Silent Objects and Topic Drop in Turkish[1]

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Abstract

This paper analyzes silent objects in Turkish as an instance of topic drop where the empty Topic operator which is base generated in the C domain licenses the silent object inside the clause. It focuses on the variable nature of silent objects and provides discussions on possible readings denoted by them in various contexts. The paper shows that (i) silent objects in Turkish receive bound variable readings (sloppy identity, distributive and arbitrary interpretations) alongside a referential one, (ii) Condition B cannot explain the distribution of silent objects, and (iii) silent objects are instances of topic drop and licensed by a covert Topic operator in the C domain.

Key words: silent objects, A'-binding, variable licensing, topic drop

1. Introduction

Languages have been observed to have a covert expression in the complement position of the verbs whose presence is assumed for theta reasons. The syntactic and semantic status of these silent objects has been investigated within the generative tradition in terms of (i) their interpretation and syntactic status, and (ii) their syntactic licensing (Huang, 1984, 1991; Pan, 2005 for Chinese; Cole, 1987 for Imbabura Quechua, Korean and Thai; Rizzi, 1986 for Italian; Hoji, 1998; Otani & Whiteman, 1991; Takahashi, 2008 for Japanese;

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Azaryad, 1990; Ince, 2004; Kornfilt, 2007; Meral, 2008, 2010; Öztürk, 2005, 2006 for Turkish; Erteschik-Shir, Ibnbari, Taube, 2013 for Russian and Hebrew).

Pronominal reading versus bound variable reading of silent objects has been a widely discussed issue in the literature. While the pronominal reading implies the presence of a *pro* which is subject to Condition B (Rizzi, 1986 for Italian; Hoji, 1998 for Japanese; Öztürk, 2006 for Turkish), the bound variable reading implies the presence of a variable which is subject to Condition C (Otani & Whiteman, 1991 for Japanese; Huang, 1984, 1991; Pan, 2005 for Chinese and Azaryad, 1990; Kornfilt, 2007; Meral, 2008, 2010 for Turkish).

As for the syntactic licensing of silent objects, there are analyses which are based on syntactic principles (VP-ellipsis analysis introduced by Huang, 1984 and developed in Otani & Whiteman, 1991; NP/DP ellipsis analysis of Takahashi, 2006, 2008). There are also analyses which are based on syntactic principles as well as semantic, pragmatic and discourse based factors. Rizzi (1986) proposes that a pronominal element, *pro* is formally licensed through case assignment by a head and recovered through binding from a licensing head. Hoji (1998) argues against the VP-ellipsis analysis and provides a semantics based account for silent objects. Erteschik-Shir et. al. (2013) argue that silent objects are instances of discourse regulated topic drop.

For Turkish, Azaryad (1990), Kornfilt (2007) and Meral (2008, 2010) independently argue for the variable status of silent objects. However, Öztürk (2006) proposes that both null subjects and objects in Turkish are pronominal in nature and silent objects are *pro*s which are licensed by thematic interpretation under the event structure. What leads the arguments to drop is the fact that arguments do not have to leave their theta positions due to the fact that there is no case driven Agree in Turkish.

In this paper, I propose that silent objects in Turkish receive variable reading and this is supported by the availability of sloppy identity, arbitrary and distributive interpretations, and the presence of quantificational silent objects. I also show that Condition B cannot explain the distribution of silent objects which is an argument against the pronominal analysis. For the syntactic licensing of silent objects, I propose that they are instances of topic drop and licensed by a covert Topic operator in C domain. The paper also discusses the possibility of analyzing parasitic gaps as instances of silent objects.

The structure of the paper is as follows. Section 2 introduces some basic properties of silent object in Turkish. Section 3 discusses the semantic interpretation of silent objects and focuses on under what conditions silent objects receive bound variable reading, and under what conditions they receive pronominal reading. Section 4 deals with silent object constructions in terms of Binding theory and focuses on cases where Condition B falls short of explaining the silent objects. Section 5 introduces the syntactic analysis of silent objects according to which a base generated empty Topic operator in the

C domain licenses the silent object inside the clause. The conclusion part summarizes the study.

