Binding as an A’-phenomenon?: Some remarks from Turkish

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Abstract

This article argues against the morpheme specificity of Binding Theory conditions in terms of pronoun-anaphor complementarity and proposes a tripartite system for the language at issue, Turkish. Focusing on the locality-based problems of Condition A and B in terms of anaphor and pronoun binding, the article claims that binding of an anaphor can be explained as an A’-phenomenon. The empty topic operator merges with the anaphor and moves to the C-domain. The stranded anaphor inside the clause is licensed by the empty operator via an A’-chain and the lexical antecedent of the anaphor plays no licensing role.

Keywords: pronoun-anaphor complementarity, binding, A’-chains, Turkish

1. Introduction

Kendi ‘self’ and kendi-si ‘self-3sg’ are two forms in Turkish which are used for a number of purposes ranging from expressing reflexivity to emphatic readings. Göksel & Kerslake (2005:265) state that kendi ‘self’ and its inflected form kendi-si ‘self-3sg’ have one adjectival and four pronominal (emphatic, reflexive, resumptive and simple pronominal) functions in Turkish. However, there seems to be no agreement on the analysis of these forms due to the fact that (i) their distributional properties cause problems for Binding Theory, and (ii) the various functions of the forms make it difficult to analyze them under a single theoretical apparatus such as Binding Theory or under a single taxonomic class such as reflexive pronoun. Consider (1) below where kendi ‘self’, kendi-si ‘self-3sg’ and a regular personal pronoun o’s/he’ are contrasted.

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buy-VN-3SG-ACC tell-PF

(i) ‘Erol told Ziya to buy a car for himself.’
(ii) ‘Erol told Ziya to buy him a car. (him=Erol or someone else)’

Adapted from Göksel & Kerslake (2005:269, example 38)

The above-mentioned three forms are used as the second complement of the embedded verb in (1). While *kendi-si ‘self-3sg’ can take both matrix and embedded subjects as its antecedent, judgements of *kendi ‘self’ are most positive when it takes a local antecedent. This makes these two forms problematic for Condition A and B. The personal pronoun o ‘s/he’ cannot take a local antecedent Ziya, respecting Condition B.

The availability of *kendi ‘self’ in non-local contexts is subject to a dialect split in Turkish. According to Dialect A (Kornfelt 2001, Rudnev 2008), *kendi and its 1st and 2nd person inflected forms (*kendi-m ‘myself’ and *kendi-n ‘yourself’) in an embedded clause act as true reflexives and cannot be co-indexed with a matrix NP while *kendi-si ‘self-3sg’ can be. According to Dialect B (examples in Sezer 1979, 1991; Meral 2010), on the other hand, the form *kendi-si is preferred but 3rd person reflexive *kendi in an embedded clause can be co-indexed with a matrix NP, i.e. *kendi can be non-locally bound. Moreover, according to Meral (2010), there are also contexts in which 1st and 2nd person reflexive forms can be bound non-locally. The relevant examples will be discussed throughout the article, but consider (2a–b) which involve the occurrence of *kendi inside an embedded clause:

(2) a. Ben [kendim-e ‘yazar’ de-n-me-sin]-den hoşlan-mi-yor-um.
   I myself-DAT author call-PASS-NM-3SG-ABL like-NEG-PROG-1SG
   *‘I do not like that myself is called ‘author’.’

b. Sen [kendin-e ‘mühendis’ de-n-me-sin]-den hoşlan-iyor-mu-sun?
   you yourself-DAT engineer call-PASS-NM-3SG-ABL like-PROG-Q-2SG
   *‘Do you like that you are called ‘engineer’?’

Assuming that the embedded clause functions as the local domain for the anaphors, first and second person singular forms *kendi-m and *kendi-n respectively seem to be bound outside of its local domain similar to the third person forms.

At first glance, *kendi-si ‘self-3sg’ can be treated as a ‘long distance (LD) reflexive’ form similar to Japanese *zibun and Chinese *ziji, while *kendi ‘self’ is a true anaphor requiring a local antecedent. However, Kornfelt (2001) states that *kendi-si ‘self-3sg’ does not share the core properties of LD-reflexives as found in other languages. Instead, she differentiates *kendi-si ‘self-3sg’ from *kendi ‘self’ due to its morphological complexity
and argues that *kendi-si* is licensed within an AgrP where a *pro* in the Spec position licenses the reflexive item locally. Thus, there is no non-local binding for neither *kendi* nor *kendi-si*.

Kornfilt’s (2001) explanation for *kendi-si* ‘self-3sg’ is on the right track given that the morphological complexity of the form is actually the factor which differentiates it from *kendi* ‘self’ in a number of other contexts such as resumption. For example, *kendi-si* ‘self-3sg’ can function as resumptive but *kendi* ‘self’ cannot. However, I propose that it is *kendi* ‘self’ which is problematic for Binding Theory given that it can be bound non-locally in a number of contexts.

Following Hornstein (2006), this article proposes that Binding Theory conditions are morpheme-specific formulae for pronoun-anaphor complementarity and therefore fail to capture the system in a language where such complementarity is not observed. Turkish distinguishes between forms which have variable interpretation (*kendi* ‘self’) and forms which have only deictic interpretation (personal pronouns). There is a third category (*kendi-si* ‘self-3sg’); a special form which combines these interpretations and is licensed in accordance with the presence/absence of an A’-operator in the C domain. Thus, their different distributional properties are a result of the chain in which they occur rather than of their intrinsic syntactic properties.

The article argues that Turkish seems to implement a tripartite system for binding according to which anaphors are licensed under an A’-chain in which an operator in the C domain licenses the anaphor inside the clause (cf. Boeckx 2008). This implies that the lexical antecedent and the anaphor are two separate entities in syntax where the former plays no role in anaphor licensing, contra the movement proposal of Hornstein (2006) according to which anaphors are copies of their antecedents which have undergone A-movement. This proposal is supported by the fact that grammatical formatives such as anaphors which are argued to be licensed under A-chains cause locality violations in Turkish. The long distance application of binding makes us to consider these forms as being licensed under an A’-chain with a different sense of locality.

