

# Non-Canonical Case Licensing is Canonical: Accusative Subjects of CPs in Turkish

**Abstract** In this paper I address issues pertaining to the licensing of Accusative Case on the subjects of finite complement clauses in Turkish. The two primary claims I make in this paper are: (i) Finite complement clauses are CPs in Turkish as supported by novel data that show that clauses headed by an overt complementizer can have Accusative subjects, and (ii) Accusative subjects do not undergo obligatory raising to the matrix clause, which hosts the licenser of Accusative Case. The key to the analysis is the further observation that subjects of such complement CPs undergo Topicalization in Turkish and thus they occupy the highest position in their clause (i.e., the edge). The main supposition relevant to the analysis is this: A syntactic object *SO* of a lower locality domain  $LD^1$  can establish a licensing relation (*Agree*, à la Chomsky 2001) with a licenser *L* in the next higher locality domain  $LD^2$  if *SO* is at the edge of  $LD^1$ . Thus, a subject NP moves close enough to its matrix licenser to get its Accusative Case licensed. I argue that observations from Turkish can be successfully analyzed under this assumption adopting the general framework outlined in Chomsky (2001) particularly when united with specific proposals concerning the functional structure of the left periphery.

## 1 Introduction

A central question since Rosenbaum (1968) has been whether or not there is a rule of raising from the subject of the complement clause to the object position of the matrix clause in the derivation of sentences like the following:

(1) Mary believes John to be a genius.

Chomsky (1973) held that there is no raising, while Postal (1974) argued that there is, providing further arguments for the raising analysis. In the more recent years, the approaches have taken a different shape although the central question remained the same. For instance, Chomsky (1995) argues that the subject NP *John* in (1) is within the boundaries of the embedded clause, at least in overt syntax, while it undergoes raising to the matrix clause at LF. Lasnik and Saito (1991), Koizumi (1993), Runner (1995), and Bošković (1997) rather argue that the Accusative Case of the subject NP *John* in (1) is licensed by raising to the matrix clause in overt syntax.

The observation that the subjects of complements of attitude verbs can be optionally assigned Accusative in Turkish dates back as early as Aissen (1974), Pullum (1975) and Kornfilt (1977). An example of such a construction in Turkish is given in (2):

(2)

- a. Pelin [ben- $\emptyset$  Timbuktu-ya git-ti-*m*] san-ıyor.  
P-nom I-nom T-dat go-past-1sg believe-pres  
'Pelin believes that I went to Timbuktu.'
- b. Pelin [ben-*i* Timbuktu-ya git-ti- $\emptyset$ ] san-ıyor.  
P-nom I-acc T-dat go-past believe-pres  
'Pelin believes that I went to Timbuktu.'

The prominent analysis of a sentence like that in (2b), where the embedded subject is marked with Accusative Case, has been a Raising-to-Object analysis (see Zidani-Eroğlu 1997, Kural 1997, Moore 1998, Özsoy 2001, but also see Kornfilt 1984, Brendemoen and Csato 1984 arguing for an S'-Deletion analysis, and Aygen 2002 for an ECM analysis without S'/CP-Deletion).

The key to the analysis of (2b) is that the embedded predicate has *Tense* morphology unlike the English example in (1), where the complement clause is infinitival. The distinctive character of (2b) becomes more puzzling when one recognizes that a sentence like that in (3) is also possible in Turkish, as was reported in Kornfilt (1977):<sup>1</sup>

(3)

Pelin [ben-*i* Timbuktu-ya git-ti-*m*] san-iyor.  
P-nom I-*acc* T-dat go-past-1*sg* believe-pres  
‘Pelin believes that I went to Timbuktu.’

The data in (2b) and (3) show that the type of complement clauses under discussion may have an Accusative subject in the presence or absence of agreement morphology, whereas they always have *Tense* (more appropriately, *Tense*, *Aspect*, and/or *Modality*). Importantly, neither involves an overt complementizer.

Crucial to our purposes in this paper, Turkish has another type of complement clause that is headed by an overt complementizer, *diye*, as noted in the reference grammars of Turkish (cf. Kornfilt 1997a, Göksel and Kerslake 2005, among many others). An example of this type of complement is given in (4):

(4)

Pelin [sen- $\emptyset$  Timbuktu-ya git-ti-*n* *diye*] bil-iyor-muş.  
P-nom you-*nom* T-dat go-past-2*sg* C know-prog-evid.past  
‘Pelin thought that you went to Timbuktu.’

What is not reported previously (to the best of my knowledge) is that just like those complement clauses without an overt complementizer in (2b) and (3), subjects of complement clauses with an overt complementizer may have subjects that optionally get Accusative Case in the presence/absence of agreement morphology on the embedded predicate. Witness the example in (5):

(5)

Pelin [sen-*i* Timbuktu-ya git-ti (-*n*) *diye*] bil-iyor-muş.  
P-nom you-*acc* T-dat go-past(-2*sg*) C know-prog-evid.past  
‘Pelin thought that you went to Timbuktu.’

The similarities between (2b,3) and (5) raise interesting questions. The parallelism between (2b,3) and (5) suggests that both complement clauses have identical structures, they both project CPs, and they both syntactically manifest a C (complementizer), although one of them is morphologically realized while the other is not (I will provide further support for this claim). Consider now the following two scenarios under this assumption:

If the raising analysis of Accusative subjects is correct as claimed on the basis of data like that in (2b) and/or (3), how do we account for the raising of subjects out of finite CPs for reasons of Case? Stated

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<sup>1</sup> Knecht (1974) reported that only (2b) is acceptable in Turkish, while it was reported in Pullum (1975) that (2b) is not possible but (3) is. Kornfilt (1977) makes the empirical claim that (2b) and (3) are not part of the same dialect, and accordingly (2b) and (3) belong to speakers of different dialects. Aygen (2002), Kural (1993), Zidani-Eroğlu (1997) claim that both (2b) and (3) exist in Turkish (i.e., agreement is optional). I disagree with the claim that there is a dialectal difference among speakers with respect to their judgments regarding (2b) and (3) as the variation exists among speakers of Istanbul Turkish, the standard dialect, and side with the latter group of researchers in the relevant respect. It is true that speakers generally pick one over the other (possibly an instance of idiolectal variation), yet no speaker I have consulted rejects either of them completely.

differently, how is A-movement out of CPs possible given that this would be an instance of improper movement?

