



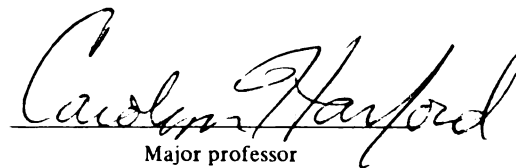
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Anaphonic Binding in Turkish**

presented by

Mahide Demirci

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M.A. degree in Linguistics


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**A GOVERNMENT BINDING APPROACH TO
ANAPHORIC BINDING IN TURKISH**

By

Mahide Demirci

A THESIS

**Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of**

MASTER OF ARTS

Department of Linguistics and Oriental and African Languages

1991

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ABSTRACT

A GOVERNMENT BINDING APPROACH TO ANAPHORIC BINDING IN TURKISH

By

Mahide Demirci

This thesis investigates the anaphoric binding of Turkish reflexive *kendi* and NP-traces within the framework of Binding Theory. In Chapter I, background material on the Turkish language and a theoretical framework is discussed. In Chapter II, it is observed that the agreement features for number and person act as accessible SUBJECT in both tense and tenseless clauses, and in possessive NPs. Furthermore, agreement features between the reflexive and the antecedent are crucial factors in determining the appropriate antecedent, which causes, in several instances, violations of the binding principle. In Chapter III, it is observed that the binding domain of Turkish reflexive *kendi* is broader than that of anaphors as proposed by Binding Theory. In Chapter IV, it is shown that violations of the binding principle for an anaphor can be solved by extending the binding-domain of an anaphor from a minimal governing category to the domain-governing category. This enables us to take root S as a binding-domain so that unbound anaphors can be bound within this domain.

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To my parents, Hasan and Cahide Demirci,
who have dedicated their lives
to the happiness and success
of their children.

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TABLE of CONTENTS

List of Abbreviations

ix

CHAPTER I

1	Preliminaries.....	1
1.1	Topic.....	1
1.2	An Overview of Turkish.....	2
1.2.1	Case Marking.....	2
1.2.2	Pronouns.....	3
1.2.2.1	Reflexives.....	6
1.2.2.2	Kendi-Reflexives.....	6
1.2.2.3	Verbal Reflexives.....	8
1.3	Verbal Morphology.....	9
1.3.1	Complex Sentences.....	9
1.4	The Theoretical Framework.....	12
1.4.1	Binding Principles.....	13
1.4.2	Binding.....	14
1.4.2.1	C-Command.....	15
1.4.3	Governing Category.....	16
1.4.3.1	Government.....	17
1.4.3.2	Subject.....	18
1.4.3.3	Accessibility.....	20
1.4.3.4	Further Examples for Governing Category.....	21
1.4.4	The SSC and TSC.....	23
1.4.4.1	Specified Subject Condition.....	23
1.4.4.2	Tensed Sentence Condition.....	25
1.4.5	Typology of Nominals.....	26
1.5	Relevant Previous Research.....	26

CHAPTER II

2	Some Aspects of Principle A in Turkish.....	31
2.1	Introduction.....	31
2.2	Possible Antecedents of Turkish Anaphors.....	32
2.3	Principle A in Turkish.....	33
2.3.1	An Initial Application of Principle A.....	33
2.3.2	TSC in Turkish.....	35
2.3.3	The Relationship of Agreement Features to Antecedents.....	39
2.3.4	Anaphors in Possessive NPs.....	46
2.3.4.1	Anaphors in Turkish Possessive NPs.....	47
2.4	NP-Traces.....	51
2.4.1	NP-Traces in Turkish.....	53
2.4.1.1	Passive Construction in Turkish.....	53

2.4.1.2	NP-Traces in Turkish	
	Passive Clauses.....	54
2.4.1.3	Raising in Turkish.....	54
2.4.1.4	NP-Traces in Turkish Raising Constructions.....	56
CHAPTER III		
3	Principle A and Apparent Problems in Turkish....	67
3.1	Introduction.....	67
3.1.1	Long-Distance Anaphors.....	67
3.1.2	Unbounded Reflexives Having More Than One Antecedent.....	72
3.1.3	C-Command.....	76
3.1.3.1	Problems for C-command.....	77
3.1.3.2	Possessive NPs.....	79
3.1.4	Split Antecedent.....	81
CHAPTER IV		
4	Toward a Solution.....	87
4.1	General Properties of Turkish Reflexives Kendi..	87
4.2	Revision of the Binding Theory.....	90
4.2.1	Manzini's Framework.....	91
4.2.2	Application of Manzini's Principle A' to Turkish Anaphors.....	95
4.2.2.1	Principle A'.1.....	105
4.3	Conclusion.....	108
BIBLIOGRAPHY		113

1PL
1SG
2PL
2SG
3PL
3SG

ABL

ACC

AGR

AOR

CON

DAT

FUT

GC

GEN

INF

INF

LOC

NOM

PAS

PLR

POS

REF

SBJ

LIST of ABBREVIATIONS

1PL	first person plural
1SG	first person singular
2PL	second person plural
2SG	second person singular
3PL	third person plural
3SG	third person singular
ABL	ablative
ACC	accusative
AGR	agreement
AOR	aorist
CONT	continuous
DAT	dative
FUT	future
GC	governing category
GEN	genitive
INF	infinitive
INFL	inflection
LOC	locative
NOM	nominal
PASS	passive
PLR	plural
POSS	possessive
REFL	reflexive
SBJ	SUBJECT

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CHAPTER I

1 Preliminaries

1.1 Topic

A considerable amount of effort in recent years has been devoted to the elaboration of a "binding theory" to regulate the determination of anaphor-antecedent relations in various languages. This study is intended as a contribution to a binding theory for Turkish anaphora. It will concentrate on the role of binding conditions for anaphors, the so-called Binding Principle A proposed by Chomsky, in the interpretation of Turkish anaphora. In this work, I will concentrate on the behavior of *kendi* (self), which is the major overt reflexive in Turkish. A study of NP traces is also a part of this research. The aim of this work is not only descriptive in nature but is also to provide theoretical foundations for the behavior of Turkish reflexive *kendi* and NP-traces.

A subordinate result of this research paper is a contribution to the study of parameters within which the grammatical framework of individual languages differ because the binding principles of Principle A of the Binding Theory

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exhibit certain differences when applied to English and to other languages.

1.2 An Overview of Turkish

The Turkish language can be characterized as an agglutinative language (high degree of suffixing) with postpositions, a regular case marking system and modifier head constructions. In terms of word order typology, it is classified as a rigid "SOV" language. However, in many instances, the sentence structure in this language differs from the canonical "SOV" order.

1.2.1 Case Marking

There are six cases in Turkish which are realized morphologically via suffixes. These cases indicate the grammatical relations of the NPs to which they are attached:¹

(1) Turkish Case System

- [$\emptyset$] Nominative
- [-In] Genitive²
- [-I/ $\emptyset$] Accusative
- [-E] Dative
- [-DE] Locative
- [-DEn] Ablative

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The following example includes five cases in Turkish.

(2) Ahmet-ø viski-yi dolap-tan cikar -ip
 NOM whisky-ACC closet-ABL take out-and

 mutfak-ta- ki
 kitchen-LOC relative pronoun

 masa-ya koy-du 3
 table-DAT put-past

"Ahmet took the whiskey out of the cupboard and put it on the table in the kitchen"

1.2.2 Pronouns

There are three sets of pronouns in Turkish. The first set is the personal pronouns, the second set is the possessive pronominal suffixes and the third set is the reflexive pronoun *kendi*. The set of personal pronouns are:

(3) <u>Singular</u>	<u>Plural</u>
a. ben "I"	biz "we"
b. sen "you"	siz "you (plural or polite form)"
c. o "he/she/it"	onlar "they"

The Turkish language has no gender distinctions; hence there is no distinction between "he", "she", and "it" and the pronoun *o* serves all three cases.

Case is assigned to the pronouns as it is assigned to other NPs as in example (4):

(4) a

b

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(5) S

a

b

c

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(6) a.

b.

c.

d.

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- (4) a. ben-de "in me"
 I -LOC
- b. san-a "to you"
 You-DAT

Turkish has the following possessive pronominal suffixes which are added to their head nominals:

(5) <u>Singular</u>	<u>Plural</u>
a. -im	-imiz
b. -in	-iniz
c. -(s)i(n)	-lari(n)

Examples are given below:

- | | |
|------------------|---------------------|
| (6) a. ev -im | "my house" |
| house-1SG:POSS | |
| b. ev-in | "your house" |
| c. ev-i | "his/her/its/house" |
| d. ev-imiz | "our house" |
| e. ev-iniz | "your house" |
| f. ev-ler-i | "their house" |

Turkish has the following personal suffixes which are attached to the verb. They indicate the agreement between the predicate and the subject in number and in person.

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(7) <u>Singular</u>	<u>Plural</u>
a. -Im	-Iz
b. -In	-SINiz
c. -ø	-IAr

As a result of this agreement between the subject and the verb, pronouns usually do not appear on the surface. Therefore, it may be readily suggested that Turkish is an example of a Pro-Drop Language. For instance,

(8) a. Ben gel-iyor-um I come-PROG-1SG	"I am coming"
b. ø gel-iyor-um	"I am coming"
c. sen yorgun-sun you tired-2SG	"You are tired"
d. ø yorgun-sun	"You are tired"
e. Biz kitap oku-yor -uz we book read-PROG-1PL	"We are reading a book"
f. ø kitap oku-yor -uz	"We are reading a book"

Another instance of agreement, and hence pro-drop, can be observed in genitive constructions in Turkish. A genitive construction is of the form "NP-gen...NP-poss" where the first NP, marked with the genitive suffix, is the possessor and the second NP, which has the possessive suffix, is the possessed.

(9) a.	O-nun	anne-si	"his/her mother"
	he/she-3SG:GEN	mother-3SG:POSS	

b.	ø	anne-si	"his/her mother"
c.	ben-im I -1SG:GEN	anne-m mother-1SG:POSS	"my mother"
d.	ø	anne-m	"my mother"
e.	*sen-in you-2SG:GEN	anne-m mother-1SG:POSS	"my mother"

Example (9e) is ungrammatical as the possessive marking on *anne* (mother) does not agree in number and person with the possessor *sen* (you). Since the possessive suffix on *anne* (mother) expresses number and person, the pronoun in the genitive case can be omitted, as seen in examples (9b) and (9d).

1.2.2.1 Reflexives

There are two types of reflexives in Turkish. One involves the pronoun *kendi* (self), and the other involves the verbal suffix *-ln*.

1.2.2.2 Kendi-Reflexives

The reflexive pronoun *kendi* is derived from the adjective *kendi* (own) (Lewis 1985:70). For instance:

- (10) a. *kendi ev-im* "my own house"
 self house-1SG:POSS
- b. *kendi ev-iniz* "your own house"
 self house-2PL:POSS

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Kendi, as the reflexive possessive, occurs prenominally adjunct to its NP. It is uninflected for number and person, as observed in 10(a) and 10(b).

The reflexive pronoun **kendi** takes a possessive suffix to indicate agreement with the subject in number and in person:

- | | |
|-------------------------|--------------------------|
| (11) a. kendi-m | "myself" |
| b. kendi-n | "yourself" |
| c. kendi/kendisi | "himself/herself/itself" |
| d. kendi-miz | "ourselves" |
| e. kendi-niz | "yourselves" |
| f. kendi-leri | "themselves" |

As is the case for all nominals in Turkish, **kendi** may be inflected with other suffixes:

- | | |
|--|----------------------------------|
| (12) a. kendi-im-den
self-1SG-ABL | |
| | "from myself" |
| b. kendi-in-de-ki
self-3SG-LOC-Rel | |
| | "the one (which is in his self)" |

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(14) a.

b.

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The following examples illustrate the use of *kendi* within clauses.

- (13) a. (Ben) Ali-ye kendi- im-den bahset- ti - m
 I -DAT self-1SG-ABL mention-PAST-PAST

"I mentioned to Ali about myself"

- b. Ayse ben-i kendi ev-in-e götür-dü
 I-ACC self house-3SG:POSS take-PAST

"Ayse took me to self's house"

1.2.2.3 Verbal Reflexives

Verbal reflexives are the class of predicates which form their reflexives with the reflexive suffix attached to the verb, as *-in*. Some examples of this type of construction are being presented for illustrative purposes.

- (14) a. Ali yıka- n -di
 wash-refl-PAST

"Ali washed himself"

- b. Ali öv - ün -dü
 praise-refl-PAST

"Ali praised himself"

- c. Kadın süsle - n - di
 woman decorate-refl-PAST

"The woman decorated herself"

1.3 Verbal Morphology

There are eight tense and aspect markers in Turkish which are suffixed to the verbal stem. Person and number agreement is suffixed to the right of the tense suffix:

- (15) a. [Sen] gel-di -n
you come-PST-2SG

"You come"

- b. [Siz] gel- e - me- -yecek -siniz
you come-abil-negative-FUTURE-2PL

"You will not be able to come"

1.3.1 Complex Sentences

E. Erguvanli (1979:95) distinguishes Turkish embedded sentences into three categories according to their surface marking.

- (16) (i) Morphologically marked embedded S_e.

- (ii) Syntactically marked embedded S_e.

- (iii) Embedded S_e which are neither syntactically nor morphologically marked.

(i) Morphologically marked embedded S_e precede the verb and include participle clauses, verbal nouns, infinitives and gerunds. The following examples serve to illustrate this category.

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case suff
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- (17) a. [Kitap oku-yan] kiz
 book read subject girl
 participle

"The girl who is reading a book"

- b. [Ders çalis-mak] isti-yor -um
 lesson study-INF want-PROG-1SG

"I want to study lesson"

- c. [Ali-nin kitap oku-dug-un]-u
 GEN book read-NOM-POSS:3SG-ACC

bil -iyor-um
 know PROG-1SG

"I know that Ali is reading a book"

These examples indicate that relative clauses are formed by replacing the verbal tense suffix with a participle suffix and deleting the repetition of the head noun of the relative in the lower sentence. Embedded nominal complement constructions are formed in a similar manner. The subject of the complement is marked with the genitive case and the corresponding possessive suffix is placed on the nominalized verb. The nominalized verb then gets whatever case suffix is necessary for its function in the matrix clause.

(ii) Syntactically marked embedded S_i have verbs which are finite in form with tense and person suffixes but the verb takes the subordinating particles to indicate that the S is an embedded clause. The following examples illustrate this point:

- (18) a. *Kitap oku- ma -dan önce ders*
 book read-verbal-ABL before lesson

çalış- ti -m
 study-PAST-1SG

"I studied before I read a book"

- b. *Kitap oku-dug-um için, müzik*
 book read-NOM-POSS:3SG for music

dinle - ye - me- di -m
 listen-ABIL-NEG-PAST-1SG

"I could not listen to the music since I read a book"

(iii) A small set of verbs in Turkish are the so-called "raising" verbs which do not take any morphological or syntactic marking on their complement clauses. These verbs are *tahmin et-mek* (to guess), *zannet-mek* (to assume) and *san-mak* (to think). For instance,

- (19) a. (Ben) [*Ali-nin kitap oku-dug-un*]-u
 I GEN book read-NOM-POSS:3SG-ACC

zannet-ti-m

"I thought that Ali was reading a book"

- b. (Ben) [*Ali kitap oku-yor*] *zannet- ti - m*
 I Ali book read-PROG assume-PAST-1SG

"I thought that Ali was reading a book"

- c. (Ben) [*Ali-yi kitap oku-yor*] *zannet- ti - m*
 I -ACC book read-PROG

"I thought Ali to have been reading a book"

The subject of the embedded clause in (19a) takes the genitive case while its verb takes the nominalization suffix

-dug instead of a tense marker. The embedded clause in (19b) is bare and is structured like root sentences in Turkish; the subject is not marked with overt genitive suffix and the verb carries its tense and agreement markers. The subject of the embedded clause in (19c) raises to the object position of the root sentence, and takes the accusative case -yi. The embedded verb still carries its tense marker.

1.4 The Theoretical Framework

The theoretical approach used in this thesis is commonly known as Binding Theory, a sub-theory of Government-Binding (GB) theory, which stems from the work of Chomsky in 1981. The theory of Binding is concerned primarily with the conditions under which NPs are interpreted as co-referential with other NPs in the same sentence.

This research work seeks to explore Principle A and Turkish anaphors to determine binding conditions. It is observed that several problems for the binding conditions occur in Turkish anaphors and there appear to be inherent contradictions. To resolve these problems, Manzini's modified Principle A', which is based on Chomsky's original Principle A, has been applied. It may be noted that Manzini's theory proves to be considerably more successful in resolving many problems encountered in the application of Binding Theory to Turkish anaphors.

1.4.1 Binding Principles

In Chomsky's GB Theory, the anaphora phenomenon has been described within binding principles (Chomsky 1981:188):

(20) Binding Principles

- (A) - An anaphor is bound in its governing category⁵
- (B) - A pronominal is free in its governing category
- (C) - An R-expression is free.

As it is seen the Binding Theory has three subclasses, one for each of the three subcategories of NP argument i.e. anaphors, pronominals and referential expressions. An anaphor is defined as a category that has no capacity for inherent reference; thus, its reference is necessarily determined by coreference with another element. Anaphors include overt categories; such as, reflexives (himself), reciprocals (each other) and covert categories such as NP-traces or traces of local movement, as involved in passives.

Pronominals are elements comprising person, gender, number and case. In contrast to anaphors, pronominals are not allowed to take their reference from an NP in an argument position within the simplex sentence. The following examples will highlight the existing differences.

- (21) a. John_i criticized himself_i

b. John_i criticized him_j

In example (21a) John and the anaphor himself are co-referential, whereas in example (21b), the pronoun him is not co-referential.

The terms free and bound have been defined in terms of coindexing by a c-commanding category (Chomsky 1982:20). Bound means "locally A-bound", where B is A-bound by α if B is bound by α and α is an A-position, that is, a position having a grammatical function such as an object or a subject.

1.4.2 Binding

(22) The notion of Binding is defined as:

A binds B if A c-commands B, and A and B are coindexed.

For example:

- (23) a. *NP[John's_i mother] likes himself_i
 b. NP[John_i picture of himself] is nice

In the Example (23a), John does not c-command himself, leaving the latter unbound in violation of the binding rule. However, in Example (23b), John does c-command himself and therefore, does bind "himself".

1.4.2.1 C-Command

The notion of c-command plays an important role in determining antecedents' relationships since it is critically involved both in movement structures and in anaphoric relationships. A 'movement' must always be to a c-commanding position and an 'anaphor' must always be c-commanded by its antecedent within the same minimal domain. C-command is defined for A and B nodes as :⁶

A c-commands B if and only if the first branching node dominating A also dominates B, and A does not itself dominate B. (Riemsdijk and E. Williams: 142)

Consider a tree-diagram as in the following (Figure 1).