The paper is organized as follows: Section 2 introduces the A’-binding proposal for anaphors and discusses supporting evidence for it. Section 3 discusses Condition A and Condition B violations and the implications of the proposal for Turkish data. The article’s findings are then summarized in the conclusion.

### 2. Binding as an A’-phenomenon

Before going into the details of the discussion, the definition of binding used in this paper should be provided. Binding Theory as introduced in Chomsky (1982) and
further developed in Chomsky (1986) has three conditions for three different grammatical forms:

(3) A. An anaphor is bound in a local domain.
    B. A pronominal is free in a local domain.
    C. An R-Expression is free (in the domain of the head of its maximal chain).

Chomsky (1986:166)

What is important for the principles above is the presence of a local domain where the anaphor, pronominal or R-expression is (un)bound. The local domain is formulated in Chomsky (1986) as the minimal complete functional complex in which the anaphor is governed. This definition requires the presence of a lexical governor for the anaphor within a complete functional complex. The term ‘complete functional complex’ implies a maximal projection i.e. TP, DP, in which the anaphor is governed, and is defined in (4).

(4) Complete Functional Complex

A Complete Functional Complex is a maximal projection where all grammatical functions compatible with its head are realized.

The term “complete” is crucial in that the maximal projection should be realized with all its functions, including the subject. Accordingly, not only S categories (TP, IP), but also a DP can be a complete functional complex if it has a subject in its specifier. The distribution of anaphoric expressions in language is argued to be universally defined, i.e. no cross-linguistic variation is observed. After providing a brief outline of Binding Theory principles, let us move into the new proposal developed for anaphor binding in Turkish. The rationale behind the new proposal is the fact that the anaphoric expression kendi exhibits strong crossover effects. Below I will discuss this issue and try to develop a new account of binding, and in section 3 I will show how the proposed analysis solves the problems caused by non-local binding of kendi.

2.1. Strong Crossover effects

Consider (5) below where an anaphor occurs in the complement position of a relativized verb.

(5) [Rel.Cl cec kendin-i, sev-en] adam
    himself-ACC love-REL man

‘The man who loves himself.’
In (5) the anaphor *kendi* occurs in the complement position of a subject relative clause and is interpreted as co-indexed with the head noun. It is not a resumptive pronoun given that it does not occur in the relativization site. Assuming that there is an empty category in the subject position of the relative clause, *kendi* in this example seems to be bound by the empty category in [Spec, TP/AspP]. In line with this reasoning, a resumptive pronoun counterpart of the empty category is expected to bind *kendi*, but this is not possible. This is given in (6a-b) below.

\[(6)\]
\[
\begin{align*}
\text{a.} & \quad [\text{Rel.Cl.} \quad \text{Kendi-si} \quad \text{dün} \quad \text{kendin-i} \quad \text{vur-an}] \quad \text{adam}\_i \\
\text{resumptive} & \quad \text{yesterday} \quad \text{himself-acc} \quad \text{shot-rel} \quad \text{man} \\
\text{Intended reading: } & \quad \text{The man, who he, shot himself yesterday.}
\end{align*}
\]

\[
\begin{align*}
\text{b.} & \quad [\text{Rel.Cl.} \quad \text{Kendi-si} \quad \text{dün} \quad \text{onu,} \text{-i} \quad \text{vuran}] \quad \text{adam}\_i \\
\text{resumptive} & \quad \text{yesterday} \quad \text{him} \quad \text{shot-rel} \quad \text{man} \\
\text{Intended reading: } & \quad \text{The man, who he, shot him yesterday.}
\end{align*}
\]

(6a) shows that a true resumptive pronoun in the subject position cannot bind *kendi* in the complement position. In (6b) *kendi* is replaced with a regular pronominal and the pronominal can only address the third party, not the subject of the relative clause. I analyze the ungrammaticality of (6a) as an instance of strong crossover which variables exhibit when a pronoun c-commands the trace of its antecedent. In (6a) the resumptive form *kendi-si* c-commands the trace of its antecedent which is the empty operator in the C domain. The relative acceptability of (6b) is due to the general ban on regular pronominal expressions with respect to their occurrence in bound-variable contexts. In other words, personal pronouns in Turkish resist bound-variable interpretations as the following example shows.

\[(7)\]
\[
\begin{align*}
*\text{Herkes, [öğretmen-in onu, çağır-düğ-in]-ı san-yor.} & \\
\text{everyone teacher-gen him call-nm-3sg-acc think-prog} & \\
\text{‘Everyone, thinks that the teacher called him.’}
\end{align*}
\]

In (7) the overt personal pronoun cannot be interpreted as a bound variable. This restricts overt pronouns to deictic contexts where their φ-feature sets are interpretable in the course of derivation.\(^3\)

\(^3\) Compared to resumptive pronouns in other grammatical positions, the occurrence of them in the highest subject position in Turkish is not readily acceptable. While some speakers find the use of resumptive pronouns in highest subject position is acceptable, other do not. However, news texts in Turkish media frequently make use of resumptive pronouns in the highest subject position.

\(^4\) Turkish is a pro-drop language and the subject pronouns are generally omitted except when cases of contrastive focus, introduction of a new topic, emphasis or new information purposes are intended by the speaker (Erguvanlı-Taylan 1986). See also Kornfilt (1984), Enç (1986), Kerslake (1986), Özsoy (1988) and Öztürk (2001) for the syntax of the distribution of null vs.
The implications of the examples in (5-7) for Binding Theory raise some questions. First, assuming that *kendi* is bound by the *ec* in the subject position of (5), why can an *ec* bind the reflexive pronoun while a pronominal expression (resumptive) in the same position cannot do so in (6a) even though the latter has φ-feature agreement with *kendi*? Second, assuming that *kendi* is bound by the head noun in (5), why is it that the *ec* in the subject position not act as an intervener? Third, assuming that *kendi* is bound by the empty operator in the C domain, would not binding from an A’-position such as Spec, CP be problematic for Binding Theory?