If the raising analysis is not on the right track, and Accusative subjects can/must remain in the clause they are base-generated in, then the question takes a different shape. In this case, how do we account for the licensing of Accusative Case on the subject of complement clause by a matrix licenser across a CP boundary? Put differently, how is such a ‘long distance’ A-type operation possible at all?

The two questions are not so different after all. They both have the implication that we are forced to allow for an A-operation (movement or Case licensing) to cross paths with A'-positions.

As for the first question, a number of researchers have argued in recent years that A-movement out of CPs is in fact not necessarily ruled out since the current framework has at its disposal the technical tools to make A-movement out of CPs possible (Bošković 2007, Epstein and Seely 2006, Ferreira 2004, Fujii 2005, McCloskey 2000, Richards 1999, Rodrigues 2004, Tanaka 200, among others).

As for the second question, it has already been demonstrated by Polinsky and Potsdam (2001) that under certain conditions  $\varphi$ -agreement can reach into a *finite* CP in Tsez (Nakh-Dagestanian), particularly when an *agreement controller* (i.e., trigger of agreement) gets sufficiently close to the *controllee* through a movement operation that remains within the lower clause boundary.<sup>2</sup> Polinsky and Potsdam (2001) show explicitly that the movement of the embedded *agreement controller* is an instance of Topicalization in Tsez.

Concerning Case licensing across clausal domains, the canonical instances of cross clausal Case licensing has generally been argued to be possible particularly when lower clauses (i.e., clauses into which Case is assigned) have a truncated structure. A prototypical example of this involves restructuring infinitives (see Bhatt 2004 for Hindi, Bobaljik and Wurmbrand 2005 for German and Itelmen, Grosz and Patel 2006 for Kutchi Gujarati, and Nomura 2005 for Icelandic, among others). Nevertheless, this is not the only option available for cross-clausal Case licensing. It has indeed been suggested in Bruening (2001), based on facts from Passamaquoddy and Japanese, that licensing of Case into a lower clause is possible even when the lower clause is not a restructuring infinitive. Bruening’s (2001) claim is that, Case licensing into finite clauses is available in Passamaquoddy and Japanese when the subject NP from the lower clause undergoes A-bar movement to get ‘close enough’ to the matrix (Case) licenser, just like  $\varphi$ -agreement can reach into *finite* CPs in Tsez (see also Massam 1985).

I will demonstrate in this paper evidence for the following two claims from Turkish:

- (i) Raising of Accusative subject NPs to the matrix clause is an option in Turkish; it is not obligatory. An immediate consequence of this is that instances of raising to matrix clause cannot be ‘Case driven A-movement.’
- (ii) Accusative subject NPs in Turkish move to hold an A-bar position at the edge of the complement clause they are base-generated in, from which they may optionally move to the domain of the matrix clause. The A-bar position in question is reserved for Topics.

The claims in (i) and (ii) will be shown to hold for both types of complement clauses illustrated in (2b) and (3).

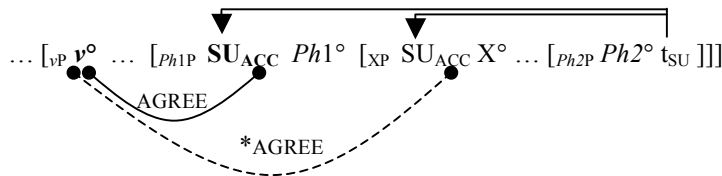
To state very briefly, the analysis of the facts to substantiate the claims above will be as the following: The key component of the analysis is the assumption that elements at the very edge of a locality domain (i.e., finite CPs in Turkish) are accessible to the next higher domain (cf. Bruening 2001, Chomsky 2000, 2001, Bobaljik and Wurmbrand 2005, Polinsky and Potsdam 2001, among others). The syntactic operation that licenses Case and  $\varphi$ -agreement is the operation *Agree* along the lines proposed in Chomsky (2001) (other conditions on *Agree* and the definitions of the relevant concepts will be outlined in Section 5). Subjects of finite complement clauses that undergo Topicalization to the edge of their

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<sup>2</sup> Polinsky and Potsdam (2001) present substantial support for their claim that movement is clause-bounded in Tsez (be it *wh*-movement, topicalization, or scrambling).

clause are thus eligible to establish an Agree relation with matrix  $v^\circ$ , which allows the licensing of Accusative Case on subject NPs. A rough illustration of the idea is given in (6) to anticipate the actual analysis to be articulated in Section 5 (in (6), *PhP* stands for *Phase Phrase*, and linear order is irrelevant):

(6)



The Accusative subject NP that occupies the Specifier of the projection indicated by X(P) (a non-phasal maximal projection) in (6) is not accessible to the matrix  $v^\circ$  under the locality conditions offered in Chomsky (2001) simply because it is not at the *edge* of the clause it is base-generated in. Following in particular Bobaljik and Wurmbrand (2005), and Polinsky and Postdam (2001), I will argue that the ‘edge’ of a clause (indicated by the *Ph1P* in (6)) ranges over a number of projections at the left periphery, and the highest one determines *the edge* in the absence of potentially higher ones, under the assumption that functional heads do not project unless there is motivation to do so (Bošković 1997, Grimshaw 1994, among others).

This paper is organized as follows: In Section 2, I first show that there is reason to treat complement clauses headed by a *null* and an *overt* C(omplementizer) alike, although they are selected by different types of verbs. The major empirical reason for the parallel treatment of the two is that these two types of complement clauses exhibit important similarities in terms of the (un)availability of Accusative subjects and  $\varphi$ -agreement on their predicates. In Section 3, I present data that challenge the arguments from the previous literature that claims that Accusative subjects undergo *obligatory* raising to matrix clause. Combining the observations in this section with those in Section 2, I claim that the complement clauses headed by the overt *C diye* and those headed by a null *C* both project CPs in Turkish. Having concluded that Accusative subjects do not necessarily raise to the matrix clause, I introduce evidence in Section 4 that show that Accusative subjects nevertheless undergo movement to the left periphery of their clauses. The movement in question is an instance of *Topicalization*, and it is not Case-driven A-movement. In Section 5, I first outline the main proposal of the paper and then turn to an analysis of the optionality of overt agreement morphology on the predicates of such complement clauses with Accusative subjects. The remainder of this section is dedicated to testing some predictions of the analysis, which are shown to hold. Section 6 aims to address some remaining issues and provide an analysis that is compatible with the general approach. Section 7 concludes the paper.