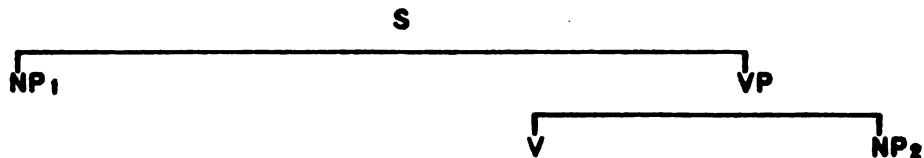


Figure 1

NP₁ c-commands NP₂ because the first branching node dominating NP₁, namely S, also dominates NP₂, and NP₁ does not dominate NP₂, nor NP₂ dominates NP₁. However, the converse is not true; the first branching node dominating NP₂, that is VP, does not dominate NP₁; therefore NP₂ does not c-command NP₁. The c-commanding relationship explains the non-grammatical nature of the sentence below:

(24) * Himself_i likes John_i

The antecedent John clearly does not c-command himself; and therefore, it does not bind the anaphor "himself" (Figure 2).

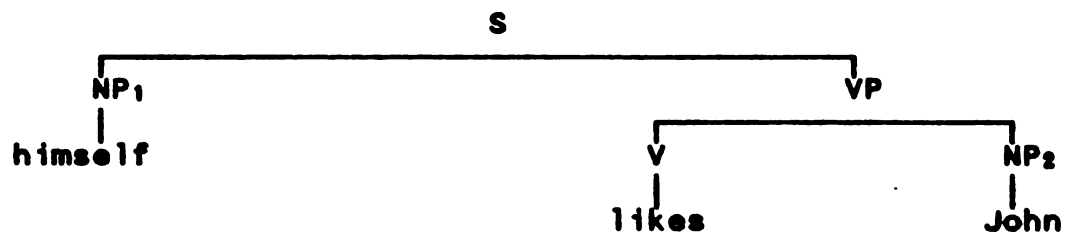


Figure 2

1.4.3 Governing Category

Chomsky's definition of governing category is as follows (Chomsky 1981: 188):⁷

(25) A is the governing category for B if and only if A is the minimal category containing B and a governor of B, where A=NP or S, and a SUBJECT accessible to B.

The notions of government, SUBJECT and accessibility which comprise governing category will be explored in the following sections.

1.4.3.1 Government

Chomsky presents the notion of government in the following definition (1982:19):⁸

(26) A governs B if $A = x' (N, V, A, P)$ and B is not protected by a maximal projection.

VP is assumed to be the maximal projection of V, S is the maximal projection of INFL. The elements subcategorized by a verbal, nominal or adjectival head are governed by the head, the object of a preposition is governed by the preposition. This is illustrated in the following cases (Riemsdijk and E. Williams: 231, Chomsky 1981: 162):

- (27) a. $VP[V\ NP]$
- b. $VP[V\ PP[P\ NP]]$
- c. $VP[V\ NP_1\ PP[P\ NP_2]]$
- d. $VP[V\ S' [NP\ VP]]$
- e. $S[NP\ VP[V]]$

For example, V governs NP in (27a), but not in (27b), (27d) and (27e). In (27b) and in (27d) the NP is contained within a smaller maximal projection than the VP, that is PP in (27b) and S' in (27d). In (27c), NP_1 is governed by V, but not by P, since P is contained in a maximal projection (PP) that does not contain NP_1 .

1.4.3.2 SUBJECT

The concept of SUBJECT introduced by Chomsky includes standard subject and AGR (the subject agreement features of a clause). AGR is the SUBJECT of a clause if agreement features are present; otherwise the subject is the SUBJECT. The intuitive idea behind the governing category is that an anaphor or pronominal searches for the closest SUBJECT to which it can be linked, where linking involves co-reference for an anaphor and disjoint reference for a pronominal.

At this point we should look in more detail at the characteristics of AGR.

It is assumed that some languages have a basic universal structure as in the following:

(28) S' ---> Comp S
 S ---> NP INFL VP, where INFL = [$\pm$ tense], (AGR)].

It should be noted that the order of the nodes in the structure in (28) can change from language to language.

The inflectional features are of two kinds: tense features and agreement features. The agreement features reflect the number and gender of the subject. In English, the agreement features are assumed to depend on the presence of the feature [$\pm$ tense]. Therefore, there are two types of INFL in English where A,B,C are variables ranging over the values that these features can take present vs past, singular vs plural, and masculine, feminine or neuter (Van

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Riemsdijk and E. Williams :274). (Figures 3 and 4):

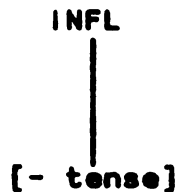


Figure 3

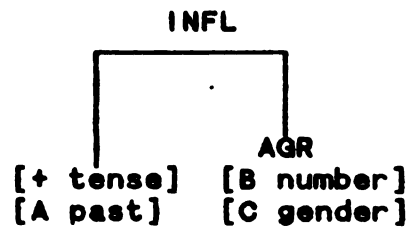


Figure 4

The agreement relationship between the agreement node AGR and the subject can be expressed by coindexing, as in:

(29) $[_{NP}[_{INFL}[\pm \text{tense}] \text{AGR}_i]_{INFL} \text{VP}]$

It is observed that AGR has basically nominal characteristics since it carries nominal features and is coindexed with NPs which it governs (Chomsky 1981:211). The notion of SUBJECT is in accordance with the idea that the subject is the most prominent nominal element, taking INFL to be head of S (Chomsky 1981:209). Therefore, the SUBJECT of a clause is $[_{AGR}[_{S}]]$; otherwise, it is $[_{NP}[_{S}]]$ or $[_{NP}[_{NP}]]$. This can be illustrated as in the following (Chomsky 1981:210):

- (30) a. John $[_{INFL}[\text{past } \text{AGR}]]$ win
 b. He believes [John to be intelligent]
 c. (John's reading the book) surprised me.

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In (30a), AGR is the SUBJECT, John is the subject. In (30b), John is the SUBJECT of the embedded clause while AGR is the SUBJECT of the matrix clause. In (30c), John is the SUBJECT of the NP and AGR is the SUBJECT of the clause.

As it is observed, S is always a potential governing category and NP is also a potential governing category when it has a SUBJECT (Chomsky 1981:210)⁹. It should be noted that it is the SUBJECT that creates a binding domain.

1.4.3.3 Accessibility

The governing category must contain a SUBJECT; moreover, the SUBJECT must also be accessible to the governee. Chomsky (1981:212) defines the accessible SUBJECT as:

- (31) A is accessible to B if and only if B is in the c-command domain of A and assignment to B of the index of A would not violate the i-within-i condition which indicates that * [Y....Z], where Y and Z bear the same index.

The i-within-i condition excludes the coindexing of an element with a category which dominates it.

- (32) a. * [his_i friend]_i
 b. * *_i[the friends of [each other's_i] parents]

Consider the example below to understand the necessity

of the i-within-i condition.

(33) a. John expects that pictures of himself will be on
sale

b. s[NP_i AGR_i V s' [that_s [NP_J [pictures of
himself_i] AGR_J VP]]]]

In this example, the i-within-i condition selects AGR_i as the SUBJECT. AGR_J cannot be the SUBJECT because it is inaccessible; assigning the index J to the reflexive would result in a structure in violation of i-within-i condition since the whole NP [pictures of himself]_J also gets the index J as seen in (34).

(34) * NP_J [pictures of himself_J]

Hence, the AGR_J of the lower clause cannot be SUBJECT accessible to the reflexive.

1.4.3.4 Further Examples for Governing Category

It should be recalled that the governing category for an anaphor is the smallest NP or S containing the anaphor, a governor of the anaphor and a SUBJECT accessible to the anaphor.

Consider the following examples:

(35) a. John_i believes [himself_i to like Mary]

- b. John_i believes [him_i to like Mary]
- c. *John_i was expected [that t_i would win]

We correctly allow example (35a) because the embedded S is not the minimal governing category containing himself and a governor for himself. The governor for himself is the verb believe. Therefore, the minimal governing category 'S', which comprises both himself and its governor, is the matrix clause. In this binding domain, the anaphor is bound by John_i. In the same way, we correctly rule out Example (35b) because him is bound within its governing category in violation of binding Principle B.

The sentence (35c) is ruled out by the Binding Principle A since the trace is governed by AGR in the embedded clause, leaving it free in its governing category. The subject of a finite clause can never be an anaphor since it can never have a A-binder within that GC. Therefore, the trace of an NP-movement cannot appear in subject position of a finite clause. This is confirmed by the grammaticality of the example below:

- (36) John_i was expected [t_i to win]

Given the definition of governing category, it is noticed that the domain for anaphor binding and that for disjoint reference are uniformly defined. This means that the basic thesis of Binding Theory is that anaphors and pronominals

exhibit complementary distribution.

1.4.4 The SSC and TSC

The definition of SUBJECT has two parts. One part, namely AGR, gives the Tensed Sentence Condition (TSC) (Chomsky 1973) because AGR is always linked with tense. The other part, namely subject, gives the Specified Subject Condition (SSC) (Chomsky 1973). An opaque domain in which an anaphor is bound can be defined as the c-command domain of the SUBJECT which unifies the SSC and TSC (Van Riemsdijk and E. Williams: 275).

In English, the presence of agreement features depend upon the presence of tense; however, in Turkish the presence of agreement features may be independent from the tense since tenseless clauses and NPs may exhibit agreement morphology which acts as accessible subject.

The Tensed Sentence Condition in Turkish will be explored at length in Chapter II. At this point, the definition of TSC and SSC will be given to serve as an outline of some of the notions that will be relevant in the discussion of the aspects of TSC in Turkish.

1.4.4.1 Specified Subject Condition

SSC defines the domain of the closest c-commanding subject as a local domain for binding (Chomsky 1986:166).

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Within this domain, an anaphor must be bound and a pronominal must be free. For instance:

- (37) a. *John_i believes [Mary to like himself_i]
 b. John believes [Mary to like him]

In these examples, both himself and him are bound in the domain of the matrix clause. However, the first one is ungrammatical since a subject intervenes between the binder and bindee in violation of Specified Subject Condition, as the anaphor is bound across the specified subject Mary. The presence of Mary in the embedded clause establishes this clause as a governing category for the anaphor and the anaphor must be bound within this governing category. Consider these examples:

- (38) a. John_i likes Mary's pictures of him
 b. *John_i likes Mary's pictures of himself_i

The genitive NP acts as the subject of an NP, in the same way that the NP of S is the subject of that S and the NP of NP is the subject of that NP. In that case, Mary is the subject of the NP headed by pictures. This subject intervenes between John and himself in violation of SSC.

1.4.4.2 Tensed Sentence Condition

The second opaque domain related to SUBJECT is the subject of a tensed sentence. TSC states that the binder of an anaphor must be within the same finite clause or within the same domain; and that the binder of a pronominal must be outside this domain. For instance:

- (39) a. *they_i expected [that [each other_i would win]]
 b. they_i expected [each_i other to win]
 c. *they_i expected [them_i to win]
 d. they expected [that [they would win]]

In the sentence in (39a), AGR of the embedded clause is the governor of each other. AGR governs only the subject of a finite clause (Lasnik 1988: 57). Furthermore, AGR is the SUBJECT. That means that the GC for each other is the lower S, and each other is free in that GC, in violation of Principle A of the Binding Theory. This example indicates that an anaphor cannot appear in the subject position of a tensed clause as the anaphor will be free in this case. Therefore, the sentence in (39a) is ruled out in violation of TSC as the anaphor occurs as the subject of a tensed clause. However, the anaphor each other in (39b) is bound by its antecedent they within its minimal GC, the matrix clause, which includes the governor for the anaphor, that is, the verb of the main clause expect, and an accessible SUBJECT, that is the AGR of the main clause.

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1.4.5 Typology of Nominals

Chomsky (1982:78) classifies nominals using two binary features, namely, [$\pm$ pronominal] and [$\pm$ anaphoric].

- (40) a. [+ anaphor, - pronominal] reflexives, NP-traces,
reciprocals.
- b. [- anaphor, + pronominal] pronouns
- c. [- anaphor, - pronominal] lexical NPs,
logical variables
(Wh-movement)
- d. [+ anaphor, + pronominal] PRO

The nominals in (40a) are subject to Binding Principle A, those in (40b) are subject to Binding Principle B, and those in (40c) are subject to Binding Principle C. PRO "pronominal anaphor" in (40d) is subject to Principle A and B at the same time, leading that PRO has no governing category.

1.5 Relevant Previous Research

The syntactic and semantic nature of Turkish reflexive *kendi* has been investigated in recent linguistic research within different theoretical frameworks.

Ayşe Özsoy (1983) analyzes the notion of reflexivization in Turkish within the framework of discourse syntax. She concludes that semantic properties as well as syntactic properties of NPs are crucial for Turkish

reflexivization. She applies the Relational Hierarchy posited by Keenan and Comrie (1978) to Turkish. She concludes that Relational Hierarchy can adequately account for some facts of Turkish reflexivization, but not all. Özsoy claims that word order is the crucial factor in Turkish reflexives, which raises a question with regard to the nature of the underlying structure of clauses in Turkish.

Jaklin Kornfilt (1984), in her research, is mainly concerned with the pronominal empty categories in Turkish, namely *pro* and *PRO*. She also examines Turkish reflexives focusing on the Turkish reciprocal *birbiri* (each other) in terms of Chomsky's Principle A. She proposes that AGR governs the subject position of *Ss* as well as that of possessive NPs. The AGR element also creates governing categories by acting both as a governor and as an accessible SUBJECT for elements in the syntactic position of those governing categories. She claims that reciprocals in Turkish can occur as subjects of possessive NPs as well as subjects of clauses. She states that AGR cannot be an accessible SUBJECT for reciprocals in possessive NPs whereas AGR is an accessible SUBJECT for reflexive *kendi* in possessive NPs. She concludes that only reflexives but not reciprocals behave according to Principle A in Turkish.

Inci Özkaragöz (1986) investigates Turkish syntax within the framework of Relational Grammar. Within this study, she also examines Turkish reflexives, both pronominal

and verbal reflexives (Chapter III). She concludes that the controller (she uses this term for antecedent) of reflexive can be final 1, final 2, or final 3 (subject, object, indirect object); however, reflexive cannot be final 1 (subject). Furthermore, controllers, which are final objects, must precede the reflexive in linear order. She proposes that the restrictions on reflexivization are in terms of grammatical relations rather than in terms of linear order.

NOTES to CHAPTER 1

1. G.L. Lewis (1985:35) states that Turkish case-endings attached to nominal groups behave like English prepositions and not like the case-endings of inflected languages such as Latin.

2. The symbol "i" stands for the high vowel alternation [i-ɪ-ʊ-u]. 'E' for the low vowel alternation [e-a], and D for the voicing alternation [d-t]. The vowel and consonant variations are governed by vowel and consonant harmony rules.

3. This example is taken from L. George and Jaklin Kornfilt (1981:108).

4. According to Underhill (1980:356), the difference between *kendi* and *kendisi* is that *kendi* is more strictly reflexive than *kendisi*, (which frequently reinforces a third person pronoun) and is normally preferred in simple sentences. In subordinate clauses *kendi* refers to the subject of the subordinate clause while *kendisi* may refer to the subject of the clause or to the subject of the main sentence .

5. Chomsky (1986:166) uses local domain to refer to his earlier term, "governing category" (1981). The characterization of the domain for anaphor binding has been attempted under various names: Clause-mate Condition, Tensed-S Condition, Specified Subject Condition, Nominative Island Condition, Opacity Condition, Governing Category and Binding Category. The domains these various characterizations define are of course different from one another (S. Park:231).

6. Chomsky's definition of c-command has been refined further by several linguists and is a gradually evolving research in linguistics. For instance, Aoun (1985:56) defines c-command as the following:

A c-commands B, if the minimal maximal projection dominating A dominates B, and $A \nsubseteq B$.

7. Huang's (1983:557) definition of governing category is as follows:

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A is a governing category for B if and only if A is the minimal category containing B, a governor of B and a SUBJECT, that if B is an anaphor, is accessible to B.

As a result of this definition, the accessible SUBJECT becomes irrelevant when pronouns are concerned. In Huang's formulation of governing category, the domain for anaphor binding and that for disjoint reference are not uniformly defined so that Chomsky's complementary distribution hypothesis is somewhat weakened.

8. Aoun (1985:23) redefines the notion of government as the following:

A governs B if A is a x' category (N,V,A,P) and A and B c-command each other.

9. According to J. Koster (1984:422-423), there are clear cases of anaphors that must be bound in S' , not in S; hence, not only S and NP are governing categories but also S' . He supports his idea by giving Dutch reflexive *zich* as an example. Dutch has two reflexives *zich* and *zichzelf*. *Zichzelf* is always bound in the minimal domain of a subject which is S or NP. *Zich*, on the other hand, is sometimes bound in the domain of the complementizer, which is the domain of S' ; and at other times is bound in the domain of S.

CHAPTER 11

2 Some Aspects of Principle A in Turkish

2.1 Introduction

There are a number of overt and covert elements that take antecedents and participate in syntactically governed co-reference relationships in Turkish. These are referred to as pronouns, pronominal anaphors and noun phrase traces:

(1) a. Pronouns: *o* (he, she, it), *on-lar* (they) etc.

b. Pronominal anaphors: *kendi* (self)

It is to be noted that the scope of this research is limited to pronominal anaphors; pronouns have been excluded from the ensuing discussion.

The pronominal anaphor *kendi*, like pronouns, can take the entire range of overt morphological marked cases:

(2) a. *kendi* - *m* - *i*
self - 1SG - ACC

"myself"

- b. kendi - si - (n)den
self - 1SG - ABL

"from self"

- c. kendi - m - e
self - 1SG - DAT

"to self"

2.2 Possible Antecedents of Turkish Anaphors

It is observed that Turkish anaphors can refer to other NPs as well as subject NPs. For instance:

- (3) a. (Ben)_i kendi - m - e_i guven - ir - im
I self - 1SG - DAT trust - AOR - 1SG

"I_i trust myself_i"

- b. (Ben) arkadas-im -i_i kendi_i
I friend-1SG:POSS-ACC self

ev -in -de gör- dü - m
house-3SG:POSS-LOC see-PAST-1SG

"I saw my friend_i at self's_i house"

- c. (Ben) Ali-ye_i kendi-n-den_i bahset - ti - m
I -DAT self-3SG-ABL mention-PAST-1SG

"I mentioned to Ali_i about self_i"

- d. Aci çekmek o-nu_i kendisi-ne_i karşı
suffering he-acc self -DAT towards

acımasız yap-ti
merciless make-PAST

"Suffering made him_i merciless towards self_i"

(Example is taken from I. Özkaragöz (1986:60))

- e. Ali_i corba-yi kendi_i için yap-iyor
soup -ACC self for make-PROG

"Ali_i is making soup for self_i"

f. Kiz_i kitab- i kendi_i yan - i -na koy-du
 girl book-ACC self beside-3SG_iPOSS-DAT put-PAST

"The girl_i put the book beside self_i,"

The antecedents in (3a) *ben* (I), in (3e) *Ali* and in (3f) *kiz* (girl), occupy subject positions whereas the antecedents of anaphors in (3b), namely *arkadasim* (my friend), in (3c) *Ali*, and in (3d) *o-nu* (him) occupy object positions. In (3b), the anaphor *kendi* is used in a possessive NP '*kendi evi*' (self's house) while, in (3e) and in (3f), the anaphor *kendi* is used as an object of a postposition within a postpositional phrase. In sentence (3d), the antecedent of the anaphor, namely *o-nu* (him), is in object position while its anaphor '*kendisi-ne*' is in an indirect object position with an overt dative case marker.