2. Silent Object Constructions in Turkish

Turkish allows both subject and object drop in finite clauses. While silent subjects are licensed by the agreement on the verb, silent object are not (Kornfilt, 1984; Özsoy, 1986).

Silent object constructions in Turkish exhibit properties both similar to and different from other languages such as Japanese, Chinese, Hebrew and Portuguese. While Japanese allows both subject and object drop in certain structures, Turkish does not. Compare Japanese (1) and Turkish (2) below.

(1) Taroo-wa Hanako-ni kare-ga/e sono syoku-ni[2]
Taroo-TOP Hanako-to he-NOM/e that position-to
kanozyo-o/e suisensuru to itta.
her-ACC/e recommend that said
'Taroo told Hanako that he would recommend her for that position.'
Takahashi (2006:1) Example (2)

(2) Mary_i, [Ali-nin_j [$ec_{*i/*j/k}$] sev-diğ-in]-i söyle-di
Mary Ali-GEN love-FNOM-3SG-ACC say-PAST
'Mary_i said that Ali_j loves her_{*i}/himself_{*j}/him_k/her_k/it_k.'
Kornfilt (2007:741) Example (6)

In Japanese example (1) the object *kanozyo-o* 'her-Acc' alternates with a silent object without changing the meaning of the sentence. In other words, both overt and covert counterparts of the object can be interpreted with *Hanako*, the matrix object. In Turkish example (2), on the other hand, the silent object can only refer to a discourse entity. In other words, it cannot be interpreted with the matrix subject *Mary* or the embedded subject *Ali*. I will discuss the implications of this fact in terms of Binding theory in Section 4.

Another property of Turkish silent objects comes with the unavailability of overt pronouns in question-answer pairs and clausal conjuncts (3 and 4).

(3) Speaker A:- Ali-y_i gör-dü-n-mü?
Ali-ACC see-PAST-2SG-Q
'Did you see Ali?'

Speaker B:- Evet, [*on-u_i/ec_i] gör-dü-m.

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[2] ACC: accusative, AOR: aorist, DAT: dative, FNOM: factive nominalizer, GEN: genitive, INF: infinitive, NEG: negative, NOM: nominative, PAST: past, PERF: perfect, PL: plural, Q: question, REL: relativizer, SG: singular, TOP: topic.

yes him see-PAST-1SG
'Yes, I saw (him)'

Speaker B':- Hayır, [on-u_i/**ec*$_i$] gör-me-di-m ama Veli-yi gör-dü-m.
No, him see-NEG-PAST-1SG but Veli-ACC see-PAST-1SG
'No, I did not see him, but I saw Veli'

(4) Ali kitab-$ı_i$ aç-tı, Veli [*ec*$_i$/*on-u_i] oku-du
Ali book-ACC open-PAST Veli it read-PAST
'Ali opened the book and Veli read (it).'

In (3) the utterance of the Speaker B is ungrammatical with an overt pronoun compared to the use of silent object which is grammatical. However, the utterance of the Speaker B' shows the reverse pattern in that while overt pronoun is grammatical, silent object is ungrammatical. This difference implies that we are dealing with a topic drop phenomenon in silent object constructions and topic initiation phenomenon in constructions where the overt pronoun is used. In (4), the second conjunct can only host a silent object given that the use of an overt pronoun causes ungrammaticality. Now compare Turkish (3) with Hebrew (5) and Turkish (4) with Hebrew (6).

(5) Q: macata et ha-maftexot?
found.2SG ACC the-keys
'Did you find the keys?'

A: ken, macati ø/ otam
Yes found.1SG them
'Yes, I found them.'

Erteschik-Shir et. al. (2013:160) Example (54)

(6) Dani katav et ha-šir ve- Miriam tirgema ø / oto
Dani wrote ACC the-song and-Miriam translated it
'Dani wrote the song and Miriam translated it.'