## 2 Finite Complement Clauses (FCCs) in Turkish<sup>3</sup>

### 2.1 FCCs with a null *C*

#### 2.1.1 Nominative and Accusative subjects of FCCs

FCCs with a null *C* (henceforth, *null-FCCs*) in Turkish are selected by verbs of belief such as *san-* ‘believe, think, consider’ as shown in (7):<sup>4</sup>

<sup>3</sup> Finite Complement Clauses in Turkish occur in the indicative and the subjunctive mood. I will only be interested in the former variety in this paper.

<sup>4</sup> I would like to note at the very outset that the English glosses of Turkish FCC-selecting-verbs and the corresponding English translations may not have identical English verbs in some examples. This is because FCC-selecting-verbs in Turkish are often ambiguous and can be glossed by a number of different English verbs. Despite that, a certain generality in the translations can be observed.

(7)

Pelin [sen- $\emptyset$  Timbuktu-ya git-ti-*n*] san-ıyor.  
P-nom you-*nom* T-dat go-past-2sg believe-pres  
'Pelin believes that you went to Timbuktu.'

An important observation concerning *null*-FCCs is that overt agreement morphology on their predicate is obligatory when their subject bears Nominative Case, as indicated by the grammaticality contrast in (8):

(8)

a. Pelin [ben- $\emptyset$  Cibuti-ye git-ti-*m*] san-ıyor.  
P-nom I-*nom* Djibuti-dat go-past-1sg believe-pres  
'Pelin believes that I went to Djibuti.'  
b. \*Pelin [ben- $\emptyset$  Cibuti-ye git-ti- $\emptyset$ ] san-ıyor.  
P-nom I-*nom* Djibuti-dat go-past believe-pres  
'Pelin believes that I went to Djibuti.'

However, the situation is different when subjects of *null*-FCCs are Accusative. As illustrated in (9), subjects of *null*-FCCs may bear Accusative Case regardless of whether the embedded predicate has overt agreement morphology or not. Note that the tense morphology remains constant in (9):

(9)

a. Pelin [sen-*i* Timbuktu-ya git-ti-*n*] san-ıyor.  
P-nom you-*acc* T-dat go-past-2sg believe-pres  
'Pelin believes that you went to Timbuktu.'  
b. Pelin [sen-*i* Timbuktu-ya git-ti- $\emptyset$ ] san-ıyor.  
P-nom you-*acc* T-dat go-past believe-pres  
'Pelin believes that you went to Timbuktu.'

The generalization emerges from (8) and (9) is this: Overt agreement morphology is obligatory when *null*-FCCs have Nominative subjects, whereas overt agreement morphology on the predicate of *null*-FCCs does not entail Nominative on their subjects. The correlation between overt agreement morphology and Nominative Case is pivotal and has had an important role in the current understanding of Agreement and Case since George and Kornfilt (1981) (cf. Chomsky 2000, 2001). I will offer an analysis of this generalization in Section 5.1.

Next, I turn to the other type of FCCs (headed by the complementizer *diye*) in Turkish and introduce their fundamental characteristics.

## 2.2 FCCs with Overt *C* 'diye'

### 2.2.1 The Basics of *Overt*-FCCs

The second type of FCCs in Turkish involves the overt complementizer *diye*, which I will refer to in this paper as *overt*-FCCs.<sup>5</sup>

*Overt*-FCCs may serve different functions in Turkish, yet I will only be concerned with those that function as complements of some (matrix) verbs.<sup>6</sup> To be precise, I will study those FCCs that are selected

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<sup>5</sup> That *diye* is a subordinator/complementizer in Turkish was argued to be the case first in Sprouse and Schwarz (1994), and later in Kornfilt (1998) and Göksel and Kerslake (2005). In his Turkish grammar, Underhill (1976) classifies *diye* as a postposition. Kornfilt (1998) rejects this classification on the basis of the fact that *diye* can head complements of matrix verbs, and that PPs in Turkish are not complements. Kornfilt (1998) thus concludes that the *complementizer* analysis of *diye* is more appropriate.

<sup>6</sup> *Overt*-FCCs may also function as adverbial clauses, which may express reason, purpose etc. (cf. Göksel and Kerslake 2005). These are not within the scope of the present study.

as complements by verbs of cognition and perception such as *bil-* ‘know/think/suppose,’ *düşün-* ‘think,’ *duy-* ‘hear,’ etc., as shown in (10) (Note that the subjects of *overt*-FCCs in (10) are all Nominative. I will turn to a discussion of Accusative subjects in the same context shortly):<sup>7</sup>

(10)

- a. Pelin [CP sen-ø Timbaktu-ya git-ti-*n* diye] bil-iyor-muş.  
P-nom you-*nom* T-dat go-past-2sg C know-prog-evid.past  
‘Pelin thought that you went to Timbaktu.’
- b. Pelin [CP sen-ø Timbaktu-ya git-ti-*n* diye] düşün-üyor-muş.  
P-nom you-*nom* T-dat go-past-2sg C think-prog-evid.past  
‘Pelin thought that you went to Timbaktu.’
- c. Pelin [CP sen-ø Timbaktu-ya git-ti-*n* diye] duy-muş.  
P-nom you-*nom* T-dat go-past-2sg C hear-prog-evid.past  
‘Pelin heard that you went to Timbaktu.’