I argue that the last question above hints towards for the analysis I will provide for Turkish binding, in which binding might indeed be an A’-phenomenon by which a reflexive is bound by an empty operator in the C domain. Note that this analysis predicts that reflexives are like (?bound) variables. Indeed, this prediction is borne out given that (6a) is ungrammatical due to the strong crossover violations of the kind exhibited by bound variables.

### 2.2. Proposal

The alternative A’-treatment of binding phenomena follows from the resumption analysis proposed in Meral (2010), according to which resumptives form a syntactic unit with their antecedent, then split in the sense of Boeckx (2003). This is shown in (8).

(8)

\[
\begin{tikzpicture}
  \node {DP} ;
  \node [below left ] at (0,0) {wh} ;
  \node [below right ] at (0,0) {\;t'} ;
  \node [above left ] at (0,0) {D'} ;
  \node [above right ] at (0,0) {t} ;
\end{tikzpicture}
\]

(Boeckx 2003:38, example (65))

The DP structure in (8) involves the antecedent of the resumptive as its complement. They enter into the derivation as a single constituent upon first merge and then split. This split results in resumption. The complement of the resumptive pronoun upon the first merge moves cyclically to its final site. In binding cases, the anaphor forms a unit with its antecedent which is an empty operator. The antecedent moves and the anaphor strands.

Following the lines of reasoning in Boeckx (2003), I propose that the different chains available between the two positions are responsible for the nature of anaphoric dependencies in Turkish. The head position of the chain is an empty operator in overt subject pronouns in Turkish.
the C domain and the tail position is a bound variable inside the clause. I assume that the empty operator can best be represented as a Topic operator given that the empty positions inside the clause (null objects, resumptives and null subjects in the adjunct clauses) are like variables and have the function of topics (Meral 2010). This is based on the idea that Turkish is a null argument language and the arguments can be dropped without a necessary recovering procedure via $\phi$-feature agreement. Thus, information-structurally speaking, arguments with topic functions can be licensed via an operator-variable chain.⁵

I propose that the $A'$-chain for binding is formed with an operator merged with the anaphor at the beginning of the derivation. The (empty) position bound by the operator receives a variable reading, not a pronominal one, and the phonetic realization of this position is restricted to the forms \textit{kendi} ‘self’ and \textit{kendi-si}, ‘self-3sg.’ This means that personal pronouns or epithets cannot occur.

(9) Binding chain

\[
[\text{OP}_i \ldots \text{[Clause} \ldots \text{[t\text{, anaphor}_i] \ldots \text{]]}]
\]

(9) is a representation where the empty topic operator licenses the anaphor inside the clause.⁶ The system here follows from Boeckx (2003) in that the reflexive is merged with its antecedent similar to resumptives. The operator moves to the C domain and the anaphor strands. The operator relates the stranded material to a lexical NP, which is the lexical antecedent of the anaphoric expression. Let us now see how the derivation proceeds. Consider (10) and (11).

(10) \textit{Ali} \textit{kendin-i} \textit{sev-iyor}.
\textit{Ali himself-ACC love-PROG}

‘\textit{Ali} loves himself.’

⁵ One remark has to be made here: In Turkish, the null subjects which are recovered via the $\phi$-feature agreement on a syntactic head are represented by \textit{pro} and assumed to have a topic function. Thus, if we assume a topic operator for the licensing of null arguments which are not recovered via $\phi$-feature agreement, we would have to account for two distinct syntactic positions for Topic heads. Following Rizzi’s (1997) influential work, I assume that clausal architecture of Turkish has two distinct positions for topic heads. The lower one is for the null subjects recovered by the $\phi$-feature agreement and the higher one is for variable licensing.

⁶ Boeckx (2008: 223) independently argues that construal relations such as binding and control fall under the rubric of resumption. According to Boeckx (2008:228), bound elements are resumptives and this position is also held in Kayne (2002) and Grohmann (2003). Copy reflexives are not pronounced traces of movement but resumptives which are duplicated to mark focus, as an instance of anti-agreement.
According to the structure in (11), the anaphor and the empty operator merge at the beginning of the derivation and they occur in the complement position of the verb. The operator moves to the C domain and the anaphor strands similar to the re- summptive.

In this derivation the lexical antecedent of the anaphor is considered as being like the head noun in relative clauses. That is to say, the lexical antecedent plays no role in anaphor licensing, i.e. no binding from an A-position. Since the source of binding is not an A-position (where the lexical antecedent sits), anaphor binding is another form of A'-dependency. The operator moves into its own C domain or to the C domain of the matrix clause via cyclic movement. Once we accept that anaphor binding is not an A-chain, we can explain the non-local binding observed in Turkish.

Since the lexical antecedent does not play a role in anaphor licensing, the position of the antecedent is not important for the derivation. This predicts that lexical NPs in positions other than the subject position can antecede the reflexive form. This is borne out given that a dative marked NP can antecede the reflexive in Turkish, a fact which has already been noted by Sezer (1979) and Kornfilt (2001), among others.