Erteschik-Shir et. al. (2013:159) Example (52)

Unlike Turkish (3), Hebrew (5) has an overt pronoun in corresponding silent object position in a question-answer pair. Likewise, in (6) an overt pronoun is used interchangeably with a silent object in the second conjunct.[3]

[3] The use of an overt pronoun in corresponding silent object position is not always the case. For instance in Russian, when the silent object corresponds to an indefinite entity or denotes a partitive reading, it is the only option since Russian lacks indefinite pronouns. In Hebrew, there are cases where overt pronouns are more readily accepted than silent objects. See Erteschik-Shir et. al. (2013) for further description of these facts.

3. Referential/Pronominal or Bound Variable Reading

This section shows how silent objects in Turkish are interpreted in various contexts. The first context we discuss is quantificational silent objects. Takahashi (2008:310) points out that it is possible to drop quantificational silent objects in Japanese. The dropped quantificational object can have both an e-type pronoun reading in the sense of Evans (1980) and a quantifier meaning. Consider the structure from Turkish given in (7a-b).

(7) a. Ali birçok gömleğ-i dene-di.
Ali most shirt-ACC try-PAST
'Ali tried most of the shirts.'

b. Veli de [*ec*] dene-di.
Veli too try-PAST
'Veli tried (them) too.'

While in (7a) the quantificational object is present in the structure, in (7b) we have a silent object. Note that this quantificational object can be interpreted as the same set of shirts that Ali tried in (7a). In addition to that reading, the silent object in (7b) can also be interpreted as another set of shirts that *Veli* tried but not Ali. Therefore, the silent object receives a bound variable reading rather than a pronominal reading. If silent objects were *pros*, we would have difficulty in explaining the quantificational silent objects exemplified above.

The second context comes with structures where the first clause includes an anaphoric object *kendin-i* 'himself' bound by the matrix subject and the second includes a silent object.

(8) [Herkes$_i$ kendin-i$_i$ eleştir-di] [sadece Ali$_k$ [*ec*$_k$] eleştir-me-di].
everyone himself-ACC criticize-PAST only Ali criticize-NEG-PAST
'Everyone criticized himself, only Ali did not do so.'

The silent object in the second clause of (8) is interpreted with the sloppy identity reading according to which the silent object is interpreted with Ali. This shows that the silent object is interpreted as a bound variable. This sloppy identity meaning is also observed in VP ellipsis contexts, a fact observed in Huang (1984) for Chinese. In (9) below, the object position of the first part of the sentence is filled by an anaphoric expression *kendin-i* 'himself' which is co-indexed with the subject. The object position in the second part of the sentence is not pronounced, hence a silent object.[4]

[4] One may question if these cases are VP deletion or VP copying cases rather than silent object constructions. We propose that we are indeed dealing with silent object constructions. Consider the following example.

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(9) Ali$_i$ kendin-i$_i$ teselli et-ti, Veli$_k$ de [*ec*$_{i/k}$] teselli et-ti.
Ali himself-ACC console-PAST Veli also console-PAST
'Ali$_i$ consoled himself$_i$ and Veli$_k$ did so.'
Sloppy identity reading: Yes (preferred)
Strict identity reading: Yes

The silent object in (9) can be interpreted as both *Ali* and *Veli*. In other words, both sloppy and strict identity readings are available, a fact which constitutes another evidence for the variable status of the silent object. The same behavior is also observed in Japanese as pointed out in Otani & Whitman (1991) but see Hoji (1998) for the arguments to the contrary. Otani and Whitman (1991) analyzes those structures on a par with VP ellipsis structures of English in that V raising takes place and VP is deleted leaving behind a totally empty VP.

The third context comes with silent objects in adjunct clauses interpreted with quantificational matrix subject. Moreover, silent objects can receive the distributive reading alongside the collective reading in certain contexts. This is given in the example (10) below.

(10) Hasan [*ec*$_i$] azarla-yınca herkes$_i$ ağla-mağ-a başla-r.[5]

(i) Fizik öğretmen-i$_i$ öğrenci-*sin*$_i$-i alkışla-dı,
physics teacher student-3SG-ACC praise-PAST
ama kimya öğretmen-i$_k$ [*ec*$_{i/k}$] azarla-dı.
but chemistry teacher scold-past
'The physics teacher praised his student but the chemistry teacher scolded (him).'