Notably, verbs that select *overt*-FCCs cannot select *null*-FCCs, as indicated by the ungrammaticality of the sentences in (11), when *diye* is absent:<sup>8</sup>

(11)

- a. Pelin [CP sen-ø Timbaktu-ya git-ti-*n* \*(diye)] bil-iyor-muş.  
P-nom you-*nom* T-dat go-past-2sg C know-prog-evid.past  
‘Pelin thought that you went to Timbaktu.’
- b. Pelin [CP sen-ø Timbaktu-ya git-ti-*n* \*(diye)] düşün-üyor-muş.  
P-nom you-*nom* T-dat go-past-2sg C think-prog-evid.past  
‘Pelin thought that you went to Timbaktu.’
- c. Pelin [CP sen-ø Timbaktu-ya git-ti-*n* \*(diye)] duy-muş.  
P-nom you-*nom* T-dat go-past-2sg C hear-prog-evid.past  
‘Pelin heard that you went to Timbaktu.’

The ungrammaticality of the sentences in (11) without the complementizer *diye* suggests that the verbs *bil-* ‘know/think/suppose,’ *düşün-* ‘think,’ *duy-* ‘hear’ cannot select *null*-FCCs in Turkish. This has the important implication that *null*-FCCs are not a variant of *overt*-FCCs with the *C* dropped, contrasting with the sentence in (12) below from English, which has been extensively discussed over the years (cf. An 2007, Bošković and Lasnik 2003, Lasnik and Saito 1992, Richards 1991, among others):

(12)

- a. John knows *that* Bill flunked linguistics.  
a. John knows  $\emptyset_{that}$  Bill flunked linguistics.

<sup>7</sup> Note that *overt*-FCCs can also be selected by verbs like *sor-* ‘ask,’ and *merak et-* ‘wonder’. These will be crucial to our discussion in Section 5.2.

<sup>8</sup> With the possible exception of *bil-* ‘know,’ which is reported to be available with *null*-FCCs at least for some speakers in Moore (1997), as given in (i):

(i) [Sen-ø viski iç-ti-*n*] bil-iyor-du-m  
you-nom whiskey drink-pastp-2sg know-prog-past-1sg  
‘I knew you drank the whiskey.’

(i), however, is rather degraded for the speakers I have consulted (including myself), yet it is perfectly acceptable when the verb *bil-* selects an FCC headed by *diye*, as given in (ii):

(ii) [Sen-ø viski iç-ti-*n* *diye*] bil-iyor-du-m  
you-nom whiskey drink-pastp-2sg C know-prog-past-1sg  
‘I knew that you drank the whiskey.’

The parallels between *null* and *overt*-FCCs to be introduced below are more remarkable in light of this observation.

### 2.2.2 Nominative and Accusative Subjects of *Overt*-FCCs

In this Section, I will introduce the first set of facts that demonstrate the parallelism between *null*- and *overt*-FCCs.

As with *null*-FCCs, overt agreement morphology on the predicate of *overt*-FCCs is obligatory when they have a Nominative subject:

(13)

- a. Pelin [CP sen- $\emptyset$  Timbaktu-ya git-ti-*n* *diye*] bil-iyor-muş.  
P-nom you-*nom* T-dat go-past-2*sg* C know-prog-evid.past  
‘Pelin thought that you went to Timbaktu.’
- b. \*Pelin [CP sen- $\emptyset$  Timbaktu-ya git-ti- $\emptyset$  *diye*] bil-iyor-muş.  
P-nom you-*nom* T-dat go-past C know-prog-evid.past.past  
‘Pelin thought that you went to Timbaktu.’

The second point of parallelism between the two types of FCCs concerns those with Accusative subjects. This is illustrated in (14):

(14)

- a. Pelin [CP sen-*i* Timbaktu-ya git-ti- $\emptyset$  *diye*] bil-iyor-muş.  
P-nom you-*acc* T-dat go-past C know-prog-evid.past  
‘Pelin thought that you went to Timbaktu.’
- b. Pelin [CP sen-*i* Timbaktu-ya git-ti- $\emptyset$  *diye*] düşün-üyor-muş.  
P-nom you-*acc* T-dat go-past C think-prog-evid.past  
‘Pelin thought that you went to Timbaktu.’
- c. Pelin [CP sen-*i* Timbaktu-ya git-ti- $\emptyset$  *diye*] duy-muş.  
P-nom you-*acc* T-dat go-past C hear-evid.past  
‘Pelin heard that you went to Timbaktu.’

The data in (14) demonstrate that *overt*-FCCs can have Accusative subjects in the absence of agreement morphology on the embedded predicate. This is not the whole story, however, as *overt*-FCCs display the same kind of optionality observed with *null*-FCCs in that their subjects can bear Accusative Case even when the embedded predicate is morphologically marked for (subject) agreement. Witness the facts in (15):

(15)

- a. Pelin [CP sen-*i* Timbaktu-ya git-ti(-*n*) *diye*] bil-iyor-muş.  
P-nom you-*acc* T-dat go-past(-2*sg*) C know-prog-evid.past  
‘Pelin thought that you went to Timbaktu.’
- b. Pelin [CP sen-*i* Timbaktu-ya git-ti(-*n*) *diye*] düşün-üyor-muş.  
P-nom you-*acc* T-dat go-past(-2*sg*) C think-prog-evid.past  
‘Pelin thought that you went to Timbaktu.’
- c. Pelin [CP sen-*i* Timbaktu-ya git-ti(-*n*) *diye*] duy-muş.  
P-nom you-*acc* T-dat go-past(-2*sg*) C hear-evid.past  
‘Pelin heard that you went to Timbaktu.’

The generalization to draw on the basis of the facts regarding *overt*-FCCs is obviously identical to those of *null*-FCCs: Overt agreement morphology is obligatory when *overt*-FCCs have Nominative subjects,

whereas overt agreement morphology on the predicate of *overt*-FCCs does not entail Nominative Case on their subjects.

These statements can safely be considered as ranging over the two distinct types of FCCs, *null* and *overt*-FCCs. Taking the complete parallelism between *null*- and *overt*-FCCs in terms of Case and Agreement properties introduced in this Section, I assume, as it is the null hypothesis, that they are structurally identical (though they are selected by different verbs). Given that *overt*-FCCs are unambiguously CPs being headed by an overt complementizer (i.e, *diye*), I assume that *null*-FCCs also project a CP, only that the *C* head of their CP is not morphologically realized.

In the next section, I will provide further evidence for the parallelism between *null* and *overt*-FCCs while showing that there is evidence that raising of Accusative subjects to the matrix clause is not obligatory.