Note that the idea that the lexical antecedent plays no role in anaphor licensing raises questions on c-command requirement between the binder and the bindee. To this effect an anonymous reviewers asks how the system captures anaphors in matrix clauses where c-command requirement seems to be operative. Consider the examples below provided by the reviewer:

(12)  
\[
\begin{align*}
\text{(12a)} & \quad \text{*Kendi}_{i} \text{ Ali}_{i} \text{-yi}_{i} \text{ sev-iyor} \\
& \quad \text{self}_{a.sc} \text{ Ali}_{c.sc} \text{ love-prog} \\
& \quad \text{*'Himself, loves Ali,'} \\
\text{(12b)} & \quad \text{Ali}_{i} \text{-yi}_{i} \text{ kend}_{i} \text{ sev-iyor} \\
& \quad \text{Ali}_{a.sc} \text{ self}_{c.sc} \text{ love-prog} \\
& \quad \text{'Ali, loves himself,'}
\end{align*}
\]

In (12a) the anaphor is the subject while its antecedent is the object, i.e. there is no c-command relation between the antecedent and the anaphor. If the antecedent had no role in anaphor licensing, this structure would be grammatical which is contrary to the facts. Note that the structure is saved via topic fronting by which the object is scrambled in front of the anaphoric subject in (12b).
I propose that the reason why (12a) is ungrammatical has nothing to do with c-command requirement, but due to the freezing positions inside the clauses in the sense of Rizzi (2006) and Rizzi & Shlonsky (2005). In (12a) the anaphoric expression is merged in [Spec, TP] and enters into phi-feature checking with the T head. This operation causes a freezing effect on [Spec, TP] and thus movement of the operator from [Spec, TP] to the immediately higher Spec position, [Spec, CP], causes ungrammaticality. This implies that freezing of the positions inside the clause could be considered to be a restriction on the application of A’-binding proposed here. In other words, it prevents the operator from moving in all cases and in this way explains, for instance, why resumption is not an alternative strategy of relative clause formation in a number of cases such as subject relativization out of relative clauses, and why long distance binding is not always the case.

The grammaticality of (12b), on the other hand, can be explained in relation to the presence of multiple Spec positions in the CP domain. Topic fronting of the object to the [Spec, CP] creates some distance between the [Spec, TP] and the Spec position targeted by the operator.7

3. Implications of the proposal on Binding Theory conditions

This section discusses problems relating to Binding Theory in terms of Condition A and B and shows how the new proposal provides an account for them. The discussion here is based on three points: (i) binding by a category other than the subject, (ii) non-local binding, and (iii) Condition B violations.

3.1. Binding by a constituent other than the subject

As already pointed out above, kendi can be bound by an argument other than the subject in Turkish. Example (13) below illustrates that in Turkish kendi can be bound by the dative marked indirect object as well.

(13) Sanki ban-a kendi-m-i anlatiyor-lar-di.
    as if  I-DAT  self-1SG-ACC  tell-prog-3PL-PAST

‘It was as if they were talking to me about myself.’

(Adapted from Göksel & Kerslake 2005:268, example 34)

7 This explanation can be considered on the right track only if we take [Spec, CP] as a potential landing site for fronted objects. [Spec, TP] could also be the landing site of the fronted objects. See Jiménez-Fernández & İşsever (2012) for an alternative account, making use of the c-command requirement, of the relationships between binding and topic fronting in terms of the similar examples above.
In (13) above, the second complement ban-a ‘to me’ is co-indexed with the anaphor kendimi ‘myself’. The subject of the sentence is a pro licensed by the 3rd person plural agreement marker on the verb. This implies that reflexive binding is not restricted to the subject position; a second complement as in the case of (13) can also bind the reflexive pronoun in the internal complement position. Note that there is no c-command requirement on binding in (13) given that the order between the binder (bana ‘to me’) and the bindee (kendimi ‘myself’) can be reversed without causing ungrammaticality. This example provides a counterargument for the applicability of Condition A which predicts it to be ungrammatical since the anaphor is bound in a domain where there is no coreferential subject.

In our proposal, on the other hand, the dative marked lexical NP bana ‘to me’ antecedes kendii ‘self’ without violating any condition on binding. Given that the lexical antecedent has no role in licensing the anaphor, its potential position is not relevant at all. What matters is that the operator which was merged with kendii moves to the C domain in order to bind the reflexive left behind inside the clause.

3.2. Non-local binding

In Turkish kendii and kendii-si can occur in different types of embedded clauses which do not contain the antecedent, thus violating Condition A. Following Özsöy (1984) and Kornfilt (1984), I assume that the embedded clauses are local domains for anaphors in that an anaphor within an embedded clause has to be bound within its own clause.

The first context in which kendii can be bound non-locally is complement clauses. 8 Consider (14a–c), in which kendii and kendii-si occur inside a nominalized complement clause and are bound by the matrix subject.

(i) Ben-Ø [Kürşat-in tı kırdığı-n]a cam-i inan-yor-um.  
I-nom break-asp dat glass-acc believe-prog-1s

‘I believe that Kürşat broke the glass.’ (Aygen 2002:87, example 83)
In (14a-c) above, the embedded verbs are nominalized with the nominalizers \{-y\}AcAK, \{-m\}AK, and \{-m\}A respectively. In all of the examples, kendi and kendi-si occur in the complement position of the nominalized verb. While kendi can only be interpreted as a reflexive, kendi-si can be interpreted both as a reflexive or a pronominal (i.e., it can take a discourse antecedent as well as the matrix subject). In (14a) kendi is bound by pro, and in (14b) by PRO which occur in the subject position of the embedded clauses. Thus, as pro and PRO in Turkish can antecede the reflexive in the complement position, the structures are grammatical without violating Condition A. However, this explanation falls short when we consider the complement clauses with \{-m\}A in (14c) where the reflexive pronoun in the second complement position of the embedded clause seems to be bound by pro in the subject position. However, pro in the embedded subject position is licensed by the 1st person agreement marker on the embedded predicate, a clear mismatch between the $\phi$-features of the reflexive and the pro subject. Hence, the structure is expected to be ungrammatical which is contrary to what we observe.

One might think that kendi in (14c) is not a true anaphor in that it behaves in the same way as a regular pronominal expression. In fact, there are two kendis in Turk-

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9 The grammaticality of this example is subject to the dialect split. Dialect A finds the use of kendi in these contexts also in (18b) ungrammatical and prefers kendi-si instead of kendi. According to Dialect B, both forms are grammatical in these positions, but kendi-si is more easily accepted than kendi.
ish: the first one behaves in the same way as a true anaphor and the latter behaves in the same way as a pronoun. This explanation finds support from the fact that *kendi* can be substituted with a regular pronominal in the right context. Consider the example below:

(15) Ahmet<sub>i</sub> [pro<sub>k</sub> on-<sub>a</sub> bir takım elbise al-ma-m]<sub>-1</sub> ist-iyor.
    Ahmet he-DAT a.suit buy-NM-1SG-ACC want-PROG

‘Ahmet wants me to buy a suit for him.’