In (i) the verb in the elided part of the second clause is different and both sloppy and strict identity readings for the silent object in the second conjunct are available. This implies that the VP ellipsis case above is not a sort of VP copying or deletion process. Rather, we are dealing with a silent object which is interpreted as a variable.

[5] Following İnce (2004), Öztürk (2006) argues that the absence of distributive reading in (i) below shows that the silent object is of a pronominal category rather than a bound variable. If it were a bound variable, distributive reading would also be possible. The example below is cited from Öztürk (2006) who cites İnce (2004).

(i) [Hasan [*ec*$_i$] azarla-yınca] herkes$_i$ ağla-mağ-a başla-*dı*.
Hasan scold-when everyone cry-INF-DAT start-PAST
'When Hasan scolded (him$_i$), everyone$_i$ started to cry.'
Multiple individual (collective reading): Yes
Single individual (distributive reading): No
Öztürk (2006) Example (11c)

However, following Meral (2008), I propose that the obligatory collective reading in (i) has nothing to do with the pronominal nature of the silent object but is due to the past

Hasan scold-when everyone cry-INF-DAT start-AOR
'When Hasan scolds (him/her$_i$), everyone$_i$ starts to cry.'
Multiple individual (collective reading): Yes
Single individual (distributive reading): Yes

Note that both multiple individual and single individual readings are available in (10). In the first reading, there is a group of people that the matrix subject *Hasan* scolds, and in the second reading, *Hasan* scolds each individual in that group. We hold that the availability of the second reading, the distributive reading, argues for the bound variable nature of the silent object.

The last context we discuss is structures where silent objects receive arbitrary reading alongside the referential one. Note that some languages have been observed to have silent objects which exhibit referential readings in certain contexts (Huang, 2000:84). This supports the view that silent objects are *pros*, not bound variables. In Turkish silent objects receive both arbitrary and referential readings. Consider (11a-b) where the silent object receives arbitrary reading when uttered out-of-blue.

(11) a. Bu adam [*ec*] çileden çıkar-ır.
this man makes.angry-AOR
'This man makes (one) *(him) really angry.'

b. Bu kitap [*ec*] çok etkile-r.
this book much affect-AOR
'This book affects (one) *(him) much.'

In (11a-b) the silent object receives an arbitrary reading. Huang (2000:84-5, ff 34) notes that Italian and French silent objects receive arbitrary reading, whereas silent objects in Brazilian Portuguese receive referential reading. However, one might think that the arbitrary interpretation of the silent object in (11a-b) comes with the generic reading resulting from the aorist marker on the verb. In (12) below, the aorist marker is replaced with the past tense marker which is the only definite tense marker in Turkish (Enç, 1986).

(12) Bu kitap [*ec*] çok etkile-di.
this book much affect-PAST
'This book effected (one) / ?*(him) much.'

Note that the example in (12) is preferred to be interpreted as having an arbitrary reading instead of referential reading. This indicates that the silent

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marker on the verb. When the sentence is introduced with the aorist marker, both collective and distributive readings become available as shown in (10) in the text.

object does not license a referential reading. However, in some question-answer pairs, silent objects tend to receive a referential reading as well as a bound variable reading. Consider (13 and 14).

(13) Speaker A: - Ali-yi gör-dü-n-mü?
Ali-ACC see-PAST-2SG-Q
'Did you see Ali?'

Speaker B: - Hayır, [*ec*] gör-me-di-m.
no, see-NEG-PAST-1SG
'No, I have not seen (him).'

(14) Speaker A: - Ödev-im-i unut-tu-m
homework-1SG-ACC forget-PAST-1SG
'I forgot my homework'

Speaker B: - Ben [*ec*] getir-di-m.
I brought
'I brought (it=mine (preferred)/yours)

In (13) the silent object in the answer part of the example receives referential reading. In (14), on the other hand, the silent object receives both sloppy identity and strict identity readings.[6] The possibility of both bound variable and referential readings of the silent object implies that the objet *pro* in Turkish seems to be like overt pronouns in English in that they can act both as referential pronouns and bound variables.