### 3 The Position of Accusative Subjects of FCCs

In this section I aim at gaining a deeper understanding about whether Accusative subjects of FCCs undergo raising to the matrix clause in Turkish. Previous work reports that Accusative subjects of *null*-FCCs involve raising to the matrix clause for reasons of Case licensing, since the licenser of Accusative is obviously at the matrix level (cf. Zidani Eroğlu 1997, Moore 1998, Özsoy 2001). In contrast to those studies, Aygen (2002), and following Aygen (2002), Öztürk (2005), suggest in passing that Accusative subjects of *null*-FCCs do not raise to the matrix clause, though they do not provide any major arguments to this effect (except Aygen's (2002) arguments involving the positioning of matrix adverbs with respect to embedded subjects, which I will briefly review below). Finally, İnce (2007) argues for a *prolepsis* analysis, where Accusative subjects are base-generated in the matrix clause and are coindexed with a null pronominal base-generated in the embedded clause.

In what follows, I first review the two major arguments from the literature for the obligatory raising analysis, which draw on data from *null*-FCCs. Despite some glitches in the argumentation to be pointed out, the particular evidence reviewed suggests that Accusative subjects of *null*-FCCs do undergo raising to matrix clause. Next, I investigate other evidence that suggests that Accusative subjects of *null*-FCCs may remain within the clause they are base-generated in, which implies that raising of such subjects in fact cannot be obligatory. Taking the latter set of facts seriously, I conclude that those cases that involve movement to the matrix clause represent a case of optional raising, and that it is not the norm. Once again, the observations regarding *null*-FCCs carry over to *overt*-FCCs with Accusative subjects. I also examine another piece of evidence that supports the claim that Accusative raising is optional, coming from sentences that involve displaced *overt*-FCCs whose Accusative subjects remain within their clausal boundaries.

The conclusion I draw on the basis of these facts is that raising of Accusative subjects of FCCs to matrix clause is optional and that such movement cannot be classified as an instance of Case driven movement/raising. The claim that movement to the matrix clause is optional naturally eliminates a *prolepsis* analysis, which makes the strongest claim that an Accusative subject is never a constituent of the complement clause, the predicate, which assigns its theta role.

#### 3.1 Adverbial Modification and Subjects of *Null*-FCCs

The discussion that follows reveals that Accusative subjects in Turkish can be interpolated with matrix clause material, such as adverbs. The evidence to be examined in this section suggests that Accusative subjects of *null*-FCCs *may* undergo raising to the matrix clause in Turkish. Significantly, however, there is nothing in these facts that shows that Accusative subjects *must* vacate the clause they are base-generated in. Here are the actual facts.

Citing Kornfilt (1977) for the observation that an adverbial PP like *sabahtan beri* 'since this morning' is only compatible with imperfective predicates, Zidani-Eroğlu (1997) argues that Accusative subjects of *null*-FCCs are outside of the clause they are base-generated in. Consider the data in (16) cited from Zidani-Eroğlu (1997:9,10) (italic-marking indicates which predicate/clause the adverbial PP modifies):



(16)

a. Siz *sabah-tan beri* [Ali-ø *öp-ül-dü*] *san-ıyor-sunuz.*

you-nom morning-abl since A-nom kiss-pass-past think-prog-2sg

‘You have been thinking since this morning that Ali was kissed.’

b. \*Siz [Ali-ø *sabah-tan beri* *öp-ül-dü*] *san-ıyor-sunuz.*

you-nom A-nom morning-abl since kiss-pass-past think-prog-2sg

(Attempted Meaning: ‘You have been thinking since this morning that Ali was kissed.’)

The adverb immediately preceding the embedded Nominative subject in (16a) can modify the imperfective predicate of the matrix clause (i.e., *san-* ‘think’), whereas it cannot modify the same predicate when it follows the embedded Nominative subject as indicated by the ungrammaticality of (16b) with the relevant interpretation.

Zidani-Eroğlu (1997) argues that the same adverbial PP can modify the imperfective predicate of the matrix clause (i.e., *san-* ‘think’) when the subject of the FCC is marked Accusative. The relevant example is given in (17) (Zidani-Eroğlu 1997:11):

(17)

Siz Ali-yi *sabah-tan beri* *öp-ül-dü*] *san-ıyor-sunuz.*

you-nom Ali-acc morning-abl since kiss-pass-past believe-prog-2pl

‘You believe Ali to have been kissed since this morning.’

[i.e., the belief has been going on since this morning.]

The contrast between (16) and (17) forms an essential part of Zidani-Eroğlu’s (1997) claim that Accusative subjects of *null*-FCCs raise to the matrix clause. To make it explicit, the availability of the reading in which the PP adverbial can modify the matrix imperfective predicate in (17) suggests that it is in the matrix clause. This further implies that the Accusative subject is also in the matrix clause since it precedes the PP adverbial. The same does not hold for the Nominative subject in (16b) that precedes the PP adverbial, which cannot modify the matrix imperfective predicate.

Aygen (2002) raises an empirical challenge against Zidani-Eroğlu’s (1997) claim that Accusative subjects of *null*-FCCs undergo raising. Zidani-Eroğlu (1997) makes the empirical claim that in the sentence cited in (18) the frequency adverb *sık sık* ‘often’ can modify either the matrix or the embedded predicate. Based on the availability of the reading in which the adverb modifies the matrix predicate in (18), Zidani-Eroğlu (1997) concludes that Accusative subjects must move out of the embedded clause. This is where Aygen (2002) sees a problem since she claims that the matrix reading of the frequency adverb *sık sık* is missing altogether in (18):

(18)

Ali Can-ı *sık sık döv-ül-dü* *san-ır.*

A-nom C-acc often beat-pass-past believe-aor

‘Ali believes John to have been beaten frequently.’

Aygen (2002) proposes that the lack of matrix reading in (18) is due to the fact that the frequency adverb occupies the immediately pre-verbal position. This is significant, according to Aygen (2002), because adverbs that are immediately adjacent to a predicate in Turkish can only modify that predicate and no other.

My informants disagree with the judgment reported in Aygen (2002), and this suggests that Zidani-Eroğlu’s (1997) empirical claim is on the right track. Nevertheless, I wish to investigate this issue further and see if Aygen’s (2002) conjecture (i.e., ‘no matrix level scope of the adverb when linearized immediately pre-verbally’) holds water at all.