2.3 Principle A in Turkish

2.3.1 An Initial Application of Principle A

It may be recalled that the Binding Theory concerning the binding of anaphors is formulated as Principle A, which requires that an anaphor must be bound in its governing category. Consider the following examples:

(4) a. (Ben)_i ayna - da kendi- m -i_i gör- dü - m
 I mirror-LOC self-1SG-ACC see-PAST-1SG

"I_i saw myself_i in the mirror"

- b. Ali_i kendisi-ni_i her zaman öv-üyor
self-ACC always praise-CONT.

"Ali_i is always praising self_i."

- c. Genç çocuk_i kendisi_i tarafından
young boy self by

vur- ul -mus
shot-PASS-PAST

"The young boy_i was shot by himself_i."

(Example belongs to I. Özkaragöz (1986:59)).

- d. (Ben) s·[s[Ali_i kendisi-ni_i öv-üyor]]
I self-ACC praise-PROG

zannet- ti -m
think-PAST-1SG

"I thought that Ali_i is praising self_i."

In the first three examples, root S is the minimal governing category including the anaphor, a governor of the anaphor, a c-commanding antecedent for the anaphor and a SUBJECT accessible to the anaphor. For instance, in (4a), the anaphor with first person singular agreement marker *kendim* (myself) is bound by the NP *ben* (I) in subject position which c-commands it. The governor of *kendim*, with first person singular agreement marker, is the root verb, namely *gör* (see) while the accessible SUBJECT to the anaphor *kendim* is AGR, which c-commands it. On the other hand, the embedded S, which is the governing category for the anaphor *kendisi* in (4d), is the minimal governing category, including the anaphor *kendisi*, its c-commanding antecedent *Ali*, (the subject of the embedded clause) and the governor of the anaphor, the embedded verb *öv* (praise). The SUBJECT

accessible to the anaphor *kendisi* is the embedded AGR, which is coindexed with the NP in subject position, namely *Ali*.

As it may be observed, the anaphor *kendi* in monoclausal sentences and as the object of embedded clauses do not present any problem for the binding conditions of Principle A.

2.3.2 TSC in Turkish

It should be recalled from Section 1.4.4.4.2 in Chapter 1 that one condition which governs the binding of an anaphor is the tensed sentence condition (TSC), which indicates that the binder of an anaphor must be within the same finite domain. The domain, which comprises the anaphor, the governor of the anaphor and either a subject or an agreement marker as accessible SUBJECT, may be the minimal clause or the NP. In English, this occurs in tensed clauses only, so that the sentence in (5) is ungrammatical, as the binding requirements for the anaphor are not satisfied.

(5) **they_i said that each other_i left*

The opaque domain for *each other* in (5) is the embedded tensed clause, leaving the anaphor free in its governing category.

The Turkish opaque domain, as determined by the TSC, is in sharp contrast to that of English. Jaklin Kornfilt and

M. L. George define a finite phrase in Turkish as one which exhibits subject agreement, whether in the form of an agreement marker taken from the nominal or from the verbal paradigm (1981:118). Jaklin Kornfilt and M. L. George states:

TSC actually refers to a more general notion of "Finiteness" rather than to "Tensedness;" in Turkish Finiteness is not Tensedness but the presence of a Subject Agreement Marker, where "subject" is understood roughly as the Nominative of a finite clause, the Genitive of a finite NP and embedded clause or Relative clause or the first Accusative of a non-finite Direct Complement (1981:124).

Under this explanation, both direct (bare) complement in (6a) and nominalized complement (6b) can be finite because they exhibit the full range of agreement markers, whereas the direct complement in (6c) can be non-finite due to the lack of agreement marker.

- (6) a. Ayse [(biz) kitab oku- du -k] san-iyor
 we book read-PAST-3PL believe-PROG

"Ayse believes (that) we read a book"

- b. Ayse [(biz-im) kitab oku-dug-umuz] -u san-iyor
 we-GEN NOM-POSS:3PL-ACC

"Ayse believes (that) we read a book"

- c. Ayse [biz-i kitab oku-du] san-iyor
 we-ACC book read-PAST-no AGR

"Ayse believes us to have read a book"

Kornfilt (1984:103) assumes that the agreement element found in nominalized embedded clauses and in NPs is a nominal itself as opposed to the AGR element exhibited by

Chomsky states:

Consider the following Turkish example, which illustrates the characteristics of the Turkish opaque domain in a clause.

- The embedded sentence is nominalized in the above example, by replacing the verbal tense suffix with a nominal suffix *-dig*; by marking the subject of the embedded clause with a genitive case *-nin*, indicating third person agreement; and by placing the corresponding possessive suffix *-in* on the nominalized verb. Even though the embedded sentence has no tense marker, it still carries agreement marker.

According to Principle A, one of the opaque domains determined by the SUBJECT is the subject of a tensed sentence. If we propose that tense determines the governing category in Turkish, as it takes place in English, then the coindexing of the anaphor *kendi* in the embedded clause with the antecedent *Ayşe* in the subject position of the embedded clause within the lower S will violate the Principle A. Since the embedded clause exhibits a lack of tense structure, no SUBJECT will be accessible to the anaphor in the lower S. It is assumed by the theory that AGR which is the SUBJECT can be found only in finite clauses (AGR is always linked with tense). TSC makes the prediction that *kendi* should be bound with *Ayşe* within the main S, not within the embedded clause (Figure 1). Note that *kendi* cannot be coindexed with *ben* (1) due to the Specific Subject Condition (refer to Section 1.4.4.1 in Chapter 1).

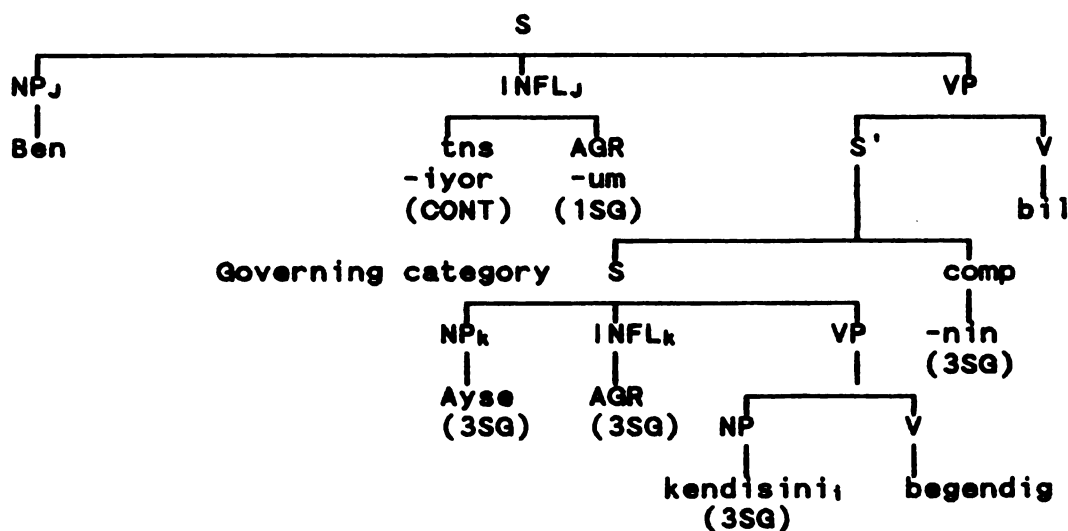


Figure 1

However, as it may be observed in (Figure 1), the embedded clause, in spite of the fact that it lacks tense, is the governing category for the anaphor *kendi* due to the presence of 'agreement'(AGR). Within this governing category, the anaphor is bound by *Ayşe* which c-commands it. The governor of *kendi* is the embedded verb *begen* (admire) and the accessible SUBJECT of the embedded clause is AGR. Consequently, all requirements of the binding principle for anaphors are satisfied. It should be noted that "agreement" rather than tense is taken to define the opaque domain in Turkish.

2.3.3 The Relationship of Agreement Features to Antecedents

Turkish reflexive *kendi* (self) carries overt agreement features which indicates agreement with the antecedent in number and person:

- (8) a. *Ali_i ban-a_j ayna-da kendi- m - i_{i/1}*
 I-DAT mirror-LOC self-1SG- ACC

göster-di
 show-past

"Ali_i showed self_{i/1} to me_j in the mirror"

- b. *Ali_i ban-a_j ayna-da kendi- n - i_{i/3}*
 I -DAT mirror-LOC self-3SG-ACC

göster-di
 show-PAST

"Ali_i showed self_{i/3} to me_j in the mirror"

It may be noted that one can see no structural differences between (8a) and (8b). Nevertheless, it is impossible in the first case to link *kendi* to the subject NP Ali anaphorically; whereas, in the second case, it is impossible to coindex *kendi* with the object NP *bana* (me).

In (8a), the reflexive *kendim* with the 1SG personal agreement marker, is coindexed with the NP in the object position *bana*, which is a first person singular pronoun whereas in (8b), the reflexive *kendi*, which is 3SG, is coindexed with the NP Ali in the subject position, both reflexives taking the S as a minimal governing category. Within the governing category S, there are two eligible but mutually exclusive antecedents, namely Ali and *bana*, which bind the anaphor syntactically and satisfy all requirements of Principle A. It is to be noted that the reflexive *kendi* will choose one of the antecedents which matches its specific agreement feature. Consider example (9) in English.

(9) *We_i like myself_i

The sentence satisfies all the requirements of condition A because the anaphor is bound in its governing category. However, the sentence is ruled out, because an anaphor must agree in syntactic features with its antecedent, which is not the case in example (9). It may be of interest to note that according to Binding Theory, example (9) would be in conformity with it and the sentence

In (10a), the governing category for the anaphor *kendi* (which is an object of a postposition *hakkindaki*) is apparently NP [*ali-nin kendi hakkindaki kitab-i*]. The NP, which is the minimal governing category for *kendi*, includes a c-commanding antecedent *Ali*. The NP also includes the governor of *kendi* which is the postposition *hakkinda* (about), the reflexive itself and an accessible SUBJECT to *kendi*, which is the AGR of the NP. (Figure 2).

When we look at the internal structure of the possessive NP in the examples (10a) and (10b), we find a close parallelism between the NP (whose head nouns are in agreement with the possessor of the NP and whose possessor can drop as subjects of root and the embedded nominalized clauses) and nominalized embedded clauses. For instance, the

- (10) a. (Ben)_i NP[Ali-nin_j kendi_i/J hakk- in- da-ki
 i -3SG_i self about-3SG-LOC-REL
- kitab-i]-ni oku- du -m
 book-3SG:POSS-ACC read-PAST-1SG
- "I_i read NP[Ali's_j book about self_i/J]"
- b. [Ben]_i [Ali-nin_j kendi_i/J hakk-im - da-ki
 i NP -3SG:GEN self about-1SG-LOC-REL
- kitab-i] -ni oku- du -m
 book-3SG:POSS-ACC read-PAST-1SG
- "I_i read Ali's_j book about self_i/J]"

subject takes the genitive case marker indicating person agreement in both possessive NPs and nominalized embedded clauses as *Ali-nin* in examples (10a) and (10b). The head noun in an NP and the verb in an embedded clause takes the corresponding possessive marker which agrees with the subject in number and person, as *kitab-i* in examples (10a) and (10b). Therefore, agreement features act as accessible SUBJECT within such an NP. Reflexives in Turkish possessive NPs will be discussed at length in the following section. In (10b), the governing category, in contrast to (10a), is the root S, not NP. As it may be observed, there exist no structural differences between (10a) and (10b); the only difference is that in (10a), *hakk in-da* (about), which is the governor of the reflexive, takes 3SG agreement marker whereas in (10b), the same postposition *hakk-im-da* takes 1SG agreement marker.

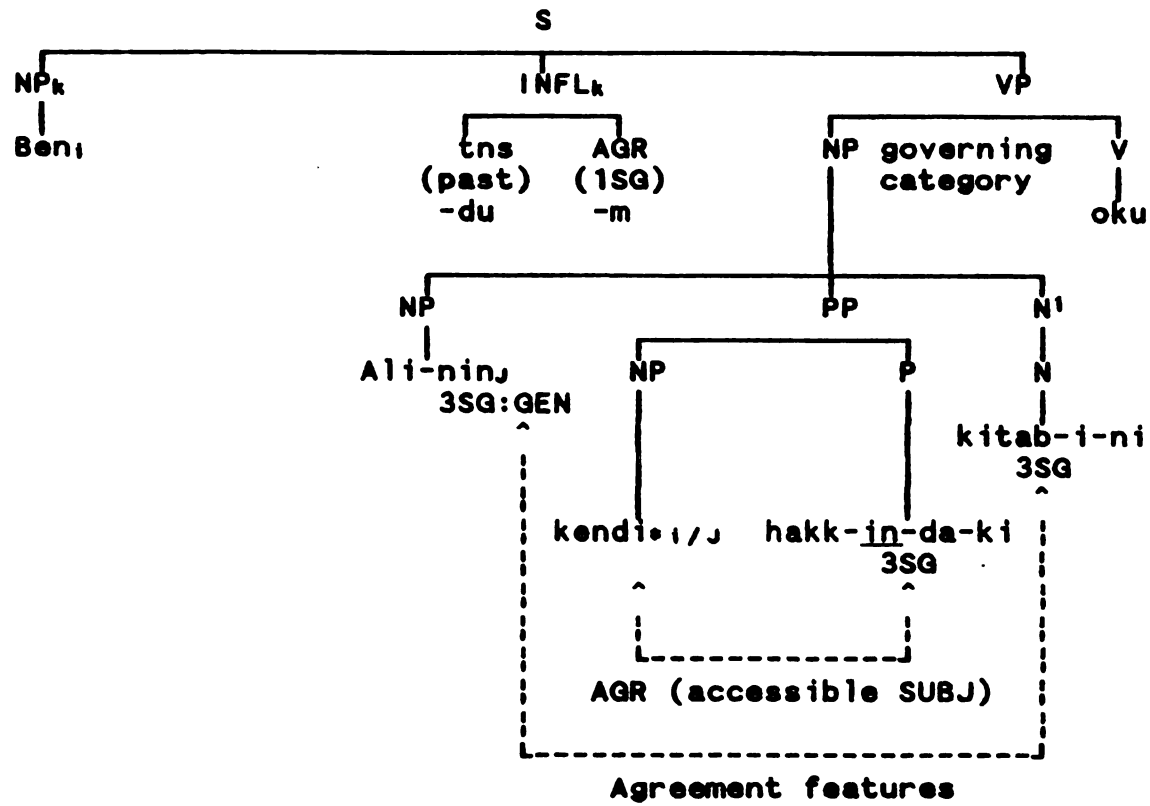


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c

n

In (10b), the reflexive *kendi* is coindexed with an NP *ben* in the subject position of the root sentence. This violates Principle A; the anaphor picks up its antecedent out of its minimal governing category, namely NP. According to the Binding Theory for anaphors, the reflexive *kendi* in both sentences must be bound by *Ali* within the minimal governing category, which is NP. However, the coindexing of *kendi* with *Ali* in (10b) will create non-grammatical binding due to the violation of agreement. Hence, this coindexing is ruled out by unmatching agreement features, even though it satisfies Principle A completely. (Figure 3)

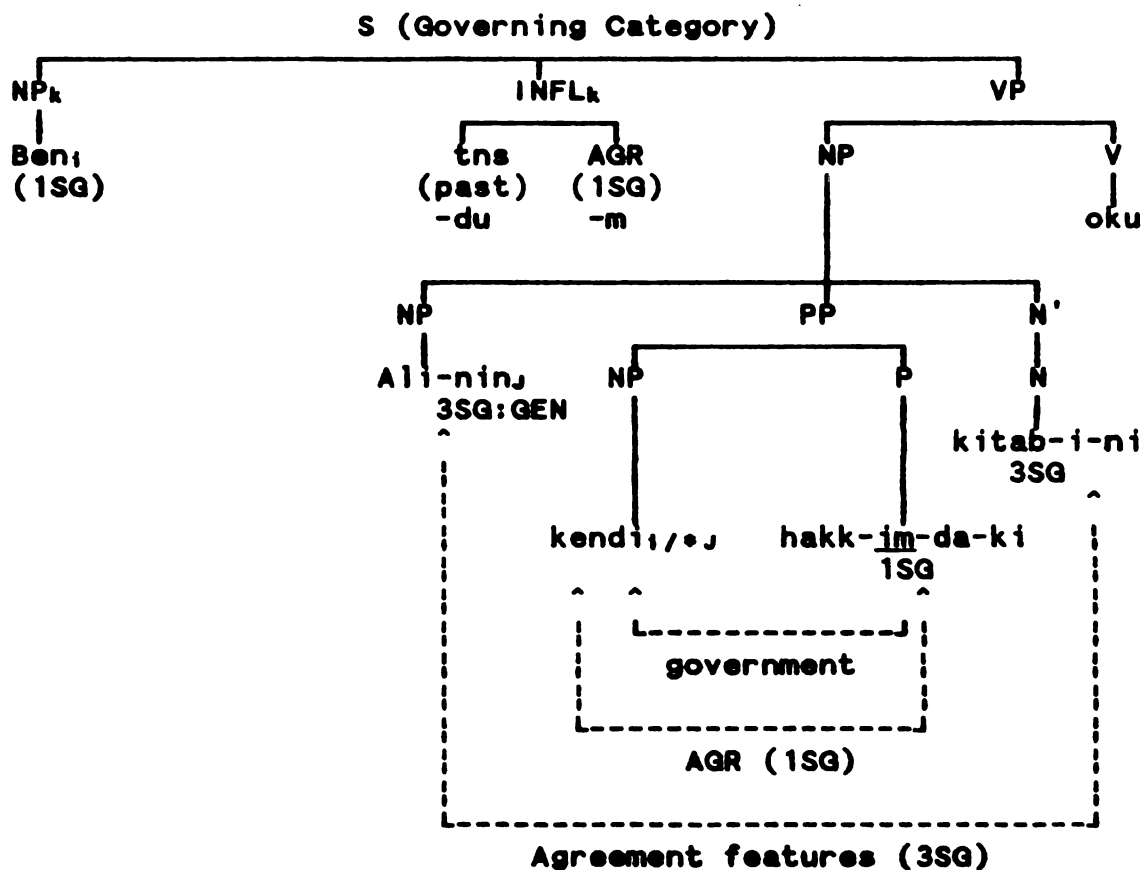


Figure 3

The following examples exhibit the ambiguity for anaphor binding in Turkish due to agreement features. It is to be noted that the reflexive *kendi* has the option of corefering with more than one antecedent when both the reflexive and eligible antecedents have the same agreement features.