4. Discussions on Binding Theory

The variable nature of silent objects is also supported by the problematic aspects of Condition B in explaining the grammaticality of some examples. Example (15) is from Azaryad (1990) where the silent object in the embedded clause is co-indexed with the subject of the main clause. If the silent object were a *pro*, the sentence would be grammatical since Condition B is not violated given that the antecedent and *pro* are not in the same minimal domain. However, the structure is not grammatical, a fact which suggests that Condition B has nothing to do with these structures.

(15) Ahmet$_i$ [Veli-nin$_j$ [*ec*$_{*i/*j/k}$] tanı-ma-dığ-ın]-ı söyle-di.
Ahmet Veli-GEN know-NEG-NOM-ACC tell-PAST

[6] Similar examples have been discussed in Erteschik-Shir et. al. (2013) for Hebrew. In Hebrew case, the silent object in the answer part is ambiguous and there is no preference for one reading unlike Turkish where sloppy identity reading is preferred.

'Ahmet said that Veli does not know (him).'
Azaryad (1990) Example (19')

The silent object in the embedded clause in (15) cannot be considered a pronominal given that the structure is ungrammatical. If it were a pronominal category, Condition B would predict the sentence to be grammatical, since a pronominal is bound by its antecedent in a different clause.

Moreover, in question answer pairs the silent objects can be bound by the subject of a simplex finite clause. This is an unexpected situation for Condition B. Kornfilt (2007:741) independently argues that silent objects are not subject to Condition B, but to Condition C.

5. Syntactic Licensing

I propose that silent objects are licensed via a representational A'- chain where the empty Topic operator which is merged in the C domain binds the silent object inside the clause. This is based on the idea that silent objects are not of pronominal category.

Within the generative theory *pro* has been assumed to be the covert counterpart of the referential overt pronoun (Chomsky, 1982). This implies that an overt pronoun and *pro* must be the same with respect to their interpretation. This is not the case in Turkish as we have noted above. Recall that a silent pronoun *pro* licensed by the overt morphological agreement on the predicate can receive a bound variable reading but not an overt pronoun in the same position. Huang (2000:88-9) notes that this contrast is observed in a number of languages including Chinese, Japanese, Korean, Tarifit, Catalan, Spanish, Italian, Czech and Serbo-Croatian.

Turkish *pro* behaves in the same way with the above cited languages in that it is not the phonetically silent counterpart of the overt pronouns. In many cases *pro* occurs where an overt pronoun cannot. The subject position of the nominalized subordinate clauses is one such position.

(16) Ali_i [o-nun$_{*i/k}$ / pro_i uyu-duğ-un]-u söyle-di.
Ali he-GEN sleep-F.NOM-3SG-ACC tell-PAST
"Ali told that he was sleeping"

(16) exemplifies an overt pronoun *o* 's/he' and a *pro* used in the embedded subject position and co-indexed with the matrix subject. While the overt pronoun is ungrammatical, *pro* is not. This indicates that *pro* does not seem to be the covert counterpart of overt pronouns in Turkish.

Going back to the silent object licensing, I propose that no A'- movement of the empty operator is involved in licensing of these constructions. In other words, the Topic operator which licenses the silent object is merged in the C-domain (17).

(17) A'- chain
[OP_i …..[Clause ……. [ec_i] …….]]

The reason behind the absence of movement might be that sloppy identity reading in silent objects does not require c-command (cf. Hoji, 1998). In (18) below, the silent object in the second clause can be interpreted with the object in the first clause which does not c-command it. Assuming that bound variable anaphora requires a c-commanding antecedent, our case does not fall with the type of chain where an empty OP first merged with the silent object and then moves to the C domain to bind the variable left behind (cf. Boeckx, 2003). Instead, the empty OP merged in the C domain of the first clause licenses the silent object in the second.