The pronominal expression *o* ‘he’ in (15) is bound by the subject of the matrix clause and is therefore grammatical in accordance with Condition B. This shows that the anaphor-like expression *kendi* in (14c) is not a true anaphor but a pronominal expression. That is to say, Condition A is not violated in (14c) since there is no context for it to apply. However, I point out that this substitution is not always the case and the explanation falls short when we consider *kendi* within a postpositional phrase. A number of postpositions such as *için* ‘for’ in Turkish check genitive case on their complement NPs if the NP is a pronominal expression (16a). However, *kendi* in the same position cannot be inflected with the genitive case marker as has already been observed by Kornfilt (1997:303) and Göksel & Kerslake (2005) (see 16b):

(16) a. Ali<sub>i</sub> [pro<sub>k</sub> *ol/on-un* için] bir paket sigara al-ma-m]<sub>-1</sub> iste-di.
    Ali he/he-GEN for a.box.of.cigarette buy-NM-1SG-ACC want-PF

‘Ali wanted me to buy a box of cigarette for him.’

b. Ali<sub>i</sub> [pro<sub>k</sub> *kendi-nin/ kendi için] bir paket sigara al-ma-m]<sub>-1</sub>
    iste-di.
    Ali himself-GEN / himself for a.box.of.cigarette buy-NM-1SG-ACC
    want-PF

‘Ali wanted me to buy a box of cigarettes for him.’

I propose that the grammaticality contrast above is problematic if we assume that *kendi* behaves analogously with pronominal expressions. If this were the case, we would not expect the contrast above. Note also that *kendi-si* can also occur in these positions. This raises the question why another anaphoric expression, *kendi-si*, is available in the same position if *kendi* is actually a pronominal expression rather than an anaphoric one? Recall that *kendi-si* can be interpreted as both anaphoric and pronominal. In the anaphoric case, it is interpreted with the matrix subject while in the pronominal case it is interpreted with the third party, in the same way as a true personal pronoun. Thus, it seems that it is *kendi-si* rather than *kendi* which has a dual status with respect to anaphoric versus pronominal interpretation.
Briefly, Turkish seems to have a pronominal system in which *kendi* and *kendi-si* are subject to a different licensing system and do not function like typical reflexives. I argue that both *kendi* and *kendi-si* behave like variables. The reflexive form *kendi* ‘self’ is a variable which can only occur in the presence of an A’-operator. *Kendi-si*, on the other hand, is a multifunctional expression (cf. Enç 1989) whose licensing differs with respect to the presence/absence of an A’-operator in the structure. In the presence of an A’-operator, *kendi-si* acts like a variable, whereas in the absence of such an operator it acts like a deictic pronominal which takes its antecedent from the previous discourse.

Another important point in (16b) is that in Dialect B *kendi* in the complement position of the postposition is bound by a non-local antecedent, the subject of the matrix clause. This is an unexpected case for Condition A, yet the structure is grammatical. Whether this is due to the absence of a Condition A-like condition on the distribution of anaphors in Turkish or not, the data show us that we are dealing with a different sense of distributional variation between pronouns and anaphors.

One could argue that the nominalized complement clauses with [-mA] allow long distance binding of an anaphoric expression since they are not factive clauses (Kornfilt 2004). However, *kendi* can also be bound by a non-local antecedent in factive clauses which are nominalized with [-DIK]. Consider the example below.

(17) \[ \text{Ali} \text{[Ahmet-in}_k \text{ kendin-e}_k / \text{kendi-si}_k \text{-e } \text{gül-düğ-ün]} -ü san-di. \]
\[ \text{Ali} \text{ Ahmet-GEN himself-DAT laugh-NM-3SG-ACC think-PF} \]

‘Ali thought that Ahmet laughed at himself.’

Note that *kendi* in (17) can be bound by the matrix subject although a lexical NP is present in the embedded subject position. The grammaticality of this example indicates that Condition A cannot account for it. Or, it may simply show that *kendi* is not a reflexive, but the same example shows that it cannot be a pronoun. Thus, it does not fall into the types of nominal element accounted for by the binding conditions.

Another instance of complement clauses involving the non-local binding of *kendi* and *kendi-si* is those which involve a postpositional phrase. Consider (18a–c).

(18)\(^{10}\) a. \[ \text{Ali}_i \text{ [pro}_k \text{ kendin-e}_k / \text{kendi-si}_k \text{-e}_{/3} \text{bağlı] ol-ma-mız} -ı \text{ ist-iyor.} \]
\[ \text{Ali} \text{ self-DAT / self-3SG-DAT be.loyal-NM-1PL-ACC want-PROG} \]

‘Ali wants us to be loyal to him.’

b. \[ \text{Ben}_i \text{ [herkes-in}_k \text{ kendim-e}_i \text{ bağlı] ol-ma-sın} -ı \text{ ist-iyor-um.} \]
\[ \text{I everyone-GEN myself-DAT be.loyal-NM-3SG-ACC want-PROG-1SG} \]

‘I want everyone to be loyal to me.’

---

\(^{10}\) The example in (18a) is grammatical according to both dialects. (10b–c) are grammatical for Dialect B, but not for Dialect A.
   you everyone-GEN self-2SG-DAT be.loyal-NM-3SG-ACC want-PROG-2SG

   ‘You want everyone to be loyal to you.’

The availability of kendi in this context shows that, for both dialects, it can be bound across its clause, i.e. it can be bound non-locally. As such, examples (14-18) are intended to illustrate that the distribution of kendi, kendi-si and personal pronouns might not follow the pronoun-anaphor complementarity proposed in Binding Theory.