- (11) a. Ali_i Ayse-yi_j kendi_{i/j} ev- in -de
 -ACC self house-3SG:POSS-LOC

gör-dü
 see-PAST

"Ali_i saw Ayse_j at self's_{i/j} house"

- b. Ali_i Ayse-ye_j kendi- n -den_{i/j} bahset-ti
 -DAT self-3SG-ABL mention-past

"Ali_i mentioned Ayse_j about self_{i/j}"

- (12) a. (Ben)_i Ayse-yi_j kendi_{i/j} ev-in -de
 I -ACC self house-3SG:POSS-LOC

gör-dü -m
 see-PAST-1SG

"I_i saw Ayse_j at self's_{i/j} house"

- b. (Ben)_i Ayse-ye_j kendi- n -den_{i/j}
 I -DAT self-3SG-ABL

bahset- ti -m
 mention-PAST-1SG

"I_i mentioned Ayse_j about self_{i/j}"

- (13) a. Ben_i Ayse-yi_j kendi_{i/j} ev- im -de gör-dü -m
 -ACC self house-3SG_i-LOC see-PAST-1SG

"I_i saw Ayse_j at self's_{i/j} house"

- b. Ben_i Ali-ye_j kendi- m -den_{i/j} bahset- ti -m
 self-1SG-ABL mention

"I_i mentioned Ali_j about self_{i/j}"

In examples (11a) and (11b), the reflexive *kendi* has two distinct c-commanding antecedents, Ali and Ayse, within its governing category, S. This ambiguity comes into the picture because both the reflexive *kendi* and the antecedents are 3SG. In examples (12a) and (12b), on the other hand, this ambiguity is removed when the antecedent of *kendi* in the subject position is replaced by *ben* (I), which is 1SG. In this case, only Ayse is the antecedent of the reflexive *kendi*. In example (13b), the reflexive *kendi* takes first person singular agreement marker as *kendi-m-den* and in (13a), the head noun of the possessive NP [*kendi ev-im*] takes first person singular agreement marker. Therefore, the antecedent of the reflexive is transformed into *ben*.

It may be concluded that if an anaphor corefers with an NP as its antecedent, the set of agreement features denoted by one of the NPs must include the set of those denoted by the other.

2.3.4 Anaphors in Possessive NPs

The Binding Theory incorporates the notion of accessible SUBJECT in order to characterize domains of binding, especially in possessive NPs. For example:

(14) They like *np* [each other's pictures]

The possessive NP in (14) does not have a SUBJECT

accessible to the anaphor. Hence, that NP is not a governing category for the anaphor in terms of the Binding Theory.

Therefore, the anaphor is not required by Condition A to be bound within that NP. In fact, the SUBJECT accessible to the anaphor is the AGR element of the S. Hence, S is the governing category for the anaphor and the anaphor is bound within S; thus, the example is grammatical. Note that Condition A would have incorrectly ruled out this structure if the possessive NP had been considered the governing category for its anaphoric subject.

2.3.4.1 Anaphors in Turkish Possessive NPs

In English, the agreement features are dependent on the presence of the feature [$\pm$ tense]. Hence, in a finite clause, AGR is the SUBJ. In non- finite clauses such as infinitives, small clauses and possessive NPs, the syntactic subject of such constructions acts as accessible SBJ; thus, that domain will be opaque. In Turkish, however, the agreement features do not always occur with the feature [$\pm$ tense], that is, unlike English, AGR may be an accessible subject in the absence of tense. For example, in a possessive NP, the head noun exhibits agreement with the possessor in number and person:

- (15) a. (ben-im) kitab-im
 I-1SG:GEN book-1SG:POSS

"my book"

b. Ali-nin kitab-i
 -3SG:GEN book-3SG:POSS

"Ali's book"

c. (sen-in) kitab-in
 your-2SG:GEN book-2SG:POSS

"your book"

As a result of this agreement between the possessor and the head noun, the AGR of NPs is similar to the AGR of Ss; such as, Pro-Drop can be observed in Turkish not only in root sentences, but also in embedded sentences and in possessive NPs which are tenseless and exhibit agreement morphology. According to J. Kornfilt (1984:103) the AGR element has Case features and hence assigns Case to the elements in the subject positions of embedded Ss and possessive NPs. J. Kornfilt states:

Embedded clauses in Turkish do pattern with NPs in that they exhibit the same morphological Cases as the NP, in the environment of verbs and postposition, and also as subjects; i.e. they exhibit Nominative or Genitive according to whether they are the subject of a root or an embedded S (1984:103).

Consider the following example illustrating possessive NPs in which the reflexive *kendi* is the possessor:

(16) a. (Ben)_i Ali-ya_j _{NP}[*kendi*_i / _j kitab-i] -ni
 i -DAT self book-3SG_i POSS-ACC

ver- di -m
 give-PAST-1SG

"I_i gave self's_i / _j book to Ali_j"

c. kitab-im
book-1SG:POSS

"my book"

Accordingly, if we take AGR of the NPs as the accessible SUBJECT, the NP will be a governing category for the reflexive *kendi* (self) in the subject position of the possessive NPs. However, in this case, Principle A is violated because the anaphor would be bound by its antecedent out of its minimal governing category, namely NP. For instance, in (16a), the minimal governing category for anaphor *kendi* is the NP, i.e. *kendi kitabi* (self's book) which includes the reflexive *kendi*; its governor, the head noun *kitab* (book); and an accessible SUBJECT to *kendi* which is the AGR of the NP. As it is observed, *Ali*, the binder of *kendi*, is in an indirect object position of the root sentence and is out of the NP. As it may be observed in the same sentence, the NP *ben* (I) which is the subject of the sentence, cannot be a binder for the anaphor even though it c-commands it because the agreement features of the possessive NP *kendi kitab-i*, namely 3rd person singular, does not match with *ben* (I), which is 1st person singular. The sentences in (16) exhibits the violation of Principle A:

- (18) The reflexive *kendi* takes its antecedent *ben* (I) out of its minimal governing category NP [*kendi aile-m*].

It may be concluded that in Turkish, the reflexive

element *kendi* preceding the head noun of the possessive NP is bound by an antecedent from outside the possessive NP. Even though Turkish possessive NPs appear to have AGR as accessible SUBJECT (in fact they do not as the examples show this), the antecedent is out of the possessive NPs, the minimal governing categories, which causes the violation of anaphoric binding conditions.

2.4 NP-Traces

According to the projection principle,³ once some syntactic positions exist, they must always have existed and must always continue to exist at d-structure, s-structure and LF. This entails the existence of empty categories, typically an empty NP position that has been vacated by movement (movement refers to Move α (Sells 1985:21)). Such empty categories are called traces, which are coindexed with the NPs that have moved in order to indicate that movement has occurred. A typical case of NP-movement is what we find in a passive construction. The GB analysis of a passive is that a D-structure object moves to become a S-structure subject. For instance:⁴

(19) a. D-Structure

e was impressed Mary

b. S-Structure

Mary_i was impressed t_i

The other construction in which NP-movement is involved is the so-called *Subject-to-Subject Raising* construction.

For instance:

- (20) a. It seems that $s' [s [Mary \text{ is sick}]]$
 b. $Mary_i$ seems $s [t_i \text{ to be sick}]$

Consider the core cases of the sentences in (20a) and (20b):

- (21) a. D-Structure

ϕ -role
 $\begin{array}{c} \text{V} \text{-----} \end{array}$
 $NP[e] \text{ INFL seem } s' [s [Mary \text{ INFL VP}]]^5$

- b. S-Structure

$Mary \text{ INFL } \text{ seem } s [t_i \text{ INFL VP}]$
 $\begin{array}{c} \wedge \text{-----} \end{array}$
 case

The Binding Theory only permits NP-movement to take place within a governing category. As government is identified with the maximal projection S' , government from outside the clause will be allowed if S' deletion takes place, as seen in the example above.⁶ The same binding principles applicable to reflexives hold for NP-traces [$+$ anaphoric, $-$ pronominal], which are therefore subject to Principle A. In the case of the passive sentence (19b), the trace left by NP-movement is bound by the NP *Mary* inside its governing category, i.e. the root S . In the case of subject-to-subject raising in (20b), the NP *Mary* which is the subject of the matrix clause and its trace are coindexed

within the root S which is the governing category.

2.4.1 NP-Traces in Turkish

2.4.1.1 Passive Construction in Turkish

In Turkish passive clauses, the direct object becomes the surface subject, the underlying subject is denoted to a *tarafından* (by) phrase which appears optionally on the surface. The promoted subject loses its accusative case marker and assumes all the properties of a subject. In Turkish, the passive suffix is *-In* which is attached to the verb if a verb stem ends in a vowel or a consonant *l*; otherwise it is normally *-Il*. For instance:

- (22) a. Polis adam-i tutukla-di
 police man-ACC arrest-PAST

"The police arrested the man"

- b. Adam (polis tarafından) tutukla- n - di
 man police by arrest-PASS-PAST

"The man was arrested by a policeman"

- (23) a. Kız kapi-yi ac-ti
 girl door-ACC open-PAST

"The girl opened the door"

- b. Kapi (kiz tarafından) ac- il -di
 door girl by open-PASS-PAST

"The door opened by the girl"

2.4.1.2 NP-Traces in Turkish Passive Clauses

Consider the following examples which illustrate NP-traces in passive constructions in Turkish :

- (24) a. Cam_i t_i tas ile kir - il - di
window stone with break-PASS-PAST

"The window was broken with a stone"

- b. Degerli esya-lari t_i ev-den cal - in - di
valuable stuff-PLR house-ABL steal-PASS-PAST

"Valuable stuff was stolen from the house"

We may recall that a lexical anaphor must be bound in the domain determined by the TSC and SSC, that is, its GC (Recall that TSC and SSC are unified by the notion of SUBJECT hence by the notion of governing category). In this domain, an NP-trace must be bound. In the example (24a), the NP-trace is bound by the NP in a subject position, that is, cam within its minimal governing category S. S includes the anaphor, namely an NP-trace; its antecedent cam (window); its governor, namely V; and an accessible SUBJECT which is the AGR of the root S. Consequently, the traces in passive constructions in (24a) and (24b) obey Principle A.

2.4.1.3 Raising in Turkish

In Turkish, a more common subordination strategy is to nominalize the embedded verb with either -dik or -ma

gerundial marker. This nominalization marker then agrees with its genitive subject in number and person:

- (25) Ali s' [s [ben - im kitap oku-dug-um]] -u
 I - 1SG:GEN book read-NOM-1SG:POSS-ACC

bil -iyor
 know-PROG

"Ali knows that I am reading a book"

Turkish has another type of clause complement which appear with a small set of verbs, the so-called raising verbs. These verbs exhibit a rich variety of suffixes for tense and agreement as in root sentences, as illustrated in the following example.

- (26) a. Ali s' [s [(ben) kitap oku- du - m] san-iyor
 I book read-PAST-1SG assume-PROG

"Ali assumes that I read a book"

- b. Ali s [ben-i kitap oku-du] san-iyor
 I-ACC -PAST-no AGR

"Ali assumes me to have read a book"

As it may be seen in example (25), nominalized clause complements do not exhibit all of these forms. Instead, certain nominalization suffixes fill the slot otherwise occupied by tense markers and to a certain extent neutralize tense. The subject of the embedded clause in

(26b) raises to the object of the root clause by taking the Accusative case.⁷

2.4.1.4 NP-Traces in Turkish Raising Constructions

Consider the following example which exhibits raising predicate in Turkish.

- (27) a. [Ben vur- ul - du - m] san- il - iyor⁸
 I shoot-PASS-PAST-1SG believe-PASS-PROG
 "It is believed that I was shot"
- b. Ben_i s[t_i vur -ul -du] san- il - iyor-um⁹
 I shoot-PASS-PAST believe-PASS-PROG-1SG
 "I am believed to have been shot"
- c. Ben_i s' [s[t_i vur- ul - du - m]] san- il
 I shoot-PASS-PAST-1SG believe-PASS
 -iyor-um
 -PROG-1SG
 "I am believed to have been shot"
- (This example is taken from R. Moore (1988:350))

There is a critical difference between the embedded sentences in example (27b) and (27c). It is to be noted that example (27c) is distinguished by the fact that it exhibits agreement marker on the embedded verb; example (27b), on the other hand, shows no such feature. As a result, the embedded sentence in (27b) is non-finite due to the absence of AGR whereas the one in (27c) is finite due to the presence of AGR according to GB assumptions. The trace in (27b) is

embedded within S whereas the trace in (27c) is embedded within S' (a maximal projection).

In (27c), the subject of the matrix clause, *ben* (1), is the obligatory antecedent of the trace subject of the embedded clause. The governing category for the trace will be determined by the location of governor and accessible SUBJECT. In this example, the trace is governed by the INFL of the embedded clause which includes tense and agreement features. It cannot be governed by the matrix verb because of the intervening maximal projection S'. The SUBJECT accessible to the trace is the subject agreement of the embedded verb. The minimal category containing the trace, its governor and accessible SUBJECT is the embedded clause, which is dominated by S'. According to Principle A, the trace should be bound in the embedded clause. In this case, the trace is bound in the matrix clause, outside of its governing category. This indicates that example (27c) is in violation of Principle A.

Example (27c) serves to look at this issue in another way. The trace in (27c) is governed and c-commanded by INFL of the embedded sentence, which contains tense and agreement features. However, INFL is not a proper governor for an anaphor because nominative case assignment indicates that INFL only governs the syntactic subject of a clause (Lasnik 1988:57). According to Principle A, the subject of a finite clause can never be an anaphor as it can never have a binder within that clause (its governing category).

Therefore, the trace in (27c) appears to be free in its governing category by occupying the subject of a finite clause (Figure 4).

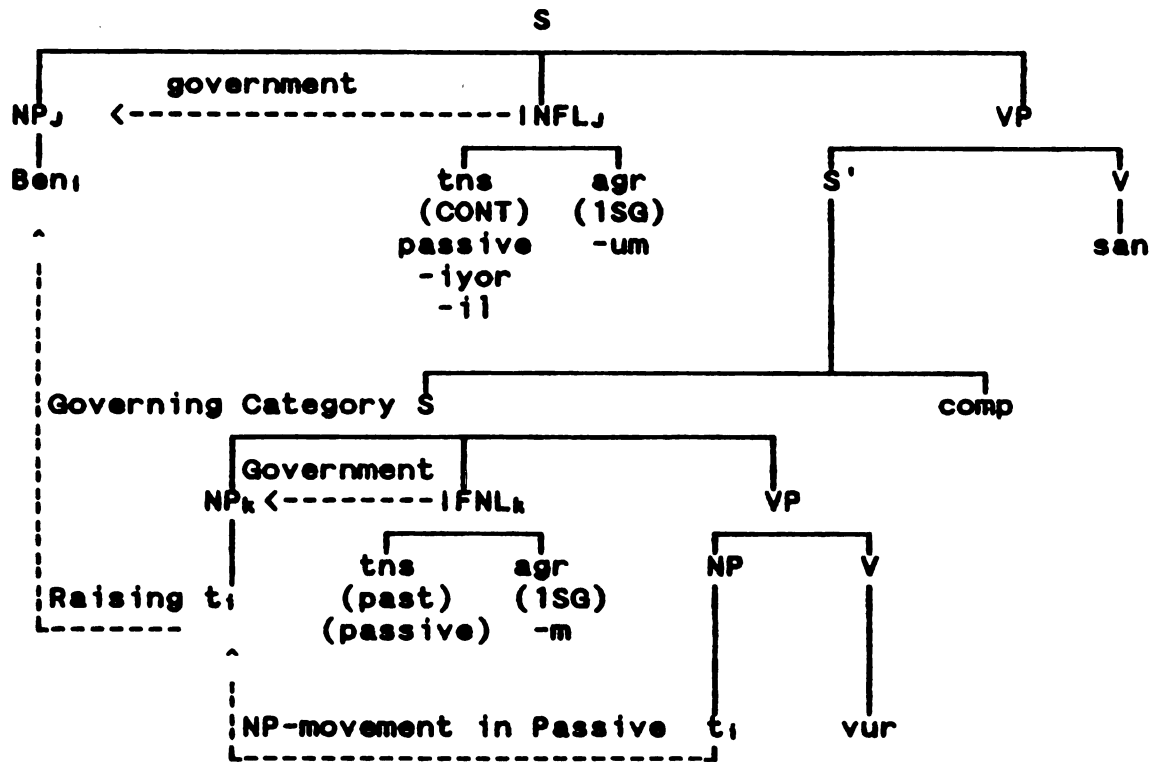


Figure 4

In (27b), however, the trace is governed by the matrix verb *san* (believe) because there is no *S'* boundary to block government. The SUBJECT accessible to the trace is the AGR of the root *S*. It may be noted that the embedded clause lacks AGR although it exhibits tense. Therefore, the governing category for the trace is the root *S*. The trace is bound by the subject of the matrix clause *ben* within its minimal governing category (root *S*). Consequently, the

sentence satisfies Principle A (Figure 5).¹⁰

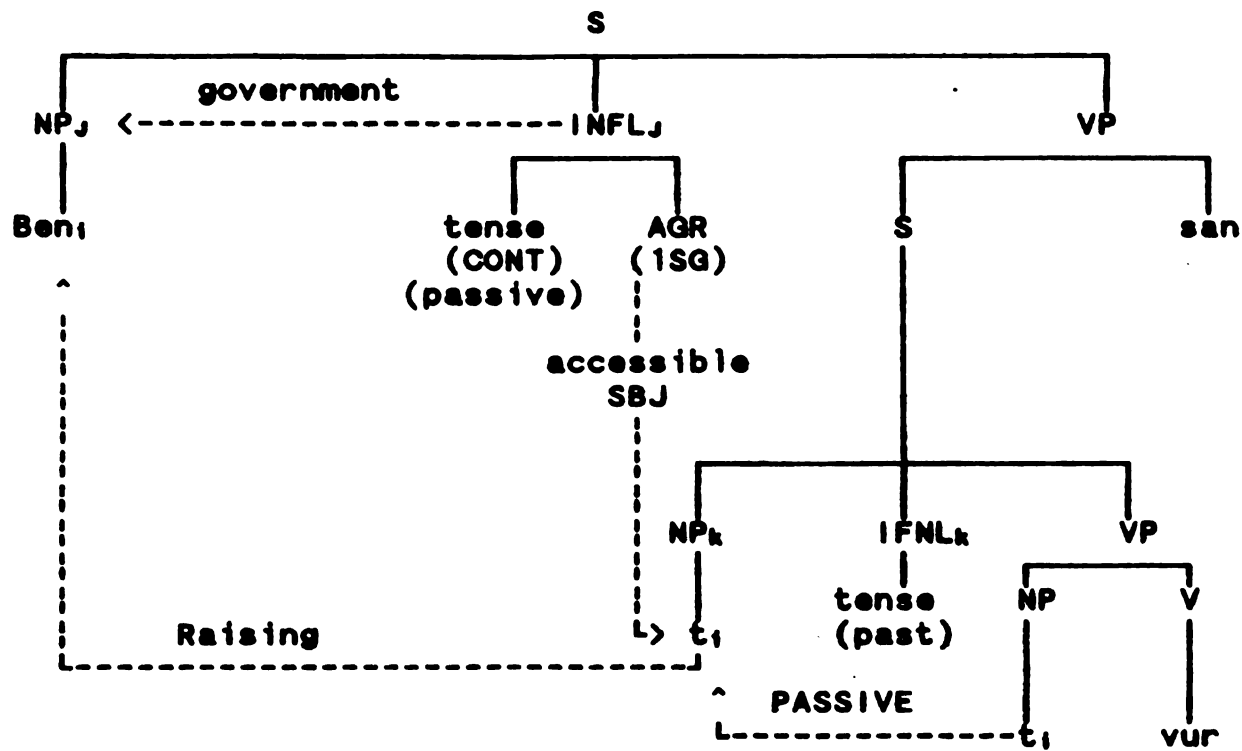


Figure 5

Consider the following examples which illustrate the raising of a subject from a nominalized embedded clause:

- (28) a. [Ben-im kitab oku-dug-um]
 I -1SG:GEN book read-NOM-1SG:POSS

bil- in -iyor
 know-PASS-CONT

"It is known that I am reading a book"

- b. Benj s[ti kitab oku-du] bil- in -iyor-um
 I book read-PAST know-PASS-PROG-1SG

"I am known to read a book"

When the genitive subject of the embedded clause moves to the subject of the higher clause, it abandons its overt genitive form and takes the nominative case as the subject of the matrix clause. As a result of this raising, the embedded predicate in nominalized form leaves its corresponding possessive marker on the embedded verb, indicating agreement with the genitive subject in number and in person, as in (28b). Otherwise, raising from gerundial embedded clauses will create a totally ungrammatical sentence, as in (28c). This indicates that raising from the subject of the gerundial embedded clause with overt genitive case to the subject of the matrix clause is impossible. In (28c), the trace still carries the genitive case due to the nominalized verb with overt agreement marker which governs the trace.¹¹

In terms of Principle A, example (28b) and (28c) are at cross purposes to each other as (28b) satisfies Principle A while (28c) is at odds with it. Example (28c) clearly rebels against Principle A for the following two reasons:

1. The trace is bound by an antecedent outside the embedded S, its minimal governing category (for the same reasons why the trace in example (27c) is bound outside its minimal governing category).