To this end, I would like to consider a situation that is different from that given in (18). Suppose that the frequency adverb *sık sık* is (linearly) left adjacent to the embedded predicate, while the embedded

predicate is intrinsically incompatible with the frequency adverb *sık sık*, and the matrix predicate is compatible. A predicate like *öl* – ‘to die’ meets this requirement. In this case, Aygen’s (2002) prediction would be that such a sentence must be unacceptable as the embedded adverb cannot modify the matrix predicate owing to her claim noted above and thus cannot modify the embedded predicate due to a semantic incompatibility. This prediction is not borne out as indicated by the acceptability of the sentence in (19) with the relevant reading:

- (19)  
 Doktorlar Can-ı sık sık öl-dü] san-ıyor-lar.  
 Doctors-nom C-acc often die-past think-pres-3pl  
 ‘Doctors often think John is dead.’

The sentence in (19) is perfectly acceptable with the matrix reading of the adverb in a situation like the following: *John has been at the emergency unit for the last 10 days, since he keeps having cardiac arrests every other day. Every time John’s name is announced in the hospital as a case of emergency, his doctors tell themselves, ‘he is dead this time.’ However, John is a strong guy and he has survived every attack so far.*

Crucially, the frequency adverb in (19) is in the immediately pre-verbal position, and yet it can (as a matter of fact, *must*) modify the matrix predicate. This suggests that the correlation that Aygen (2002) claims to hold (the one that concerns the linear position of adverbs and their modificational properties) is not tenable. Given this, there is no strong evidence to reject Zidani-Eroğlu’s (1997) claim that Accusative subjects are out of the clause they are base-generated in, in sentences like (17) and (18). The facts examined thus far suggest that the raising analysis is on the right track. Problems arise for the obligatory raising analysis, however, when we consider further data. Here is one example.

Neither Aygen (2002) nor Zidani-Eroğlu (1997) report an example that has critical importance for the present investigation. A clear prediction of the *obligatory* raising analysis is that an Accusative subject should never follow an adverb that unambiguously modifies the embedded predicate. The grammaticality of (20) suggests that this prediction of the *obligatory overt raising* does not hold.<sup>9</sup>

- (20)  
 Pelin [dün Metin-i sınav-a gir-di] san-ıyor.  
 P-nom yesterday M-acc exam-dat enter-past believe-pres  
 ‘Pelin believes that yesterday, Metin took an exam.’

The grammaticality of (20) is completely unexpected if Accusative subjects of FCCs *must* undergo raising to the matrix clause.<sup>10,11</sup> Crucially, however, (20) and the available readings in (17)-(19) can be

<sup>9</sup> Özsoy (2001) reports that the sentence in (i), which is sufficiently similar to the one in (20), is unacceptable for her, but she also notes in a footnote (Özsoy 2001, 235: fn.17) that some speakers she consulted found (i) acceptable:

(i) *pro* [dün gece ben-i Ankara-ya git-ti-m] san-ıyor-lar.  
 last night I-acc A-dat go-pres-1sg consider-prog-pl  
 ‘They consider me to have gone to Ankara last night.’

In this paper, I will be mainly concerned with the judgment of those speakers who find (20) and (i) acceptable and provide an analysis for these examples.

<sup>10</sup> The grammaticality of the example in (20) appears to induce at first sight a problem for the requirement that Accusative subjects of FCCs must be placed at the *edge* of their clause as will be discussed in Section 4. I will turn to a discussion of (20) in Section 6.1.

<sup>11</sup> An implicit assumption concerning the example in (20), as pointed out to me by Mark Baker (pc.), is that embedded adverbs cannot move into the matrix clause in Turkish, unlike English, where adverbs can be topicalized and focused in Indo-European languages (example due to Mark Baker (pc):

(i) *Yesterday*, I thought we could win, but *today* I am not so sure.

Importantly, however, the adverbial in (20) cannot be moved into the matrix clause in Turkish, as shown in (ii):

accounted for under the assumption that overt raising of Accusative subjects to the matrix clause is not obligatory. This is the direction I will pursue in this paper. In what follows, I turn to *overt*-FCCs.

### 3.2 Adverbial Modification and Subjects of *Overt*-FCCs

The *overt*-FCC data to be examined below imitate the data that pertain to *null*-FCCs introduced in the previous section. Note that I will only consider in this section the corresponding examples from *overt*-FCCs that are relevant to our discussion.

In (21a), we see that the PP adverb precedes the Nominative subject and the adverb can modify the matrix predicate as expected. Reversing the linear order of the adverb and the Nominative subject in (21b) renders it impossible for the adverb to modify the only imperfective predicate (i.e., the matrix predicate *duy*- ‘hear’), hence the unacceptability:

(21)

- a. Biz      *sabah-tan beri* [sanık-ø      sorgula-n-dı      diye] *duy-uyor-uz*.  
     we-nom morning-abl since    accused-*nom* question-pass-past C    hear-pres-2pl  
     ‘We have been hearing since the morning that the accused has been interrogated.’  
 b. \*Biz      [sanık-ø      *sabah-tan beri* sorgula-n-dı      diye] *duy-uyor-uz*.  
     we-nom    accused-*nom* morning-abl since question-pass-past C    hear-pres-2pl  
     ‘We have been hearing since the morning that the accused has been interrogated.’

Replacing the Case of the embedded subject with Accusative, rather than Nominative, and keeping the linear order of constituents in (21b) intact, improves the judgment as seen in (22):

(22)

- Biz      sanığ-ı      *sabah-tan beri* sorgula-n-dı      diye] *duy-uyor-uz*.  
     we-nom accused-*acc* morning-abl since    question-pass-past C    hear-pres-2pl  
     ‘We have been hearing since the morning that the accused has been interrogated.’

That the sentence in (22) is acceptable suggests that the PP adverbial is out of the embedded clause, which further implies that the Accusative subject is out of the embedded clause as well. Given this, we can conclude that Accusative subjects of *overt*-FCCs *can* be raised into the matrix clause in a fashion parallel to the Accusative subjects of *null*-FCCs. The question is: Is there evidence that shows it is not obligatory?