(18) [$_{Cl.1}$ OP_i Ali_i kendin-i_i teselli et-ti], [$_{Cl.2}$ $Veli_k$ de [$ec_{i/k}$] teselli et-ti].
Ali himself-ACC console-PAST Veli also console-PAST
'Ali_i consoled himself$_i$ and $Veli_k$ did so.'

In (18) there is no movement and the empty operator which is merged in the C domain licenses the empty category inside the second clause whose subject is *Veli*. The empty category is a silent object. Recall that silent objects are often interpreted as variables in Turkish. The variable nature of silent objects is supported by the fact that silent objects cannot be pronounced as regular pronominal expressions, but as a complex pronominal expression *kendisi*, the form which can occur in A'- dominated positions. The Operator licenses the silent object and the formative is interpreted with its antecedent.

Note that the A'-chain I proposed for the silent objects explains the facts observed in these constructions. First of all, silent object constructions in Turkish do not obey island constraints. Consider (19-20) below where the silent objects which are interpreted as equal to the matrix objects are within an adjunct and a wh- island respectively, and both structures are grammatical.

(19) Ahmet [[ec_i] öldür-meden iki saat önce] Ali-yi_i gör-müş-tü.
Ahmet kill-before two.hour.before Ali-ACC see-PERF-PAST
'Ahmet saw Ali_i two hours before killing (him$_i$).'

(20) [[Kim-in [ec_i] döv-düğ-ün]-ü gör-ünce] Ahmet-i_i
whose beat-FNOM-3SG-ACC see-when Ahmet-ACC
koru-mağ-a başla-dı-n?
protect-INF-DAT start-PAST-2SG
'?Whose beating (him$_i$) did you see and started to protect Ahmet$_i$?'

Operator-variable constructions are considered to exhibit island effects, since they involve binding of a variable by an operator in A'- position as noted in Aoun and Li (2003). However, island constraints in Turkish seem to work differently in that they exhibit contradictory properties. Meral (2010) argues that "islands" in Turkish work in a different way in that the island status of a linguistic unit is not something which is intrinsic to the unit, but is closely related to the clausal architecture and the grammatical operations applying in the clause. That is to say, different properties of silent objects seem to be regulated by a set of conditions on the formation of A'- chains whose head is a moved empty operator in the C domain. It is how this empty operator works in the course of the derivation is what marks a chain (il)licit with respect to silent object structures (cf. Boeckx, 2008).[7]

That silent objects in Turkish do not obey island constraints can also be considered as related to the parasitic gap constructions in Turkish. A parasitic gap is a gap whose presence depends on a real gap, i.e., a gap resulted from an A'-movement, which does not c-command it (Chomsky, 1982). In line with Takahashi (2006), I propose that parasitic gaps in Turkish are only apparent, i.e., they are not actually parasitic gaps, but are instances of silent objects. The reason behind this is two-fold: (i) they do not obey island constraints similar to silent objects, and (ii) different from real parasitic gaps, they do not require being licensed by another gap. The first point is shown below (21-22).

(21) [$_{\text{Rel.Cl.}}$ OP Ali-nin [*ec*1$_i$] [$_{\text{Adj.Cl.}}$ OP [*ec*2$_i$] oku-madan] sil-diğ-i]
Ali-GEN read-without delete-REL-3SG
e-mail$_i$
e-mail
'The e-mail that Ali deleted without reading'

(22) [$_{\text{Rel.Cl.1}}$ OP [$_{\text{Rel.Cl.2}}$ Ali-nin [*ec*1$_i$] gör-düğ-ü] adam-ın$_i$
Ali-GEN see- REL-3SG man-GEN

[7] Languages vary with respect to the availability of cases where an embedded silent object is co-indexed with the overt matrix object. While Chinese silent objects cannot be co-indexed with matrix objects, those in Imbabura Quechua (Cole, 1987) do so. What is important about this distinction is that a strong crossover effect is expected in the presence of co-indexation between the lower object and the higher one if the silent objects are of variable category (matrix object c-commands the variable=silent object=trace of its antecedent, possibly a topic operator). Accordingly, while Chinese silent objects are variables, those in Imbabura Quechua are pronominal. Note that Turkish silent objects show condition C effects (Meral, 2008). However, the grammaticality of the examples in (19-20) needs an explanation. I leave the issue for future research and simply assume that the reason why movement is not involved in silent object licensing follow from the contradictory facts observed in silent objects with respect to strong crossover phenomenon.