2. The trace is free in its governing category because

it is governed and coindexed with the AGR of the embedded clause (for the same reasons why the trace in example (27c) is free in its governing category).¹²

At this point, it is observed that AGR is the main factor that determines the domain for traces within which Binding Theory holds. In the case of raising-to-subject, where there is no AGR element at all, the subject is forced to move to the subject position of the higher clause with the application of S' deletion. This indicates that S' deletion has to occur, removing the barrier to the government of the trace by the matrix verb, hence removing the barrier to the binding of the trace by its antecedent within its minimal governing category. It is to be noted that S' deletion occurs only when the AGR is absent from the embedded clause (at D-structure).

NOTES to CHAPTER 11

1. The same phenomenon can be observed in some other languages such as, Portuguese in which non-tensed clauses show agreement with their subject, motivating the distinction between tense and agreement (P. Sells 1985:46).

2. J. Kornfilt (1984:73) states that reciprocals in Turkish are allowed in subject position of NPs whereas Turkish reflexive *kendi* (self) is not. Turkish reciprocals take overt genitive case whereas Turkish reflexive *kendi* occurs bare within the possessive NPs without any overt genitive case.

Kornfilt claims that Turkish NPs that exhibit AGR are governing categories, and that AGR element, where present, is an accessible SUBJECT (1984:83). According to Kornfilt, a fully overt AGR element acts as a strong accessible SUBJECT while a non-alternating "weak" AGR element which does not exhibit person features acts as a weak accessible SUBJECT in that it allows for reciprocal anaphors in the subject position of the governing categories it creates but not for reflexive anaphors (1984:92).

According to Kornfilt, the AGR in possessive NPs with reciprocals is weak, and cannot act as an accessible SUBJECT because the AGR element exhibited by possessive NP in Turkish is that of the 3rd person singular whenever a reciprocal element is the possessor, irrespective of its person and number. Therefore, the AGR element is non-alternating throughout the paradigm of reciprocal subjects. For instance:

(i) a. *birbir -imiz-in ev-i*
 each other-1PL -GEN house-3SG:POSS

"The house of each other of us"

b. **birbir-imiz-in ev-imiz*
 -1PL -GEN house-1PL:POSS

"The house of each other of us"

a. *birbir -iniz-in ev-i*
 each other-2PL -GEN house-3SG

"The house of each other of you"

- b. *birbir-iniz-in ev-iniz
 -2PL 2PL

"The house of each other of you"

However, the reflexive *kendi* presents a different picture from that of reciprocals:

- (ii) a. *kendi* ev-im
 self house-1SG:POSS

"myself's house"

- b. **kendi*- m- in ev-i
 self-1SG-GEN house-3SG:POSS

"myself's house"

- c. **kendi*- m -in ev-im
 self-1SG-GEN house-1SG:POSS

"myself's house"

- (iii) a. *kendi* ev-in
 self house-2SG:POSS

"yourself's house"

- b. **kendi*- n -in ev-i
 self-2SG-GEN house-3SG:POSS

"yourself's house"

- c. **kendi*- n -in ev-in
 self-2SG-GEN house-2SG:POSS

"yourself's house"

It is observed that reflexives are not allowed in the examples (iib) and (iiib) when there is no AGR or agreement features in the head noun. Hence, AGR is strong enough to act as accessible SUBJECT to the anaphor. When AGR is absent as in the possessive NP with reciprocals, NPs will be transparent.

3. The Projection Principle is defined as:

Representations at each syntactic level, namely D-structure, S-structure and LF, are projected from the lexicon, in that they observe the subcategorization properties of lexical items (Sells 1985:33).

The principle establishes a mapping between D-structure and S-structure and LF to the effect that if there is an NP-position in a certain structural configuration at one level, that NP position must be present at all levels, even though that position may be empty, that is, not lexical item.

4. In such types of NP movement, the θ -criterion and case theory play a crucial role in making a NP-movement obligatory. θ -criterion requires that every argument must bear one and only one θ -role and each θ -role is assigned to one and only one argument (Chomsky 1981:36). Case theory requires that every lexically headed NP must receive a Case from a Case assignor, namely, INFL, V, and P (Sells 1985:53). In the case of a passive construction, the NP in the object position of a passive construction at d-structure must move to the subject position in order to acquire Case. In a passive construction, the subject position is empty at d-structure without any θ -role; however, the syntactic position will exist due to the extended projection principle. Moreover, the passive morpheme takes away the ability of the verb to assign Case, forcing movement. Consequently, the NP with a θ -role but without any Case would be forced to move to the empty subject position which has no θ -role but has the ability to gain a Case from INFL, and Case-assignment would take place at s-structure with a trace left behind by NP-movement.

5. It should be noted that movement is forced by Case theory as in the passive construction. The NP Mary must move to the subject position of the matrix clause, which is empty, in order to get Case, for the verb "seem" does not assign Case. The θ -role of the subject is determined entirely by the lower VP.

6. According to GB theory, S' blocks movement, and blocks binding out of S'.

7. J. Kornfilt and M. George (1981:108) claim that gerundial embedded clauses behave, in fact, like lexical NPs, not S.

8. Unlike English, Turkish has no overt pleonastic subject element "it," to fill the subject position of such constructions. The whole embedded clause behaves like the subject of the passive verb on the surface. The most remarkable feature of the Turkish passive is its impersonal use. For instance: (Lewis 1985:150).

(i) a. yalan söyler - n - ir
 lies tell-PASS-AOR

"lies are told"
(lit) "lie-telling is done"

In this example, the passive verb appears to have a subject,

but impersonal passives are also regularly formed from intransitive verbs and have no conceivable grammatical subject:

- b. Istanbul-a gid- il - di
Istanbul-DAT go-PASS-PAST

"one went to Istanbul"
(lit) it was gone to Istanbul

9. R. Moore separates Turkish raising constructions into two classes: those that exhibit agreement on both the matrix and embedded verbs, which is called Copy Raising, and those that exhibit agreement on the matrix verb only, which is referred to as Movement Raising. This is illustrated below:

- (i) [Ben vur- dul- du -m] san- il -iyor
I shot-PASS-PAST-1SG believe-PASS-PROG

"It is believed that I was shot"

a. Copy Raising

Ben_i [pro_i vur-ul-du-m] san- il -iyor-um
1SG believe-PASS-PROG-1SG

"I am believed to have been shot"

b. Movement Raising

Ben_i [t_i vur-ul-du] san il-iyor-um
no agreement 1SG

"I am believed to have been shot"

Corresponding to the impersonal passive construction in (i) in which the matrix verb carries no personal agreement marker are the sentences in (ia) and (ib) where the embedded subject ben "I" has been raised out of the embedded clause to the matrix subject position. Notice that the embedded verb still retains its first person singular agreement in (ia), but not in (ib). R. Moore (1988:350) discusses that the pronominal empty category in (ia) indicates subject-verb agreement, which reinforces the fact that Turkish is a pro-drop language. Therefore, according to Moore, the empty category in copy raising in (ia) acts as 'pro' rather than a trace left behind by a NP-movement. On the other hand, in movement raising in (ib) the embedded verb bears no agreement marker. Therefore, the empty category in (ib) acts as a NP-trace. Moore claims that copy-raising is not NP-movement, rather it is base-generated.

Movement raising shows why agreement features determine the notion of finiteness and non-finiteness in Turkish in terms of GB theory:

(ii) a. D-Structure

• [ben vur - ul -du - ø]
 I shoot-PASS-PAST-no agreement

san- il -iyor-um
 believe-PASS-CONT-1SG

b. S-Structure

ben_i [t_i vur-ul-du-ø] san-il-iyor-um

"I am believed to have been shot"

It may be noted that in (iia), the embedded clause is non-finite due to lack of agreement; therefore, the subject of the embedded clause *ben* has to raise to the empty subject position of the matrix clause to take a Case. In terms of Case Theory, a non-finite clause lacks INFL and it is INFL that has the ability to assign Case to subject NP. On the other hand, the matrix verb carries an agreement feature; thus, it has the ability to give case to its subject. As is seen, raising from subject to subject is forced by absence of AGR, not by tense.

10. As may be seen from the tree diagram, S' deletion occurs in (27b) as a result of raising to subject from the standpoint of GB theory. On the contrary, we cannot see S' deletion in example (27c) since the embedded sentence still retains its AGR.

11. In this example, the movement is blocked due to the S' according to GB theory. There is no S' deletion since the embedded verb still carries its agreement feature. It should be recalled that non-finiteness in Turkish is relevant to the agreement feature, not tense. Moreover, there is nothing to force the movement of the subject of the embedded clause because the subject has already a case. This is a genitive case from the nominalized verb in the embedded clause.

12. The binding relationships between the trace and its antecedent NP in such cases create another interesting result. In this example, the trace still carries its covert genitive case. Hence, the trace cannot be bound by an antecedent, which carries a nominative case. This indicates that if a trace bears a case feature value, then it must be identical to the case feature value borne by the antecedent (though, in fact, traces are Caseless, according to GB theory). R. Moore (1988:352) states this language-particular condition as:

Let A and B be members of a A-chain, where A binds B, if B bears a Case feature value, then it must be identical to the Case feature value borne by A.

CHAPTER III

3 Principle A and Apparent Problems in Turkish

3.1 Introduction

This chapter presents Turkish data which exhibit problems related to anaphoric binding. The central thesis of Binding Theory is that an anaphor must have a c-commanding antecedent within a minimal domain. The first problem which comes into the picture is related to the so-called Long-Distance anaphors¹, which have their antecedents non-locally. This indicates that an anaphor can pick up its antecedent across finite clause boundaries. The second problem is related to anaphors for which the notion of c-commanding is not appropriate. Hence, they cannot have a c-commanding antecedent within their minimal category. Other problems arise with anaphors which have so-called split antecedents.

3.1.1 Long-Distance Anaphors²

in Turkish, anaphors can have antecedents which are not in the same clause, in contrast to English where anaphors

- c. Kızı_i [kendisin-den_i daha uzun ol-an t_j]
 girl self-ABL more tall be-NOM

arkadas-in -i_j gör-dü³
 friend-3SG:POSS-ACC see-PAST

"The girl_i saw her friend who is taller than
 self_i,"

- d. Çocuk-lar_i [kendi-ler-in-e_i t_j
 child-PLR self-3PL-

ver-il-en t_j] kitap-i_j oku-du-lar
 give-PASS-NOM book-ACC read-PAST-3PL

"The children_i read the book which was given to
 self_i,"

The example in (2a) poses the following problem for
 Principle A.

The anaphor *kendi* which is the subject of the embedded
 clause is governed and c-commanded by AGR of the embedded
 clause. Therefore, the GC for *kendi* is the lower S and *kendi*
 is free in its governing category, in violation of the
 binding principle for anaphors. Recall that AGR can govern
 only syntactic subjects of clauses (Figure 1)⁴.

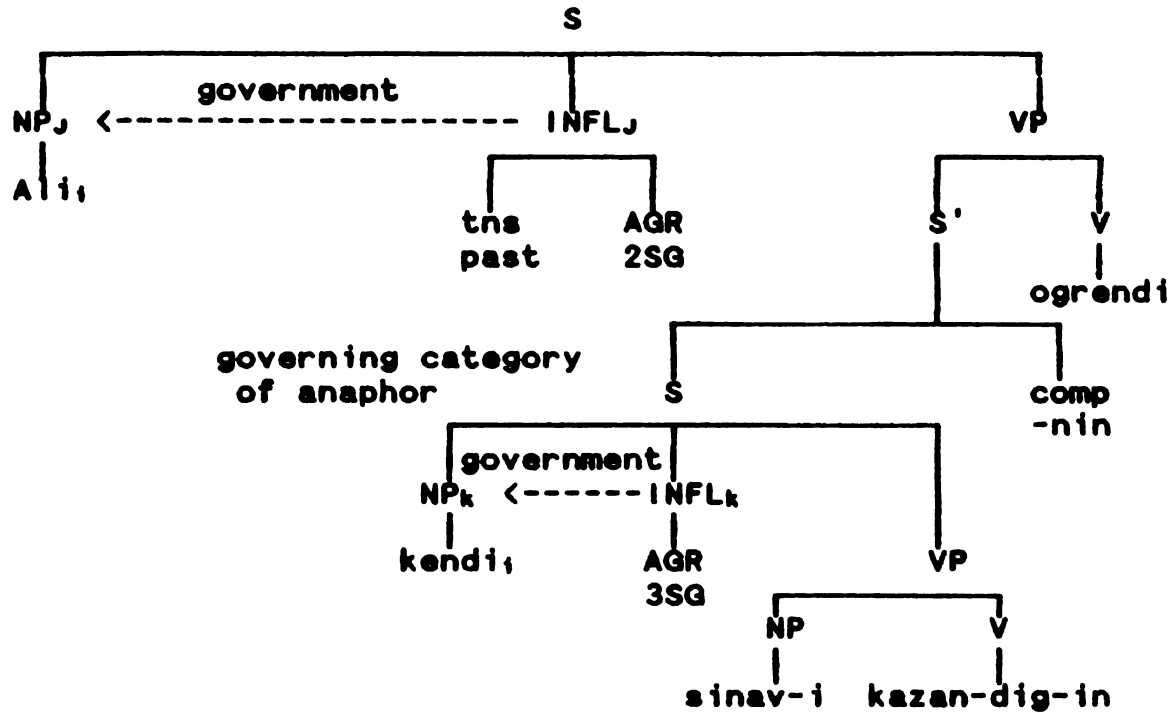


Figure 1

The anaphor *kendi* in (2b), which is an object of a postposition in embedded clause is bound by an antecedent *Ayse* which is the subject of the matrix clause. This indicates that *kendi* has its antecedent out of embedded S, its minimal governing category, in violation of Principle A. As it is observed, the minimal governing category of *kendi* (embedded S) has another possible antecedent *biz* (we) in the subject position of the lower clause. In fact, according to Principle A, the reflexive *kendi* must be bound by *biz* within its minimal governing category, namely lower S, by taking the AGR of the embedded S as accessible SUBJECT. There is nothing to prevent *biz* to be an antecedent of *kendi* within

the lower S except that the antecedent *biz* (we) does not agree with *kendi* (3SG) in number and person. Hence, the reflexive has to select the appropriate antecedent for its agreement features. This antecedent is *Ayşe* (3SG), which is the subject of the matrix clause. (Figure 2)

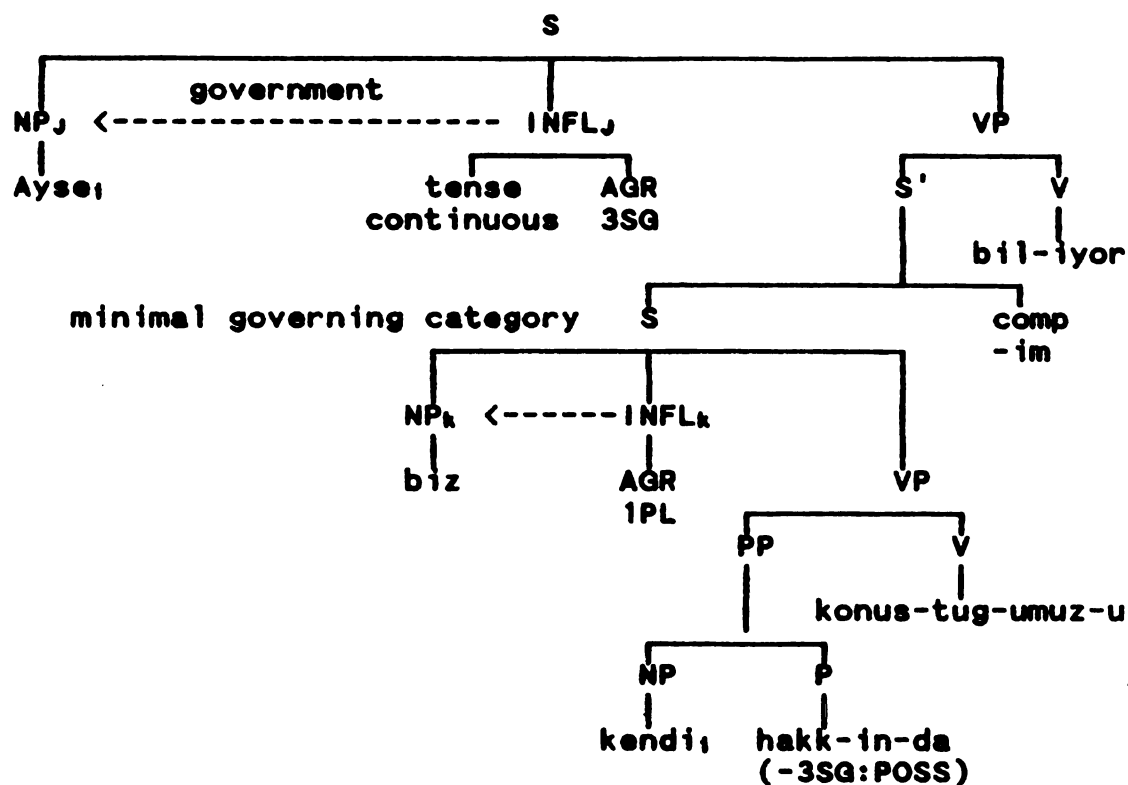


Figure 2

In example (2c) and (2d), which are relative clauses in Turkish, the anaphor *kendi* takes its antecedent from its minimal governing category, namely lower S. The antecedent of *kendi* is *kiz* (girl) in (2c), and *cocuklar* (children) in (2d). Both the antecedents occur in the matrix clause.