The second context of non-local binding is ECM clauses where the anaphor occurs as the exceptionally case-marked NP. This shows that the ECM clause is another context where Condition A is violated in Turkish. ECM clauses are argued to be opaque domains for binding (Özsoy 2001, Kornfilt 2007). However, this is not what we observe in our data (19a-c).11


   ‘Ali considers himself to be going to Istanbul.’

   Ali self-ACC/ self-3SG-ACC prime.minister think-PROG

   ‘Ali considers himself prime minister.’


   ‘Ali considered me to be laughing at him.’

All the examples in (19a-c) involve kendi and kendi-si inside the ECM clause. In (19a) the ECM clause has a verbal predicate, and the anaphoric NP in the subject position of the ECM clause is bound by the matrix subject. Likewise, in (19b) the anaphoric subject of the ECM clause with a non-verbal predicate is bound by the matrix subject. However, in (19c) the anaphoric expression is in the complement position of the ECM verb and bound by the matrix subject. The availability of non-local binding of kendi and kendi-si in ECM clauses argues against Condition A given that the structures are predicted to be ungrammatical.

According to the proposal offered here, long distance binding is not a problematic case. The empty operator moves successive-cyclically to the C domain of the matrix

11 The position of the ECM subject is a controversial issue. Following Aygen (2002), Öztürk (2005), Meral (2005) and contra Zidani-Eroğlu (1997), Özsoy (2001) and Arslan (2006), I propose that the ECM subject stays in situ, i.e. it does not move to the matrix clause for case checking. See also İnce (2006) for the proposal that ECM subject is base generated in the matrix clause.
clause and forms a chain with the lexical NP via co-indexation. A schema for this is given in (20–21) below.

(20) Ahmet, [pro_m kendin-e_i bir takum elbise al-ma-m]-i ist-iyor. Ahmet himself-DAT a.suit buy-NM-1SG-ACC want-PROG

'Ahmet wants me to buy a suit for him.'

(21) \[
\begin{array}{c}
\text{C Domain1} \\
\text{OPi} \\
\text{T Domain1} \\
\text{Ahmet} \\...
\text{C Domain2} \\
\text{t_i} \\
\text{T Domain2} \\
\text{[t_i+kendin-e_i]]}
\end{array}
\]

\text{Successive cyclic movement}

In (21) the empty operator merges with kendin ‘self’ and moves to the higher position, to the intermediate C domain first, then to the C domain of the matrix clause. In its final position, it binds the reflexive and relates it to the lexical antecedent Ahmet. The long distance movement is not possible in A-chains given that the intermediate landing site for the lexical antecedent is filled by a pro which is the subject of the embedded clause in (20). In other words, intermediate subject position would be the final position of the moving constituent in an A-chain. Since A’-movement does not consider subject positions as potential landing sites, no MLC violation arises.

The long distance binding option marks the difference between the analysis provided here and a similar movement based approach to Condition A provided by Hornstein (2006). According to Hornstein (2006), the lexical antecedent and the anaphor merge at the beginning and the lexical antecedent moves to the subject position which is an A-position. However, this limits the movement of the antecedent to the first available A-position and no further (MLC defined by Chomsky 1995). However, with an A’-movement analysis the empty operator can move successive cyclically without violating conditions on movement.

The analysis of binding provided here has implications on island sensitivity phenomenon. Licensing reflexives via a type of resumptive chain predicts that binding of an anaphor is possible across a syntactic island in the sense of Ross (1967), given that resumption involves island (in)sensitivity in Turkish (Meral 2010). Example (22) indicates that this prediction is borne out.


'Ali was surprised when he saw himself in the mirror.'

12 In (21) the reason why the binding operator moves cyclically is the possibility of ambiguous sentences where the reflexive is bound by the embedded subject and the matrix subject. I assume ‘at a distance’ property of Move in Minimalist Program and following Boeckx (2003, 2008), I assume that intermediate movement sites do not have to involve feature checking. Thus, cyclic movement is not for feature checking purposes.
In (22) the anaphoric expression *kendi* ‘self’ occurs inside an adjunct island and is bound by the subject of the matrix clause *Ali*. This shows that binding has another characteristic of resumption, island insensitivity, which is observed in A’-dependencies with resumptive pronouns. Our analysis of binding can easily account for this fact given that the operator and *kendi* merge in the beginning of the derivation and *kendi* strands after the movement of the empty operator.

A problem with this proposal remains to be solved. I proposed that reflexives are licensed via an A’-chain with an empty operator. However, there are sentences which involve a reflexive in the complement position and a quantifier subject in the subject position. This is exemplified in (23).

\[
(23) \ [\text{Op}, [q, \text{Herkes},] \text{ kendin-}e, \text{ elma al-ma-m}]-1 \text{ iste-di].}
\]
\[
\text{everyone himself-DAT apple buy-NM-1SG-ACC want-PF}
\]

‘Everyone, wanted me to buy an apple for him.’

Note that the universal quantifier *herkes* ‘everyone’ binds the bound-variable *kendi* ‘self’ in the structure. The structure also involves reflexive binding in that the empty operator binds the reflexive. The problem is that two instances of operator-variable chains involve a single variable *kendi*. How are these two distinct operator-variable chains formed?

According to Lasnik & Stowell (1991), A’-chains are of two types: (i) quantificational chains which include wh-questions and quantifier raising, and (ii) anaphoric chains which include null operator structures and topicalization. Note that while the former chain shows weak crossover effects due to the quantificational nature of the operator, the latter does not due to the non-quantificational nature of the operator. This implies that while the former chain may end in a variable bound by a quantificational operator, the latter chain ends only in pronouns or epithets. This prediction is borne out given that languages such as English (Lasnik & Stowell 1991), Italian (Rizzi 1997) and Greek (Alexopoulou 2006) do not allow a pronoun or a pronominal clitic which is bound by a quantificational expression.\(^\text{13}\) This means that quantificational operators in these languages bind only a null variable, but not overt expressions such as pronouns.