[$_{\text{Adj.Cl.}}$ OP [*ec*2$_{k.}$] oku-yunca] [*ec*3$_{k.}$] sev-me-diğ-i] kitap$_k$
read-when like-NEG-REL-3SG book
'The book that the man who Ali saw did not like after reading'

In (21) *ec*2 is the parasitic gap whose presence depends on the real gap (*ec*1) resulted from operator movement in relative clauses (Kornfilt, 2000; Meral, 2010; Özsoy, 1994). The parasitic gap is inside the adjunct clause. In (22) the parasitic gap (*ec*2) is inside an adjunct clause which is embedded in a relative clause. *ec*2 depends on the presence of *ec*3 which is the actual relativization site. The availability of parasitic gaps inside the islands speaks for an analysis which treats them as silent objects whose licensing is mediated by a Topic operator in the C domain.

One of the reviewers asks about the potential interaction between the relative operator and the topic operator in (21-22). If the silent objects are licensed by a topic operator in the C domain as claimed here, this point has to be clarified. In both structures above, adjunct clauses are the domain where the empty topic operator licenses the silent object. For relativization, the domain of the operator is the relative clause where the empty operator moves to the C domain. However, the crucial point here is that the variable licensed by the empty topic operator (silent object) and the one licensed by the relative operator (gap) are interpreted as the same (*e-mail* in 21 and *book* in 22).

I propose that the two operator variable chains above are subject to the LF chain reduction for proper interpretation. Narrow syntax maps these structures to the interface level as involving two dependencies for a single item. The fact that the item is interpreted as a bound variable supports the view that we have only one licensing needed.[8]

Another interesting property of parasitic gaps in Turkish is that they can occur without a licensing real gap. (23) below exemplifies this case.

(23) Ali e-mail-i$_i$ [[*ec*$_i$] oku-madan] sil-di.
Ali e-mail-ACC read-without delete-PAST
'Ali deleted the e-mail without reading (it).'

In (23) the gap inside the adjunct clause is not licensed by another gap resulted from an A'- movement. If it was a real parasitic gap, this example would be ungrammatical as in languages such as English which are argued to have real parasitic gaps. Thus, we conclude that parasitic gaps in Turkish can be considered as silent objects whose licensing is mediated by a Topic operator.

One final remark for the Topic operator analysis presented here is related to the clausal architecture of Turkish. The presence of the Operator is not a

[8] See Sharvit (1999) for a detailed discussion of this issue on the basis of selective versus unselective operator binding of the variables.

necessary condition for TopPs in that TopPs can be generated without an empty OP. If personal pronouns, those which resist variable interpretation, occur as topics in the sentence, the best position for these pronouns is TopPs. Thus, apart from the topic operator-variable chain whose head position is Spec-TopP, there is a projection where the Spec position of the TopP hosts topicalized personal pronouns whose antecedents are selected from the discourse.[9]

6. Conclusion

This paper analyzed silent objects in Turkish as an instance of Topic drop where the empty Topic operator which is base generated in the C domain licenses the silent object inside the clause. The variable nature of silent objects, different readings denoted by silent objects, the relations between the silent objects and Condition B, the similarities between the parasitic gaps and silent objects have been discussed. The paper concluded that (i) silent objects in Turkish receive bound variable reading, (ii) Condition B cannot explain the distribution of silent objects, (iii) silent objects are instances of Topic drop and licensed by a covert Topic operator in the C domain, and (iv) parasitic gaps can also be considered as instances of silent objects.

Future research would focus on how exactly Topic drop phenomenon is observed in Turkish and how it is related to focus phenomenon. What are other constructions in language which can be examined as instances of Topic drop? Given that Turkish is a Topic drop language putting severe restrictions on pronoun using, thorough discussions on Topic drop phenomenon would shed lights on theoretical description and analysis of Turkish language.

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