3.1.2 Unbounded Reflexives Having More Than One

Antecedent

Turkish has some unbounded constructions in which the antecedents can be indefinitely far away from the reflexive. Furthermore, such constructions create ambiguity in the sense that the reflexive can have two or more distinct antecedents outside of its governing category. It is observed in the examples below that the antecedents of anaphors can be separated from the anaphors by any number of clauses.

- (3) a. Ali_i Ahmet-e_j s' [s [Ayse-nin_k kendisi-ni_{i/j/k}
-DAT -GEN self-ACC

sev-di-g-in]] -i söyle-di
like-NOM-3SG:POSS-ACC say-PAST

"Ali_i said to Ahmet_j that Ayse_k likes self_{i/j/k}"

- b. Ali_i s' [s [Ahmet-in_j kendisin-den_{i/j/k}
-GEN self-ABL

nefret et-me-si]] -nin s [Ayse-yi_k
hate do-NOM-POSS -GEN -ACC

üz-dü-g-ün]] -ü bil-iyor
worry-NOM-3SG:POSS-ACC know-PROG

"Ali_i knows that it worried Ayse_k that Ahmet_j hates self_{i/j/k}"

- c. Ali_i s' [s [Ayse-nin_j kendisi-ni_{i/j}
-GEN self-ACC

suçla-di-g-in]] -i zannet-ti
blame-NOM-3SG:POSS-ACC think-PAST

"Ali_i thought that Ayse_j blamed self_{i/j}"

- d. Alt: s' [s [Ayse-nin] [kendisi-nin] /
-GEN self-GEN

masum ol-dug-un] -a
innocent be-NOM-POSS-DAT

inan- il -dig-in]]-i bil-iyor
believe-PASS-NOM-POSS-ACC know-PROG

"Ali, knows that Ayse, is believed that self,,
is innocent"

- (4) a. Ayse: kendi, /_i resmi-ni Ali-ye
self picture-3SG:POSS -DAT

**göster-di
show-PAST**

"Ayse, showed self's, /, picture to Ali,

- b. Ayse_i Ali-ye_j kendin-den_{i,j} bahset-ti^s
 -DAT self-ABL mention-PAST

"Ayse, mentioned to Ali, about self, /,"

It is observed that the reflexive *kendi* in all the above examples has more than one antecedent. Furthermore, all the antecedents and *kendi* are 3rd person singular. As the English translation reveals, *kendi* can be used with both male or female antecedents. Furthermore, not only the subject or object of the same clause, but also the subject or the object of the higher clause can serve as antecedents for *kendi*. Before the analysis of the Turkish examples can be made, consider the binding of an anaphor in the embedded clause in English:

- (5) John_i thinks [that [Bill_j likes himself_{i,j}]]

The governing category for himself in (5) is obviously

the lower S, which includes a c-commanding antecedent, Bill, for the anaphor; the anaphor's governor, namely V like; and the AGR of the embedded clause as accessible SUBJECT. Hence, in terms of the binding principles for anaphors, the sentence is well-formed. Naturally, the coindexing of himself with John will be ruled out since John is not within the minimal binding domain, namely embedded S.

In (3a), according to Principle A, the reflexive *kendi* can be bound by only Ayse, which is the subject of the embedded S. Moreover, Binding Theory guarantees that only the embedded S will be the governing category for anaphor. However, *kendi* has two potential c-commanding antecedents from the higher clause, namely Ahmet in object position and Ali in subject position. Therefore, *kendi* violates the condition of local binding of anaphors by picking up antecedents out of its minimal governing domain.⁶

In (3b), as the indices show, *kendi* has three potential antecedents, namely Ayse which is the object of the embedded intermediate clause, Ahmet which is the subject of the lowest clause and Ali which is the subject of the matrix clause. In terms of the binding principle for anaphors, the lowest clause, which is a sentential subject of the embedded clause, must be the governing category for *kendi* because *kendi* is in this clause. Within this GC, Ahmet is a c-commanding antecedent while the accessible SUBJECT is the AGR of this clause. On the other hand, *kendi* has another antecedent, Ayse, which does not precede and does not c-

command the reflexive, another violation of Principle A.
(Figure 3).

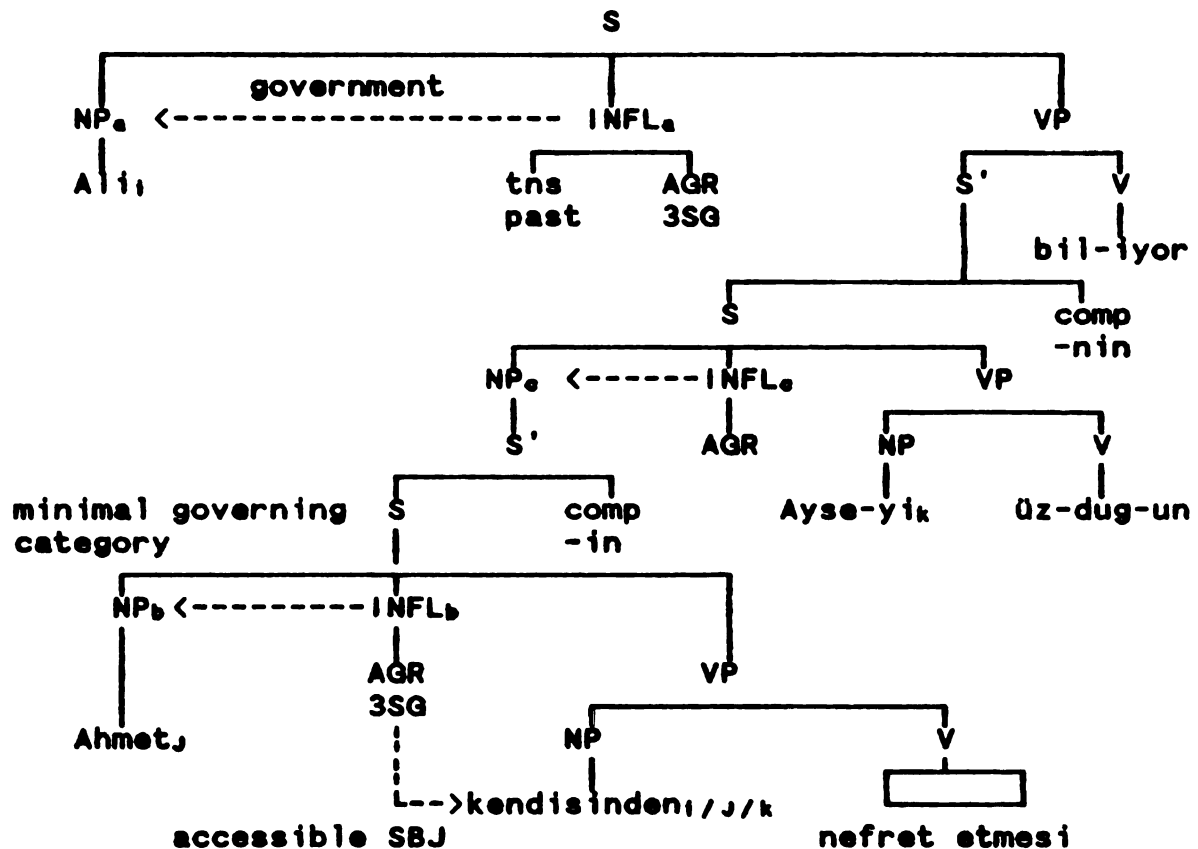


Figure 3

It is observed that an anaphor has more than one potential antecedent not only in complex sentences but also in simple sentences. For instance, in (4a) and in (4b), the reflexive *kendi* in a monoclausal sentence picks up two c-commanding antecedents, namely Ayse and Ali, within the minimal governing category S. Note that the reflexive in (4a) precedes its antecedent although the antecedent c-commands *kendi*.

All the examples given above exhibit a common characteristic, which is that the reflexive *kendi* and the eligible antecedents are marked with third person singular, which creates ambiguity.

3.1.3 C-Command

It should be recalled that an anaphor must be bound by a c-commanding antecedent such that both items occur within the minimal NP or S that contains the governor of the anaphor, and a SUBJECT accessible to the anaphor. The examples in (6) help us to examine the requirement of c-commanding antecedent for anaphors:

- (6) a. *Kendi-m_i ben-i_i vur-du-m ?
 self-1SG I -ACC shoot-PAST-1SG
 "Myself_i shot me_i,"
- b. *Ben Berna_i için kendisi-ni_i bahçe-ye
 I for self-ACC garden-DAT
 cikar- di - m ?
 take out-PAST-1SG
 "I took self_i out to the garden for Berna_i,"

The sentences in (6a) and (6b) are ill-formed. In (6a), the GC of the anaphor is the root S (its governor is INFL), but the only argument that could give the anaphor its referential index, *beni*, cannot bind it properly because it does not c-command it. Thus, the anaphor is not bound within its governing category and the sentence is ungrammatical. In

(6b), the anaphor *kendi*, in object position, is not bound by the antecedent *Berna* properly since it does not c-command the anaphor. Therefore, once again, the sentence is ungrammatical. As it is observed in the examples above, the antecedents do not precede the anaphor *kendi*. However, precedence of anaphor to the antecedent does not count for the ungrammaticality of sentences in (6) because it is not relevant to the anaphoric binding in Turkish as it may be seen in example (4a) in the previous section.

3.1.3.1 Problems for C-Command

It should be clear from the discussion of the previous examples that Principle A of Binding Theory guarantees that only sentences with anaphors in permissible positions will be predicted as being grammatical. However, Turkish exhibits some sentences in which the anaphor is coindexed with antecedents which do not c-command it:⁹

- (7) a. *np*[*kendi*_i *hata-lar-i*] *Ali-ye*_i *ders ol-du*
 self mistake-PLR-POSS -DAT lesson be-PAST

"Self's_i mistakes become lesson to Ali_i,"

- b. *np*[[*kendi*_i *kari-si*] -*nin hastalig-i*] *Ali-yi*_i
 self wife-3SG:POSS-GEN illness-POSS -ACC

cok *üz-dü*
 very sadder-PAST

"The illness of self's_i wife worried Ali_i very much"

In (7a) and (7b), *kendi* takes the non c-commanding NP *Ali* as antecedent outside of its minimal governing category NP. In the above examples, the reflexives are in the subject position of the genitive NPs which are the subjects of the root clauses.

In fact, English also has such anaphor constructions which present problems for the Binding Theory.

(8) s[_{NP}[Each other's pictures] would please the boys]¹⁰

In (8), the genitive NP (each other's pictures) cannot be a minimal governing category for each other since there is no accessible SUBJECT to each other within this NP. Furthermore, the root S cannot be a governing category for each other because, once again, there is no SUBJECT accessible to the genitive in S. Coindexing of the genitive and the AGR in S would violate the i-within-i condition because the AGR, which is an accessible SUBJECT, is coindexed with the whole NP [each other's pictures] which dominates the reciprocal. i-within-i condition rules out the coindexing of an element with a category which dominates it. In this case, the reciprocal appears to have no governing category, which violates Principle A. In order to overcome this type of violation, a root S counts as a governing category for a governed element that lacks an accessible SUBJECT (Chomsky 1981:220; Aoun 1985:26). Therefore, it can be predicted that each other, in (8), is an exception and

will be bound in root S although it does not fulfill the requirements of the binding principles.

It should be noted that the Turkish genitive NPs in the examples in (7) have governing categories (NP) unlike their English counterparts. Recall from Section 2.3.4.1 of Chapter 11 that Turkish genitive NPs have overt AGR element which acts as the accessible SUBJECT. However, the problem in the example (7a) and (7b) is that the Turkish reflexive *kendi* has a non c-commanding antecedent *Ali* outside NP, its minimal governing category.¹¹

Even though the sentences in (7), where *kendi* has non c-commanding antecedents, suggest that c-command is not relevant to anaphor binding in Turkish, the notion of c-command predicts the ungrammaticality of the sentences in (6). This leads us to conclude that the c-command requirement would be inadequate with anaphors which are the subject of genitive NPs in the subject position of monoclausal sentences in terms of Principle A.

3.1.3.2 Possessive NPs

The possessor in a possessive NP is not capable of serving as the antecedent of anaphors:

- (9) a. NP [John's mother]_i likes herself_i
 b. * NP [John's_i mother] likes himself_i
 c. NP [John's mother] likes him

in example (9a), the NP John's mother c-commands the object herself. Therefore, the sentence is well-formed. However, in example (9b), John does not c-command himself. In particular, the first branching node dominating the NP John, namely, the NP John's mother, does not dominate himself. Therefore, John cannot bind the anaphor himself.

In light of this account, some other relevant examples in Turkish are presented:

- (10) a. μ [Ali-nin_i baba -si]_j kendisi-ne_{i/j}
 -GEN father-POSS self-DAT

palto al-acak
 coat buy-FUTURE

"[Ali's_i father]_j will buy a coat for self_{i/j}"

- b. μ [Ayse-nin_i baba -si]_j kendisi-ni_{i/j}
 -GEN father-POSS self-DAT

elestir -di
 criticize-PAST

"[Ayse's_i father]_j criticized self_{i/j} "

In (10a), *kendi* has two antecedents, *Ali* and *Ali-nin baba-si*, within the root S, its GC. According to Principle A, *kendi* can be bound only by the c-commanding NP *Ali-nin baba-si* (Ali's father), but not by *Ali*, which does not c-command *kendi* (Figure 4). However, Turkish permits an optional antecedent within the possessive NP if the possessor is third person singular even though it may violate the binding conditions for anaphors.

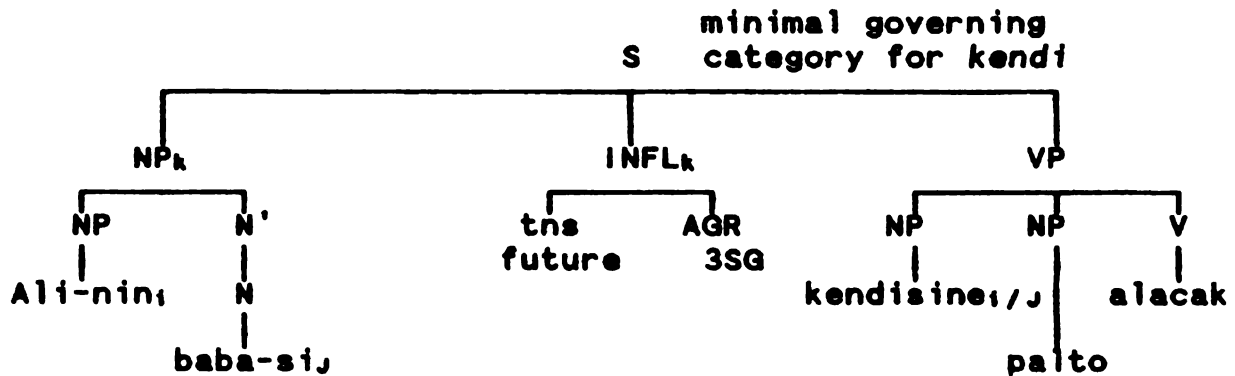


Figure 4

3.1.4 Split Antecedent

It is well known that whereas pronouns display the split antecedent phenomenon, anaphors do not.¹² Thus, the sentence in (11) is ungrammatical:

(11) *Bill_i asked_j John about themselves_{i+j}

Personal pronouns, on the other hand, are known to take split antecedents:

(12) John told Peter that Mary hated them.

In the example (12), them can be co-referential with both John and Peter. Nevertheless, Turkish has some constructions in which anaphors can take split antecedents:

- (13) a. Ali_i Ayse_j ile kendi-ler-i_{i,j} hakk- in -da
with self-PLR-POSS right-POSS-LOC

konus-tu
speak-PAST

"Ali, spoke with Ayse, about self, + J"

- b. (Ben) ¹ _{NP1} [Ali ² _{NP2} ile ³ _{with} Ayse-ye] ⁴ _{-ACC} kendi-ler-in- den₁ ⁵ _{self-PL} ⁶ _{-POSS-ABL}

bahset-ti-m

"I talked to Mr. [Ali and Ayse] about self,"

In (13a), there are two NPs, taken together as a set, that bind the anaphor *kendileri* (themselves) in root S. One of the NPs is *Ali*, which is in subject position. The other is *Ayse*, which is an object of a postposition. In (13b), the reflexive *kendileri* (3PL) refers to a conjoint object, namely NP (*Ali* and *Ayse*), however, the anaphor in this example is bound by a compound NP rather than two distinct antecedents as it happens in (13a).

This chapter has dealt with apparent problems occurring in Turkish with regard to Principle A. An obvious aberration is that anaphors appear to take split antecedents in Turkish. An analysis of such aberrations is entirely beyond the scope of this thesis. However, further research in this area is recommended and may provide invaluable material for a broader perspective on the subject.

NOTES to CHAPTER III

1. Such type of anaphors are also called unbounded or non-local anaphors in the literature (A. Giorgi 1984:307).

2. This phenomenon is not the exclusive preserve of the Turkish language. Some other languages, such as, Korean, Japanese, Swedish, Malayalam, Norwegian and Icelandic allow unbounded or long-distance anaphors.

3. Anne Zribi-Hertz (1989:698-699) discusses some anaphors in English which are used emphatically as alternatives to pronouns in violation of Principle A.

- (i) a. John_i thinks that Mary is taller than
[him_i/himself_i]
- b. John_i believes that letter was sent to [both him_i
and Mary/both Mary and himself_i]
- c. John_i thinks that Mary is in love with
[him_i/himself_i], not Peter
- d. As for [him_i/himself_i], John_i said he_i wouldn't
need to move

4. According to Jaklin Kornfilt (1984:155), 3rd person reflexives (singular as well as plural) are acceptable as subjects of embedded clauses, while 1st and 2nd person reflexives are ungrammatical. She accepts the following sentence as ungrammatical in which 1st person reflexive occurs as the subject of the embedded clause.

- (i) *(Biz)_i [kendi-miz-in_i Ankara-ya tayin
we self-1PL-GEN -ACC appoint
ed- 1l - me-sin] -e karsiy- di - k
do-PASS-NOM-3SG:POSS-DAT against-PAST-1PLR

"We_i were against that ourselves_i were appointed to
Ankara"

I am not so clear why J. Kornfilt accepts this sentence as being ungrammatical. To me, the sentence is perfectly acceptable. Even J. Kornfilt herself cannot give a clear

6. As it is observed, the sentence is ambiguous since the anaphor has more than one eligible antecedent. The analysis is totally based on syntactic factors; discourse factors are not taken into consideration. Within a context, depending on the discourse, the reflexive probably will be coindexed only

with one antecedent. Some linguists have examined anaphors in terms of discourse binding, such as Beom-Mo Kong and Anne Zribi-Hertz. They have observed that given proper discourse contexts, an anaphor without a proper syntactic binder may be discourse bound, in Turkish as observed in the following Turkish examples:

- (1) a. Ali; arkadas-in -i san-a yolla-di -mi?
 friend-3SG:POSS-ACC you-DAT send-PAST-Q

"Did Ali send his friend to you?"

- b. Hayir, kendisi; gel-di
 no, self come-PAST

"No, self; came (in person)"

Kendisi in utterance (b) is not bound within clause. Its antecedent Ali is found in the previous utterances (a).

7. This example is taken from I. Özkaragöz (1986:64). Her analysis for the ungrammatical nature of the sentence is totally based on the grammatical relationships of the NPs.