Lasnik & Stowell’s (1991) system excludes pronouns and epithets from restrictive relative clauses given that restrictive relatives are argued to involve a quantificational operator in their analysis. Alexopoulou (2006) argues that the absence of resumptives

\(^{13}\) A relevant example is given in (i).

\[
(\text{i}) \ *\text{kanena den ton ida}
\]
\[
\text{nobody-ACC not him saw-1S}
\]

‘Nobody, I saw him.’

(Alexopoulou 2006:60, example 3a)
in Greek restrictive relatives (except relative clauses introduced by complementizer *pu*) also follows from this typology. However, cross-linguistic data reveal that this is not always true. Resumptives are allowed in restrictive relatives in many languages. Also, epithet phrases can occur in Lebanese Arabic relative clauses in the positions where resumptives appear (Aoun & Choueiri, 2000:12). Moreover, resumptives in Turkish and Lebanese Arabic are compatible with head nouns which are quantificational expressions and receive bound-variable readings.

I propose that the operator-variable chains formed with *kendi* in (23) are subject to a process similar to LF chain reduction for proper interpretation. Narrow syntax maps this structure to the interface level as involving two dependencies for the single item. The two dependencies are unified and interpreted as the same at LF. The fact that the form *kendi* is interpreted as a bound variable supports the view that we have only one chain.\(^{14}\)

The analysis here has also implications on the question: where do binding relations occur? Recent literature on Minimalist program supports the view that binding applies in narrow syntax rather than LF, due to the fact that binding has characteristics that are shown by narrow syntactic operations. Following Reuland (2001, 2005), Kayne (2002), Hornstein (2006), I propose that binding takes place in narrow syntax.\(^{15}\) However, the example (23) indicates that binding has interactions with the interpretive phenomenon such as quantifier interpretation as already pointed out by Fox & Nissenbaum (2004) and Sportiche (2006). Note that scope interpretation is assumed to hold at LF. Hicks (2008) proposes that bound variables must be in the scope of their binder at LF and an anaphor must be bound during narrow syntax by an antecedent which is sufficiently local to it. Thus, a separation for the two licensing operations is offered on the ground that reflexive binding is a distinct grammatical operation. Given that the two operations have similar tool applications in our system, we will analyze the operator-variable chain as licensing the reflexive in narrow syntax and mapping the derivation into the interface level, LF. LF converts this chain into a quantifier-bound

\(^{14}\) It is also possible to hold that the resumptive is bound simultaneously by the relative operator in the C domain and the universal quantifier in the T domain (Sharvit 1999). This implies that the operators induce selective binding where different types of operators bind different types of variables.

\(^{15}\) Safir (2008) is an exception in this respect. He proposes that narrow syntax treatments of coconstrual relations fail to explain unbounded dependencies, dependencies with non-local relations. This is an important observation made by Safir for our study in that the non-local or long distance relations in Turkish follow Safir’s position. However, I propose that the possibility of long distance relations does not necessarily argue for the application of binding principles at the interface levels. If we consider binding relations as specifically A-relations, we can capture the generalizations about the possibility of non-local binding relations. This is the crucial point where the analysis here differs from other approaches to binding within Minimalism.
variable chain without violating the Inclusiveness Condition (Chomsky 1995) given that no interpretive difference is observed, i.e. that \textit{kendi} is interpreted as a bound variable in both cases.

### 3.3. Condition B violations

This section focuses on the distribution of \textit{kendi} ‘self’, \textit{kendi-si} ‘self-3sg’ and personal pronouns in terms of Condition B.\(^{16}\) I intend to show that the use of these pronominal forms does not seem to be explained by Condition B either, but is subject to a more general restriction on subjects: the positions where the use of an overt personal pronoun is blocked are interpreted as hosting bound variables. Given that overt personal pronouns in Turkish are incapable of occurring in variable positions (bound variable anaphora contexts), overt pronouns are sanctioned from the subject positions of the embedded clauses when they are co-indexed with a higher NP.

The first fact about personal pronouns in Turkish is that they cannot be used in bound variable anaphora contexts This seems to be the point where Turkish developed a multifunctional form \textit{kendi-si} which is able to act as a bound variable, resumptive and reflexive on the one hand, deictic on the other. Consider (24).


\textit{everyone teacher-GEN him / self-3SG-ACC call-NM-3SG-ACC think-PROG}

‘Everyone, thinks that the teacher called him.’

In (24) the overt personal pronoun cannot act as a bound variable while the complex pronominal expression \textit{kendi-si} can do so. This restricts overt pronouns to deictic contexts where their \(\phi\)-feature sets are interpretable in the course of derivation.\(^{17}\)

Given that \textit{kendi-si} is claimed to act as a bound variable, a reviewer asks if it licenses sloppy identity reading under ellipsis. This is indeed the case in Turkish (see also Rudnev, 2008).

\(^{16}\) Condition B has long been subject to studies which question its validity as a separate Binding condition. For instance, Reuland (2001:442) argues that Condition B is only a descriptive generalization. Neither GB nor Minimalism provides intrinsic reasons for its presence. Moreover, Hornstein (2006) considers Condition B as an elsewhere case where the anaphor binding fails to apply (the term “binding” is put for the ease of exposition here, recall that anaphor binding is explained as A-movement in Hornstein’s 2006 system).

\(^{17}\) Turkish is a \textit{pro}-drop language and the subject pronouns are generally omitted unless for contrastiveness, introduction of a new topic, emphasis or new information purposes are intended by the speaker (Erguvanlı-Taylan 1986). See also Kornfilt (1984), Enç (1986), Kerslake (1986), Özsoy (1988), and Öztürk (2001) for the syntax of the distribution of null vs. overt subject pronouns in Turkish.
Ali Veli-nin, kendisin-ći / ona-ści vur-ma-sın-a şaşırdı,
Mehmet de.
Mehmet also

‘Ali was surprised that Veli hit him (=Ali) and Mehmet also [was surprised that Veli hit him (=Mehmet)]’ (sloppy identity reading)

(25) shows that kendisi but not a regular personal pronoun licenses sloppy identity reading under ellipsis. This constitutes another support for the idea that kendisi acts as a bound variable.