The evidence that reveals that overt movement of Accusative subjects to the matrix clause is not obligatory is provided by an example like that in (23), where the Accusative subject of the *overt*-FCC can follow an adverb that unambiguously modifies the embedded predicate:

(23)

- Pelin [ *dün*      Mert-*i* sınav-a    gir-di      diye] bil-iyor.  
     P-nom *yesterday* M-*acc* exam-dat enter-past C    know-pres  
     ‘Pelin thinks that yesterday, Mert took an exam.’

(23) shows that movement of Accusative subjects of *overt*-FCCs is not obligatory, as was observed with *null*-FCCs. This suggests that the Accusative Case of the subject in (23) must be licensed without its raising to the matrix clause: If raising was obligatory for the licensing of Accusative Case, then in cases like (23) licensing of Accusative Case would be impossible as the subject remains within the clause it is

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(ii) \**Dün*      Pelin [Metin-*i* sınav-a    gir-di]      san-ıyor.  
     *yesterday* P-nom M-*acc* exam-dat enter-past believe-pres  
     ‘Pelin believes that yesterday, Metin took an exam.’

base-generated in.<sup>12</sup> The implication of the observation in (23) is that instances of raising of Accusative subjects to the matrix clause cannot be driven by Case; it must have a different type of trigger. Support for the validity of this assumption will be presented in Section 4.

In the next section, I will review and challenge the second most important argument for the raising analysis of Accusative subjects of *null*-FCCs, the argument from Negative Polarity Items (NPIs).

### 3.3 Accusative Negative Polarity Subjects of *Null*-FCCs

The primary goal of this sub-section is to show that the previous arguments from NPI licensing for *obligatory* raising of Accusative subjects of *null*-FCCs are not as compelling as one would want them to be. Let us briefly review one argument put forth in the previous literature.

The first significant observation concerning NPIs is that subject NPIs in Turkish can be licensed by negation unlike subject NPIs in English (cf. Kornfilt 1984, Kural 1993, Kelepir 2001, Zidani-Eroğlu 1997, among others) (due to Zidani-Eroğlu 1997,224:22b,23b):

(24)

- a. *Kimse*                *uyu-ma-dı*.  
     anybody-nom sleep-neg-past  
     ‘Anybody did not sleep.’  
 b. \**Kimse*            *uyu-du*.  
     anybody-nom sleep-past  
     ‘Anybody slept.’

(25) \*Anybody did not sleep.

Zidani-Eroğlu (1997) presents a pair of examples from *null*-FCCs in Turkish, which shows that Nominative NPI subjects of *null*-FCCs can be licensed by the embedded or matrix negation. I provide examples below that are modeled on the examples given in Zidani-Eroğlu (1997):<sup>13</sup>

(26)

- a. *pro* [*kimse-ø*      *gel-me-di*] *san-dı-m*,            (*ama birileri*      *gel-miş*).  
     anybody-*nom* go-neg-past believe-past-1sg (but some people came-evid.past)  
     ‘I thought nobody would come, but supposedly some people came.’  
 b. *pro* [*kimse-ø*      *gel-di*] *san-ma-dı-m*.  
     anybody-*nom* go-fut believe-neg-past-1sg  
     ‘I did not think that anybody would come.’

The sentence in (26b) is particularly natural in the context of a question such as the following:

<sup>12</sup> An important assumption I make here is that there is no LF/covert raising for Case licensing, particularly under the theory of Agree (Chomsky 2001) adopted in this paper. This should not be interpreted as the total absence of LF/covert movement as a theoretical tool. That is to say that the option might very well be available in cases other than Case and agreement licensing, such as (quantifier) scope computation (see Bobaljik and Wurmbrand 2005; Bošković 2007, 2008; Nissenbaum 2000; Pesetsky 2001 for different views on these issues).

<sup>13</sup> While everyone in the literature finds (26a) grammatical, judgments concerning (26b) are controversial as Kornfilt (1984), Kural (1993), Kelepir (2001) judge sentences comparable to (26b) to be unacceptable. However, my informants, including myself, find (26b) acceptable as also reported in Zidani-Eroğlu (1997). The former group of researchers concludes on the basis of the unacceptability of sentences like (26b) that NPIs in Turkish are subject to a clause-mate condition. In this paper, I will be mainly concerned with the judgments of those speakers who find (26b) grammatical.

(27)

Q: Biri(-si)-ø      mi gel-di      san-dı-n?  
someone-nom Q come-past believe-past-2sg

‘Did you think that someone came?’

A: *pro* [kimse-ø      gel-di]      san-*ma*-dı-m.  
anybody-nom come-past believe-neg-past-1sg  
‘I didn’t think anybody came.’

Having shown that Nominative NPI subjects can be licensed by matrix negation, Zidani-Eroğlu (1997) goes on to argue that Accusative NPI subjects of *null*-FCCs cannot be licensed by embedded negation in contrast to Nominative NPI subjects. The example in (27) is cited from Zidani-Eroğlu (1997, 226:29a):

(28)

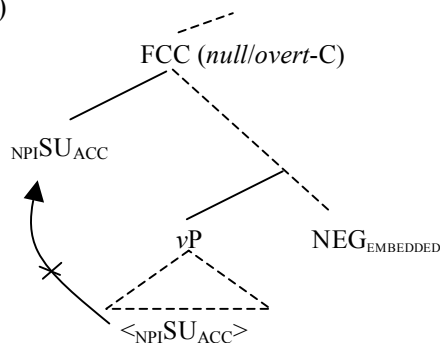
\*Siz      [kimse-yi      bu kitab-ı      oku-*ma*-dı]      san-ıyor-sunuz.  
you-nom anybody-acc this book-acc read-neg-past believe-pres-2pl  
‘You believe nobody to have read this book.’

Zidani-Eroğlu (1997) concludes, given the ungrammaticality of (28) and its contrast with (26a) that the Accusative subject must be raised to the matrix clause, and therefore the raising analysis is on the right track (see also Özsoy 2001 for the same conclusion on the basis of a similar example).