8. Example is taken from Özsoy (1983:27). I. Özkaragöz also uses the same example (1986:62). However, their interpretations are different from mine. According to Özkaragöz, the sentence is ungrammatical since an oblique is the controller of the reflexive, and the target of reflexivization is a term.

9. The notion of c-command for anaphors is not applicable to some languages, for example, Japanese and Korean. (For further information, see William O'Grady and Weon-Don Jeong).

10. The problematic sentence shows non-complementary distribution of anaphors and pronouns, contrary to what Principle A and Principle B of Binding Theory predict. Chomsky states:

The structure of the Binding Theory leads us to expect that in a position in which an anaphor A appears bound to its antecedent B, a pronominal Y cannot appear bound by B. Thus, there is a certain type of complementary distribution between anaphor and pronominal. This expectation is generally fulfilled, but there are two well-known exceptions, both in nominal expressions:

The children like [each other's friends].

The children like [their friends].

Both each other and pronoun their can be bound by the same antecedent the children (1986:169).

11. According to Bouchard (1985:124), there are three levels

at which we can talk about anaphors. These are summarized in the following:

- (i) Morphological anaphors: reflexives and reciprocals
- (ii) Syntactic anaphors: elements that bear a specific relation to their antecedent, this relation being obligatory, one-to-one, local and structurally conditioned (c-command)
- (iii) Semantic anaphors: elements whose antecedent must be linguistic, not demonstrative.

In sentences like (7a) and (7b), for example, the usual syntactic property of c-command by the antecedent is not present. Therefore, according to Bouchard's analysis, the anaphor *kendi* is just a morphological anaphor, not a syntactic one. Bouchard calls these reflexives "false reflexives" in that they are in fact syntactic pronouns.

12. Jon Koster (1984:418-419) presents the following properties of the dependency, between an anaphor (A) and its antecedent (B):

- (i) a. Obligatoriness: A and B are obligatorily linked
- b. Uniqueness of B: There is only one B for each A
- c. Prominence: B c-commands A
- d. Locality: A and B are in the same domain.

Therefore, according to the property of uniqueness, bound anaphors never have split antecedents.

CHAPTER IV

4 Toward a Solution

4.1 General Properties of Turkish Reflexives *Kendi*

We observed in Chapter II and Chapter III that the binding domain in which the antecedent of *kendi* (self) occurs is not limited to the minimal clause S or NP where *kendi* occurs. The basic properties of *kendi*, which have been illustrated in previous examples in Chapter II and Chapter III, are:

(A) The Turkish anaphor *kendi* must be bound in a governing category. The Turkish anaphor *kendi* may have a non-c-commanding antecedent as well as a c-commanding one (refer to the example (3b) in page 72 and the example (7) in page 77 of Chapter III).

a. Antecedents of anaphors can be NPs in object position as well as in subject position, both in monoclausal sentences and in complex sentences.

b. The Turkish reflexive *kendi* can occur as the object of a root clause, or as object the of a postposition. Furthermore, *kendi* can occur as both the subject or the

object of embedded tenseless clauses. On the other hand, *kendi* cannot occur as the subject of a root tensed clause.

c. The Turkish reflexive *kendi* occurs as the subject of possessive NPs.

(B) The opaque domain of *kendi* is broader than that of the anaphor which is determined by Principle A.

a. *Kendi* has the characteristic of being a long-distance anaphor. Thus, its antecedent may exist outside of its finite domain. In other words, the domain in which the antecedent of *kendi* occurs is not limited to the minimal clause or NP in which *kendi* appears.

b. The reflexive *kendi* can take more than one antecedent ambiguously. This ambiguity appears wherever *kendi* and its eligible antecedents are third person singular. The anaphoric linkage of *kendi* to distinct antecedents in subject and object position is equally possible as far as syntax is concerned.

(C) In Turkish, the Tensed Sentence Condition, which is subsumed by the notion of governing category in Government-Binding Theory, is determined by AGR rather than by tense. Thus, the notion of finiteness is dependent upon AGR, not tense.

a. The only SUBJECT accessible to an anaphor is AGR, not an overt subject.¹

b. NPs are not minimal governing categories for

anaphors in Turkish even though NPs have AGR as an accessible SUBJECT to an anaphor. The antecedent of *kendi* is always outside NP. This result indicates that AGR in Turkish possessive NPs does not behave as an accessible SUBJECT.²

(D) The Turkish reflexive *kendi* is in contrastive distribution with pronominals where the antecedent lies outside the minimal NP or S, which contains it. Therefore, one finds that a pronoun and an anaphor in the same structure can have the same antecedent, as in:

- (1) a. Ali_i s [kendisi-nin_i akilli ol-dug-un-] -a
self-3SG:GEN clever be-NOM-3SG:POSS-DAT

inan-iyor
believe-PROG

"Ali_i believes that self_i is clever"

- b. Ali_i S [pro_i akilli ol-dug-un]-a inan-iyor ³

"Ali_i believes that he_i is clever"

- (2) a. (Ben)_i Ali-ye _i [kendisi kitab-im] -i
-DAT self book-1SG:POSS-ACC

ver-di -m
give-PAST-1SG

"I_i gave to Ali [self_i's book]"

- b. Ben_i/pro_i Ali-ye [pro_i kitab-im]-i ver-di-m ⁴

"I gave to Ali [my book]"

(E) Turkish reflexive *kendi* may take a split antecedent,

which is a characteristic of pronouns.

(F) There is no gender agreement with respect to reflexives. However, the Turkish reflexive *kendi* carries an overt personal suffix which is in agreement with its antecedent in number and in person.

4.2 Revision of the Binding Theory

The application of Principle A of the Binding Theory by Chomsky (1981) to the Turkish reflexive *kendi* leads to violations of this principle. This leads us to conjecture that a possible outcome may be the introduction of a new binding domain and a resulting change in Principle A.

It may be here noted that no violations of Principle A of the Binding Theory occur in the case of simple sentences in Turkish; the violations occur in complex sentences where anaphors take their antecedents non-locally out of their minimal governing category. It is with these violations in complex sentences that we must seek a successful resolution to the problem.⁵

The question that arises is how we may deal with these often conflicting observations about the anaphor *kendi* within a new framework. The introduction of a new binding domain, and a resulting change in Principle A, offers promise as a possible solution. It is with this objective in mind that Manzini's refined theoretical framework is applied

to seek a successful resolution to the violations occurring in Principle A of the Binding Theory when applied to Turkish reflexives.

4.2.1 Manzini's Framework

Manzini (1983:432) proposes an extended Binding Theory, Principle A', for anaphors which is based upon the Binding Theory of Chomsky, Principle A

(3) Principle A'

An anaphor is bound in its governing category and in its domain-governing category.

Manzini (1983:433) defines a domain-governing category for an element as:⁶

(4) A is domain-governing category for B if

- a. A is the minimal governing category with a subject containing the c-domain of B and a governor for the c-domain of B, and
- b. A contains a subject accessible to B.

The c-domain of an element and the notions of c-command and government are defined as follows (1983:422):

(5) A is the c-domain of B if A is the minimal maximal category dominating B

(6) A c-commands B if the minimal maximal category dominating A dominates B.

(7) A governs B, if A is a lexical category and A and B c-command each other.

The definitions of governing category and accessible SUBJECT have already been given in Chapter 1.

Manzini arrives at Principle A' by combining her own Control Theory with Chomsky's Binding Theory, as

(8) Principle A. An anaphor is bound in its governing category (Chomsky).

(9) Principle A'. An anaphor without a governing category is bound in its domain-governing category (Manzini's Control Condition (1983:424)).

Manzini (1983:432) collapses Chomsky's Principle A and her Control Condition A' into one principle, as given in (3). Manzini's Control Condition refers to PROs in object sentences. The anaphoric subjects of infinitives embedded under control verbs (PRO) do not have governing categories. Therefore, Chomsky regards PRO as subjects belonging to Control Theory and not to Binding Theory. However, given the version of binding in Manzini (1983:425), it is possible to make Binding Theory subsume control:

(10) [John asked Bill s. [PRO to shave himself]

In the example above, the c-domain of PRO is S', since S' is the minimal-maximal category dominating PRO. Furthermore, the governing category for the c-domain of PRO is the root S; for the root S is the minimal category containing S', a governor for S', that is the matrix verb, and a subject accessible to S', that is NP or AGR. Finally, S, the governing category for the c-domain of PRO, contains a subject accessible to PRO, that is NP or AGR. Hence, S is the domain-governing category of PRO.

Manzini's theory also states that:

(11) An anaphor in a subject sentence without a governing category and without a domain-governing category is not subject to any binding principle, hence corefers freely? (Manzini 1983:424-435).

Manzini (1983:434) gives the following examples in which these two theories (Manzini's and Chomsky's theories) give different results :

- (12) a. s[The boys saw _{NP}[each other's pictures]]
 b. The boys thought that s[_{NP}[each other's pictures] were on sale]
 c. s[_{NP}[Each other's picture] would please the boys]

The governing category for the genitive anaphor, according to Chomsky, is S in (12a), the matrix sentence in (12b) and S again in (12c), where pictures is the governor.

In (12a) and in (12b), the boys or AGR is the accessible subject. In (12c), there being a governor and no accessible subject, the default clause applies. According to Manzini's theory, the genitive in (12a) has a domain-governing category, namely S. S is the minimal category with a subject (the boys or AGR) containing the c-domain of the genitive (NP), and a governor (V) for the c-domain of the genitive. The genitive in (12c), however, does not have a governing and a domain-governing category (Manzini 1983:434). The minimal category with a subject containing the c-domain of the genitive is S. But S does not contain a subject accessible to the genitive since coindexing of the genitive and the AGR in S would violate the i-within-i condition. In this case, the anaphor is not subject to any binding condition (Manzini 1983:435). Binding condition (A') predicts that the anaphor in (12c) co-refers freely. Thus, it is co-referential with the boys which is the only NP in an argument position in the sentence. This leads us to predict that an anaphor in the subject position of a nominal without a governing category and without a domain-governing category co-refers freely within the root S (Manzini's Binding Condition stated in (11), page 93).

4.2.2 Application of Manzini's Principle A' to Turkish Anaphors

Recall Manzini's binding condition A':

An anaphor is bound in its governing category and in its domain-governing category.

Consider the following examples in which the reflexive *kendi* violates Principle A. It is to be noted that these examples have already been discussed in Chapter 3.

- (13) Ali_i s:[Ahmet-in_j kendisin-den_{i,j}]
 -GEN self-ABL

nefret et-tig-in]] -i soyle-di
 hate do-NOM-3SG:POSS-ACC say-PAST

"Ali_i said that Ahmet_j hates self_{i,j}"

In example (13), according to Manzini's c-domain definition, the c-domain of the anaphor is S'. The governor for the c-domain is the verb of the matrix clause, namely *soyle* (say). There are two SUBJECTs accessible to the anaphor, the subject agreement marker of the matrix clause and the subject agreement marker of the embedded clause. The governing category for the c-domain of the anaphor is the minimal category containing the c-domain, a governor for the c-domain and a SUBJECT accessible to the anaphor. This category is the matrix S which in turn contains S' and its governor, namely the matrix verb. Furthermore, the subject agreement marker of the root S is the accessible SUBJECT³. Hence, *kendi* can be bound by either *Ali* or *Ahmet* within the

Figure 1

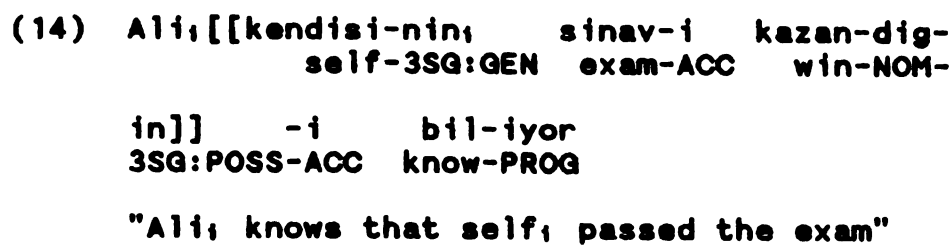


Figure 1

The anaphor *kendi*, in example (14), acts as the subject of the nominalized embedded clause and is bound by an antecedent outside its minimal governing category, which is the embedded S. Moreover, the anaphor *kendi* is free within its governing category because it is governed and is c-commanded by the AGR of the embedded clause. Therefore, this sentence would be ruled out by Principle A of Chomsky. However, the new binding-domain, Principle A', the domain-governing category, is defined in terms of the c-domain of the anaphor. Thus, it is possible to link an anaphor to an antecedent outside of its governing category.

Within Manzini's framework, *kendi* is bound by the subject NP of the matrix clause *Ali* within its domain-governing category, namely the root S. The root S is the minimal category which contains the c-domain of *kendi* (S'), the governor of the c-domain which is the matrix verb *bil* ((know) and SUBJECT accessible to the anaphor which is the AGR of the matrix clause. As may be observed, the revised Binding Theory for anaphors predicts that the sentence is well-formed in terms of Binding Theory since the anaphor is bound in its domain-governing category. According to the Binding Principles of Chomsky, the reflexive *kendi* is free in its minimal GC, namely embedded S, but according to the revised principles of Manzini, *kendi* is bound within its domain-governing category, namely matrix S.

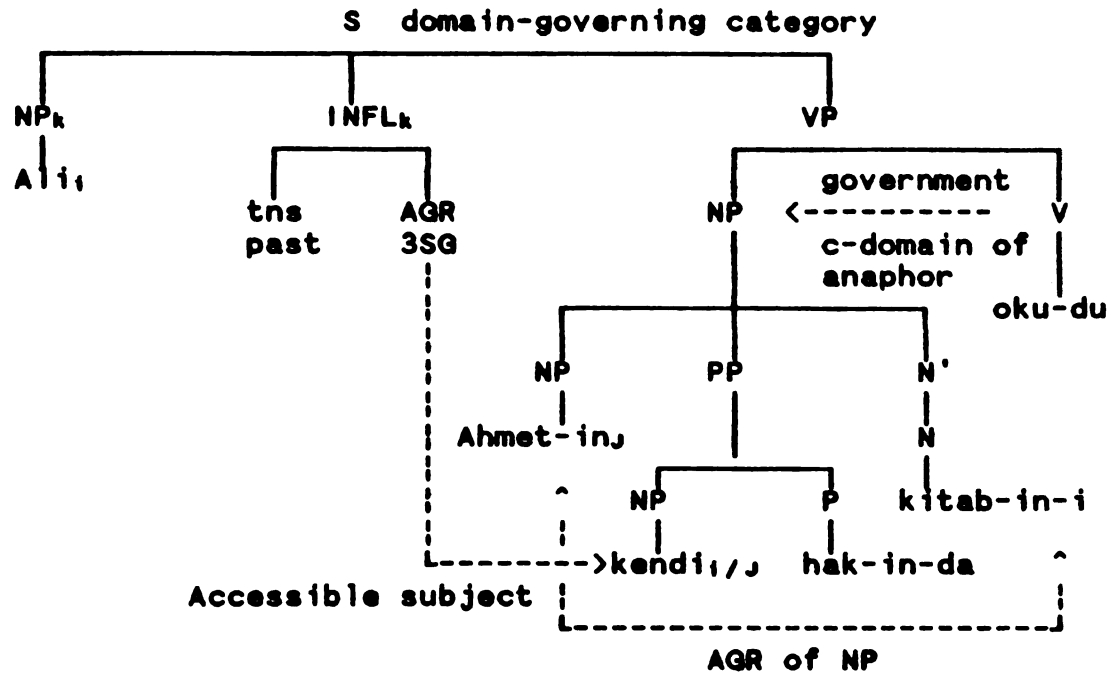


Figure 2

(16) NP[Kendi_i hata-lar-i]
self mistake-PLR-3SG:POSS

Ali-ye_i ders ol-du
-DAT lesson be-PAST

"[Self_i mistakes] became a lesson to Ali_i,"

In example (16) in which the genitive NP is the subject of the clause, the reflexive *kendi* has neither a governing category nor a domain-governing category in terms of Manzini's Principle A'; the minimal category with a subject containing the c-domain of the anaphor (NP) and a governor for the c-domain of the anaphor (INFL) is S. However, S does not contain a subject accessible to the anaphor as

coindexing of *kendi* and AGR in S would violate the i-within-i condition because the AGR_J of the root S is coindexed with the NP_J [*kendi hatalari*], therefore AGR_J cannot be coindexed with *kendi* dominated by NP_J. Hence, according to Manzini, the anaphor in the genitive NP is not subject to any binding condition. It can pick its antecedent freely in the root S (Figure 3). Therefore, *kendi* is co-referential with the object NP *Ali* which is the only eligible antecedent in the root S. It should be added that this example is parallel to the English example given in (12c), page 93.

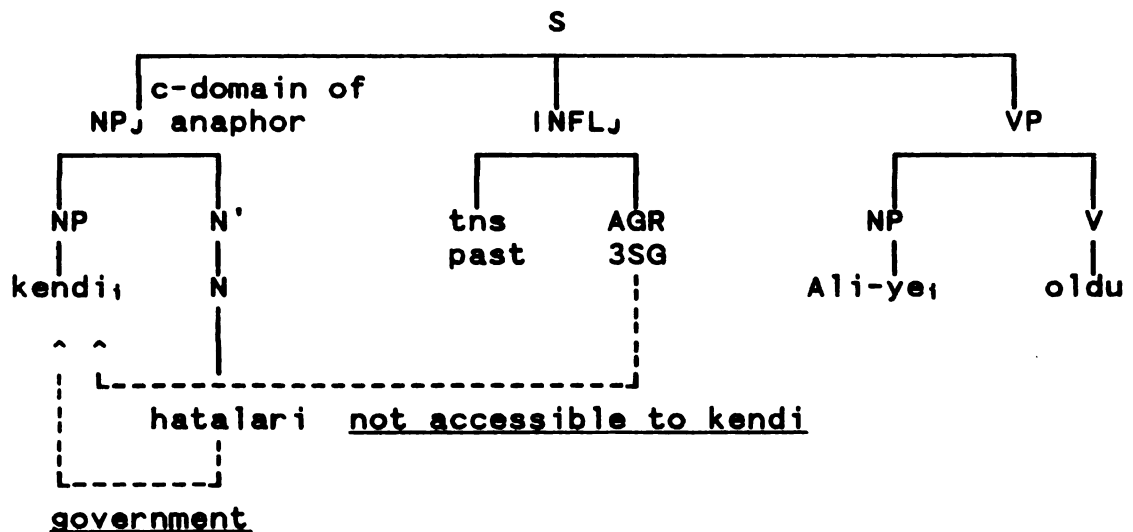


Figure 3

At this point, it will be helpful to give some similar examples from Korean. The Korean reflexive *caki* and the Turkish reflexive *kendi* have the following characteristics in common.

(17) i. There is not gender agreement with respect to reflexive. This means that Korean *caki* and Turkish reflexive *kendi* can be used with a male or female antecedent.

ii. The antecedent can be indefinitely far away from the reflexive. This means that the antecedent can occur outside of the minimal clause or NP where Turkish *kendi* and Korean *caki* occur.