Similar to the case above, in Turkish the embedded subject position which is co-indexed with the subject NP in the matrix clause cannot host a pronominal category or a co-indexed R-Expression, except the special pronominal expression kendisi.18 This is given in (26).

Ali / Ali / he / self-3SG home-DAT go-when I-GEN come-NOM-1SG-ACC
iste-di.
want-PF

‘Ali wanted me to come when he goes home.’

Note that the use of the personal pronoun o ‘he’ and Ali is ungrammatical in the embedded subject position in (26). The ungrammaticality of Ali is expected given that R-expressions must be free everywhere. Condition C correctly predicts the un-
grammatical case. The ungrammaticality of o ‘he’, on the other hand, is not expected according to Condition B. Note that kendisi and ec can occur in this position unlike the overt personal pronoun.

The unexpected ungrammaticality of the pronoun in (26) might be considered to follow from the Avoid Pronoun Principle proposed by Chomsky (1982), according to which a pronominal expression and its antecedent cannot be too close to each other. I argue that the Avoid Pronoun Principle falls short when we consider examples in which there is an overt pronoun in the subject position of the embedded clause and pro in the subject position of the matrix clause. The Avoid Pronoun Principle predicts a grammatical sentence given that there is no overt antecedent of the pronoun in the matrix subject position. However, these structures are ungrammatical as illustrated in (27).

(27) * pro i [on-un_i gel-eceğ-in]-i söyle-di.
    he-GEN come-NM-3SG-ACC tell-PF

‘He said that he would come.’

In (27) the matrix subject position is filled by pro which is licensed by the agreement marker on the matrix verb. According to Condition B, pro in the matrix clause is expected to bind the pronoun in the subject position of the embedded clause. However, the structure is ungrammatical. I argue that the case above is related to a general ban on the pronunciation of variables in sentences. I propose that the subject position of these clauses can be filled by a variable which is phonologically realized as kendisi (note that NPs can occur in the embedded subject position; it is only when the subject position of the embedded clause and an NP in the higher clause are co-indexed that this restriction holds).

The explanatory weakness of Condition B is also obvious with respect to the use of kendisi. Consider (28) where kendisi occurs in the embedded subject position and (29) where it occurs as the complement of the main verb in a simple clause.

(28) Ali i [kendisi-nin i̇jk aksam gel-eceğ-in]-i söyle-di.
    Ali self-3SG-GEN evening come-NM-3SG-ACC tell-PF
    ‘Ali said that he will come in the evening.’

(29) Ali kendisi-ı̇jk sev-iyor.
    Ali self-3SG-ACC love-PROG
    ‘Ali loves himself/him.’

According to Condition B, kendisi is a pronominal form which is bound outside of its domain, hence the structure in (28) is grammatical. However, in (29) kendisi
can act as an anaphor, i.e. it is bound by its antecedent within its domain. In this case, Condition B seems to be violated. Note that the structure is ambiguous between the reflexive and pronominal readings. This implies that at LF the structure is mapped to two different LF representations.

Hornstein (2006: 49) states that Binding Theory conditions are morpheme specific. He notes that the distribution of only a subset of pronouns is explained by Condition B, namely those which are bound/referential pronouns. There are many different types of pronouns which are exempt from the Binding Theory: resumptives, expletives, deictic pronouns, intrusive pronouns. Accordingly, pronouns in Turkish seem to be a bit more complicated in that only personal pronouns in matrix clauses with the antecedent outside of the sentence are correctly predicted by Condition B. The distribution of *kendi* and *kendi-si* however, seems to be problematic for both Condition A and B (30).

(30) Ali\textsubscript{i} Ahmet-\textsubscript{d} \[Ay\textsubscript{g/e}se-nin\textsubscript{m} kendi-sin-\textsubscript{i}-m sev-diğ-in\textsubscript{-i}-m söyle-di.\]

‘Ali told Ahmet that Ayşê loves him/herself.’

*Kendi-si* in (30) can take *Ali, Ahmet* or *Ayşê* as its antecedent. If *kendi-si* is a pronoun, binding of it by the local NP *Ayşê* is a clear violation of Condition B. If it is an anaphor, that the non-local NPs *Ali* and *Ahmet* bind the reflexive is a violation of Condition A. This shows that Binding Theory conditions are morpheme specific as argued by Hornstein (2006). Thus, there seems to be no condition of Binding Theory which explains the distribution of *kendi-si* in (30).

I propose that the pronominal system of Turkish seems to have a tripartite system where not only the distribution of the personal pronouns and anaphors, but also that of a complex pronominal expression *kendi-si* is crucial to understand the exact nature of the pronominal system. Turkish seems to have a pronominal system where the pronouns are employed for deictic use, *kendi* is employed for a set of functions including the reflexive, the bound variable, but excluding resumption, and *kendi-si*, as a complex pronominal expression, is employed for a set of functions which combines the functions of the two others.

4. Conclusion

This article focuses on Turkish pronominal anaphora and problematic aspects of Binding Theory conditions in terms of the distribution of *kendi, kendi-si* and overt personal pronouns. I proposed a tripartite system of pronominal expressions in Turkish instead of the pronoun-anaphor complementarity offered in Binding Theory.
The article shows that Condition A and B are problematic for Turkish given that non-local binding is available. Based on locality problems posed by Condition A and B, I argued that a treatment of binding as an A'-phenomenon can solve the locality related problems in the binding system of the language.

I propose that the possibility of long distance binding is a consequence of the fact that the idea that there is a minimal domain in Turkish is less well motivated than in languages such as English. Other grammatical phenomena related to A-chains also seem to be affected by questions over the definition of a minimal domain in Turkish.

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