According to Manzini and Wexler (1987:423), the root tense in Korean acts as accessible SUBJECT (whereas AGR in Turkish). Manzini and Wexler (1987:423) say that Korean *caki* should be bound in the root sentences and the subject of the root sentence and that of any intervening sentence should be accessible to *caki*. If they are not accessible, the governing category is not defined and Binding Principle does not apply (also refer to B. Kang 1987:427). For example,

- (18) John_i-un [[Bill]_j-i caki_{i/J/k}-lul
 -TOP -NOM self -ACC
- miweha-nunkes-i] Mary_k-lul sulphukey
 hate-COMP -NOM -ACC sad
- hay -ass -ta -ko] mit- ø -nunta
 make-PAST-DEC-COMP believe-PRES-DEC
- "John_i believes that it made Mary_k sad that Bill_j
 hates self_{i/J/k}"

(Example is taken from Manzini and Wexler 1987:422. The same example can be found in B. Kang 1987:428).

As it is seen, *caki* in (18) can have an antecedent that does not c-command it (i.e. Mary in this case) which is contradictory to Binding Principle of Chomsky. However,

Manzini and Wexler (1987:423) argue that *caki* in (18) does not have a governing category. The minimal category which contains *caki*, a governor for *caki* and a root tense as accessible SUBJECT is the root S. However, according to Manzini and Wexler, the subject of the intermediate sentences i.e. [Bill hates self] is not accessible to *caki* since it violates i-within-i condition. Hence, *caki* does not have a governing category and is predicted by Manzini's theory to pick its antecedent freely (Manzini's Binding Condition of Principle A stated in (11), page 93). It should be recalled that the similar Turkish example has been given in (3b), page 72 of Chapter III, as shown below.

- (19) Ali_i s:[Ahmet-in_j kendisin-den_{i/j/k}
-GEN self-ABL

nefret et-me-si] -nin s[Ayşe-yik
hate do-NOM-POSS -GEN -ACC

Üz-dug-ün]] -ü bil-iyor
worry-NOM-3SG:POSS-ACC know-PROG

"Ali_i knows that it worried Ayşe_k that Ahmet_j
hates self_{i/j/k}"

In this Turkish example, *kendi* can have an antecedent, Ayşe which does not c-command the anaphor, as it happens in the parallel Korean example. In the Turkish example above, the c-domain of the anaphor is the lowest S' (Ahmet hates self) which is the subject sentence of the intermediate clause and the governor for the c-domain is the AGR of the intermediate clause. The governing category for the c-domain

of *kendi* (S') is S (intermediate clause). The governor and accessible SUBJECT for S' (the c-domain) is AGR of the intermediate clause. However, the governing category of the c-domain (intermediate S) does not contain the SUBJECT accessible to *kendi*. The coindexing of the AGR of the intermediate clause with *kendi* violates the i-within-i condition because AGR is already coindexed with S' which dominates *kendi* (Figure 4), therefore Manzini's theory makes a prediction that Turkish *kendi* does not have a governing category and it picks its antecedents freely.

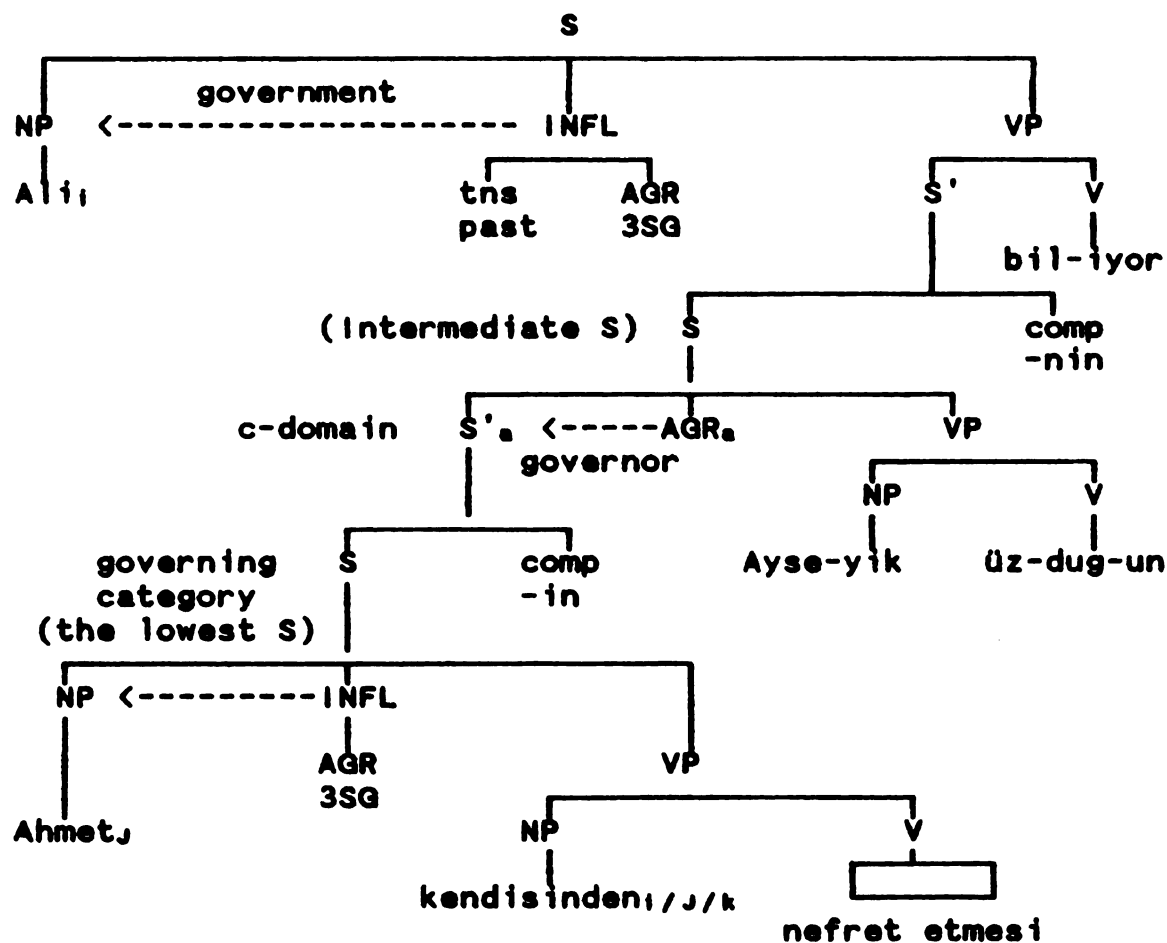


Figure 4

As it is observed, Manzini's theory explains non-c-command binding (B. Kang 1987:426). Consider another example from Korean (B. Kang 1987:429).

(20) [caki_i-uy chinkwu-ka] John_i-lul
 self-POSS friend-NOM -ACC

pangmwunha-ass -ta
 visit-PAST-DEC

"Self's_i friend visited John_i"

The coindexing of the tense (accessible SUBJECT in Korean) with the subject of the sentence, i.e. [caki-uy chinkwu-ka] (self's friend) will violate i-within-i condition (the possessive NP is coindexed with the tense, therefore, according to i-within-i condition, caki cannot be coindexed with the NP which dominates caki). Since there will be no accessible SUBJECT to caki, caki will not have a governing category. Therefore, according to Manzini's theory, it should be free to choose its antecedents within the root S (B. Kang 1987:429). It should be noted that the Korean example in (20) is parallel to the English example given in (12c), page 93, and parallel to the Turkish example in (16), page 99.

4.2.2.1 Principle A'.1

It is observed that Principle A' also makes correct predictions about the set of Turkish data in which an anaphor in the object position of an embedded clause is bound in its governing category (embedded S) and the Turkish data in which an anaphor is bound in a monoclausal sentence. For example:

- (21) Ali_i kendisi-ni eleştir-di
self-ACC criticize-PAST

"Ali_i criticized himself_i."

Example (21) consists of a single clause in which VP is the c-domain of the reflexive in object position. However, VP has no governor; therefore there is no governing category of the c-domain to be the domain-governing category of the object reflexive. Hence, the reflexive is bound in S, its governing category.

Consider another example given in (27c), page 56 of Chapter 11, as shown below.

- (22) a. [Ben_i t_i vur- ul - du - m] san- il - iyor
I shoot-PASS-PAST-1SG believe-PASS-PROG

"It is believed that I was shot"

- b. Ben_i s' [s [t_i t_i vur- ul - du - m]] san-
I shoot-PASS-PAST-1SG believe-

il-iyor-um
PASS-PROG-1SG

"I am believed to have been shot"

As it is seen, the sentence in (22b) comprises of two traces: one is in passive construction and the other is in raising construction. Although the first trace (raising) is bound in the matrix clause, its domain-governing category, the second trace (passive) is bound in the embedded clause, its governing category. Furthermore, the matrix clause cannot be construed as the domain-governing category for the second trace because VP, not S', is its c-domain. However, the VP of the embedded clause has no governor because the potential governor, the verb of the matrix clause is separated from it by the maximal projection S'. Since VP has no governor, it does not have a governing category, which would be the domain-governing category of the trace. Therefore, the second trace (passive) is bound in the embedded clause, its governing category, which includes the trace, the governor for the trace, the embedded verb and an accessible subject, the AGR of the embedded clause (Figure 5).

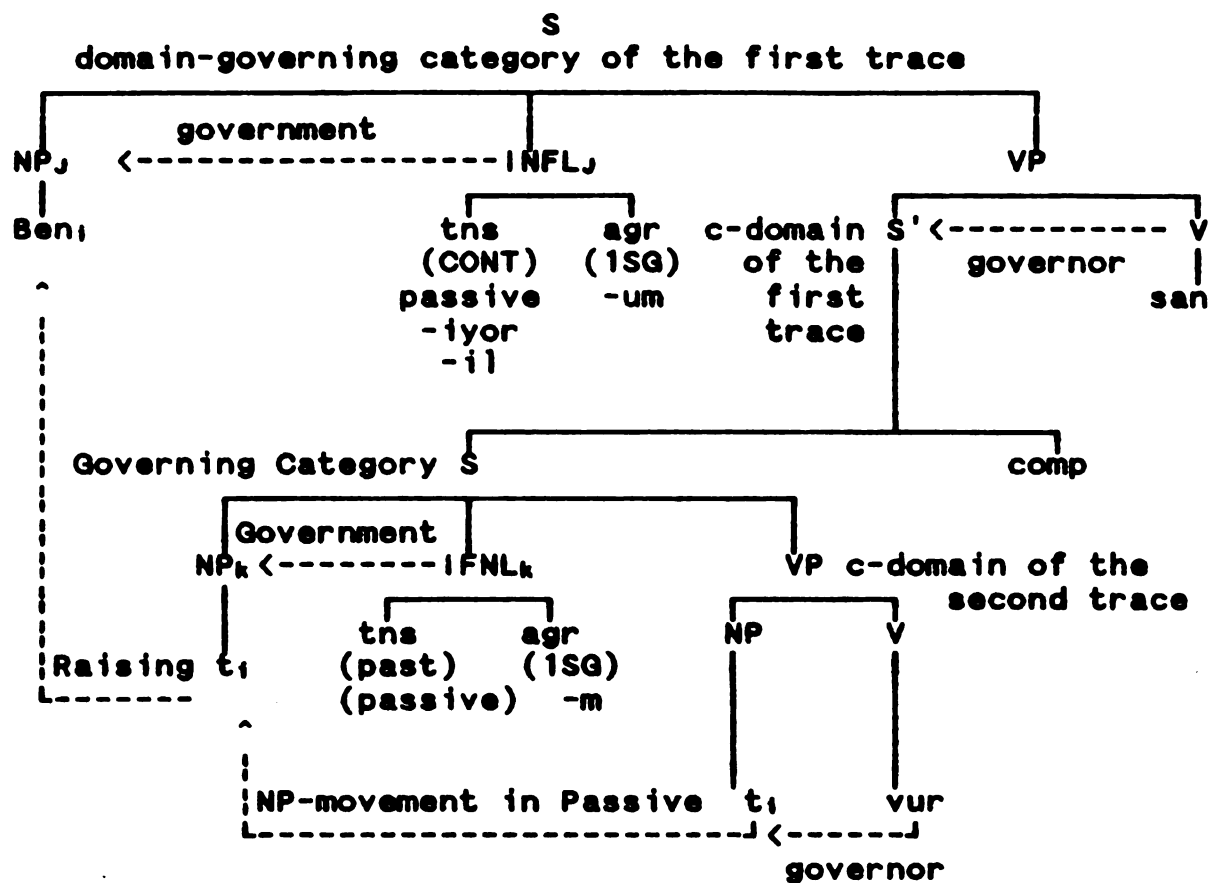


Figure 5

This conclusion suggests an addition to Principle A' as Principle A'.1.

(23) Principle A'.1

An anaphor without a domain-governing category is bound in its governing category.¹⁰

4.3 Conclusion

It seems clear that the Binding Theory of Chomsky (1981) faces difficulties in accounting for certain cases in Turkish.

- (24) a. *kendi* in an embedded clause is bound by an antecedent in the matrix clause that appears outside the governing category (embedded S)
- b. *kendi* appears as subject of a tenseless embedded clause
- c. *kendi* in a genitive NP has a binder outside its governing category (NP)

On the other hand, Manzini's modified version of the Binding Theory for anaphors, the so-called Principle A', overcomes such difficulties by extending the minimal governing category to the domain-governing category. This new binding domain permits an anaphor to be bound in a clause higher than the one it is in, while retaining the result of Chomsky that S and NP are the only categories within which binding takes place. It is observed that a revised Principle A' theory of anaphor binding helps to resolve violations in cases dealing with incorrect predictions due to Principle A in the earlier analysis of Chomsky. It is worthy to note that Principle A' also maintains the correct predictions made by Principle A.

In this respect, it is proposed that Condition A of the Binding Theory should be modified for Turkish anaphor *kendi* and an NP-trace as follows:

- (25) a. Turkish anaphors are bound within an existing domain-governing category; otherwise, they are bound within a governing category.
- b. (i) The governing category for a Turkish anaphor is the category that comprises the anaphor, the governor of that anaphor and a SUBJECT accessible to that anaphor. That governing category is S.
- (ii) The domain-governing category for a Turkish anaphor is the minimal governing category that comprises the c-domain of that anaphor, a governor for the c-domain of that anaphor, and a subject accessible to that anaphor. That domain-governing category is root S.

In comparison to Chomsky's Principle A, the governing category for a Turkish anaphor lacks the restrictive term "minimal." Principle A requires a stricter condition than Turkish for the definition of governing category. According to Principle A, only the "minimal category" (S and NP) is the governing category for an anaphor. On the other hand, there is no minimality restriction in Turkish. In fact, Turkish anaphors may co-occur outside of embedded S and NP, the minimal categories defined by Chomsky, to take root S as governing categories. This indicates that the root S, the domain-governing category, can be a binding domain for a Turkish anaphor.

NOTES to CHAPTER IV

1. D. Yang (1983:185) parametrizes SUBJECT for different languages as follows:

- (i) Anaphor-Binding Principle:
An anaphor is bound in the c-domain of its c-commanding minimal SUBJECT.
- (ii) SUBJECT is parametrized:
 - (a) SUBJECT=AGR or subject for unmarked binding (reciprocals, unmarked reflexives).
 - (b) SUBJECT=AGR only for marked binding (for marked reflexives that do not obey TSC).
- (iii) AGR for marked binding is parametrized:
 - (a) AGR=INFL of a finite clause (for Russian, etc.)
 - (b) AGR=INFL of an indicative clause (for Icelandic, etc.)
 - (c) AGR=COMP (for Dutch, etc.)

According to this parametrization, AGR is the only SUBJECT for unmarked and marked binding in Turkish. For marked binding, AGR of INFL of a tensed clause will be SUBJECT in Turkish.

2. Turkish does not have the English type of NP where the possessor occurs in a PP, i.e.,

NP[the pictures PP[of himself]]

The only structure relevant to the discussion about NP as a binding domain is therefore the kind of NP where the possessor is a genitive subject; i.e., examples corresponding to:

NP[each other's pictures]

3. Chomsky (1982:81) defines *pro* as empty pronominal which is the null counterpart of the lexical pronouns and appears as the subject of a tensed clause. Therefore, *pro* has the features [+ pronominal, - anaphor].

4. In these types of possessive NPs, the possessor pronoun is overtly expressed only for emphasis, as in:

- (i) (Ben) Ali-ye [(ben-im) kitab- im]-i ver-di-m
 i i -1SG:GEN book-1SG:POSS-ACC

"I gave to Ali my book"

Note that the subject *ben* is also dropped here.

5. My esteemed professor, Dr. Carolyn Harford, has suggested the use of Manzini's theorem as a possible resolution to the problem.

6. Manzini and Wexler (1987:422-423) parameterize the governing category for an anaphor in each language, even for each anaphoric lexical item within a given language. More specifically, binding principles remain as Chomsky states (1981). However, the definition of governing category varies from language to language, or even from one anaphoric to another in a given language. The definition of governing category is given as follows, and a language is supposed to choose among available values of this parameter:

- (i) A is the governing category for B if A is the minimal category that contains B, and a governor for B and
- a. can have a subject or, for B anaphoric, has a subject Y, if $Y \neq B$ or,
 - b. has an INFL; or
 - c. has a tense; or
 - d. has a "referential" tense (i.e., indicative mood); or
 - e. has a "root" tense if, for B anaphoric, the subject Y', $Y' \neq B$, of A, and of every category dominating B and not A, is accessible to B.

For instance, the value (a) is supposed to be for the English anaphors, (b) for Italian reflexive *se*, (c) for Icelandic pronoun *hann*, (d) for Icelandic reflexive *sig*, and (e) for Korean reflexive *caki*, Japanese *zibun*.

7. Since Manzini combines the Binding Theory and the Control Theory as one theory, she accepts PRO as anaphor. She concludes that a PRO in subject position of a sentence co-refers freely (1983:424):

- (i) . . . [PRO to behave himself in public] would help Bill

In (i), the c-domain of PRO is S' and the governing category for the c-domain of PRO (S') is S. The governor and accessible subject for S' is AGR. However in (i), S, which is the governing category for the c-domain of PRO does not contain a subject accessible to PRO; for S' and AGR c-command PRO, but coreferring of S' or AGR will violate the i-within-i condition (since S' dominates PRO) hence PRO does

not have a domain-governing category. Therefore, PRO is not subject to any binding principle, and co-refers freely (Manzini 1983:425). (Figure a.)

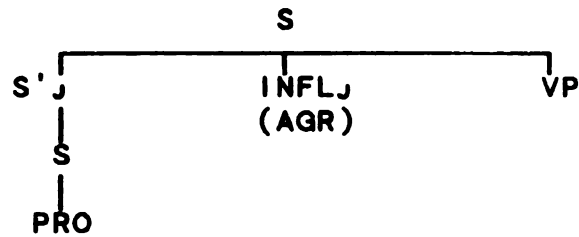


Figure a.

8 . Both the subject agreement marker of the root S and that of the embedded S can be accessible subjects. However the second AGR, that is, the AGR of the embedded S, is not relevant to our discussion here because Manzini's Binding Theory is defined in terms of domain-governing category.

9. This conclusion is taken from C. Harford (1985:57).

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