Though quite reasonable, Zidani-Eroğlu’s (1997) proposal is not the only way to interpret the above facts. In what follows, I would like to pursue another alternative to show that the ungrammaticality of (28) does not provide a compelling reason to conclude that Accusative NPI subjects undergo raising to the matrix clause in Turkish.

The alternative I will entertain presently is this: Suppose that Accusative subjects do not vacate the clause they are base-generated in, yet they move as high as the left edge of their clause, which renders Accusative Case licensing possible from a matrix functional head. Suppose also that, as I will provide evidence for in Section 4, the movement in question is an instance of *topicalization*, which places an Accusative (NPI) subject at the highest position in its clause (as has already been observed with topicalization in other languages, see Rizzi 1997, 2004, a.o.). When this supposition is combined with another observation (which I will empirically support below) that NPI topicalization is illicit for the speakers I have consulted, the ungrammaticality of (28) receives a simple account: Topicalization of the Accusative NPI subject in (28) to the edge of its own clause is what leads to ungrammaticality, not the raising of Accusative NPI subject to the matrix clause. The idea is very roughly depicted in (29):

(29)



The observation that NPI topicalization is illicit comes from examples like the following:<sup>14</sup> As shown by the ungrammaticality of the sentence in (30), topicalization of Accusative NPI *object* in a root clause to the left periphery of its clause across a subject NP is illicit:

- (30)  
 \**Kimse-yi* Pelin *t<sub>kimseyi</sub>* *öp-me-di*.  
 anybody-acc P-nom kiss-neg-past  
 ‘Pelin did not kiss anybody.’

Consider now the examples in (31) and (32). In (31), the Accusative NPI *object* inside a non-finite embedded clause is licensed by the matrix negation:

- (31)  
 Pelin [*PRO kimse-yi* *gör-mek*] *iste-m-iyor*.  
 P-nom anybody-acc see-inf want-neg-pres  
 ‘Pelin does not want to see anybody.’

Although the NPI *object* can be licensed ‘long distance’ by the matrix negation in (30), long distance topicalization of the embedded NPI *object* to target the pre-matrix-subject position yields an ill-formed output as shown in (32):

- (32)  
 \**kimse-yi* Pelin [*PRO t<sub>kimse-yi</sub>* *gör-mek*] *iste-m-iyor*.  
 anybody-acc P-nom see-inf want-neg-pres  
 ‘Pelin does not want to see anybody.’

Now consider the ungrammaticality of (33) in light of the observations above:<sup>15</sup>

- (33)  
 \**pro* [*kimse-yi* *gel-di*] *san-ma-dı-m*.  
 anybody-acc come-past believe-neg-past-1sg  
 ‘I didn’t think anybody came late.’

Note importantly that the sentence in (33) cannot be used, as expected, in the context illustrated by the question in (27), as shown in (34):

<sup>14</sup> I assume that there is a speaker variation in this respect. Kural (1997, 503:10), in an entirely different vein, reports that the example cited in (i) to be acceptable, where an object NPI is extracted out of a nominalized complement clause (Kornfilt 1984, and Kelepir 2001 note that NPIs in nominalized complement clauses, infinitives, and inflected infinitives can be (long distance) licensed by matrix negation in Turkish):

(i) *Kimse-nin*<sub>1</sub> Ahmet [*t<sub>1</sub>* *uyu-ma-dıĝı-ı-nı*] *bil-iyor*  
 anyone-gen A-nom sleep-neg-noml-acc know-pres  
 ‘Ahmet knows that noone slept.’

The acceptability of (i) implies that NPI topicalization is an option for Kural and his informants. However, the sentence in (i) is unacceptable for my informants, including myself. The data examined in this section that involve NPI topicalization are all judged unacceptable by the speakers whose judgments this paper aims to account for.

<sup>15</sup> Kornfilt (1984) reports that an example similar to (33) is grammatical. I assume that those who find (33) grammatical allow topicalization of NPIs (cf. fn.13), unlike the speakers whose judgments I focus on in the present paper. Another reasonable way to interpret this variation is to assume that for those speakers who find sentences like (33) acceptable, the movement of (Accusative) NPI subjects is an instance of *scrambling* and not *topicalization*. This also provides a first approximation for why NPIs are not subject to the non-topicalizability restriction for those speakers (cf. Bošković 2004 for a discussion of the differences between *scrambling* and *topicalization*).

(34)

Q: Biri(-si)-ø        mi gel-di        san-dı-n?  
     someone-nom Q come-past believe-past-2sg  
A: <sup>#</sup>*pro* [*kimse-yi*        gel-di]        san-*ma*-dı-m.  
     *anybody-acc* come-past believe-*neg*-past-1sg  
     ‘I did not think anybody came.’

Under the present conjecture I sketched above, the ungrammaticality of (33) follows as a consequence of the claim that Accusative subjects undergo topicalization to the edge of their clause, but crucially NPIs cannot be topicalized.

It is worth noting that the present conjecture is a plausible one particularly when we take notice of an interesting observation from English concerning NPI licensing. As is well known, under certain conditions NPIs can be licensed across a finite clause in English, as shown in (35) (see Gajewski 2005 for a review):

(35)

I don't think [ that Mary solved *any problems* ].

As noted in Lasnik and Uriagereka (1988), however, topicalizing the NPI seriously degrades the sentence in (35), as shown in (36):

(36)

\*I don't think [ that *any problems*<sub>i</sub>, Mary solved t<sub>i</sub> ].

The contrast between (35) and (36) is interesting for it basically suggests that there is something to NPI licensing that goes beyond trivial locality considerations. It seems that *closeness* is not one of the major conditions on NPI licensing (at least in English), since otherwise we would expect (36) to be grammatical in light of the grammaticality of (35), contrary to fact (for discussion of sentences like (35), see Boskovic 2007, Epstein 1992, Müller and Sternefeld 1993, among others). The grammaticality contrast between (35) and (36) is very similar to that in (31) and (32). In neither case does it help to place the NPIs closer to their potential licensors. On the contrary, movement/topicalization degrades an otherwise well-formed sentence.

Turning to the ungrammaticality of (28) and (33) in the light of the discussion above, I conclude that NPI licensing is orthogonal to the issue of whether Accusative subjects involve raising to the matrix clause. To be specific, I contend that (28) and (33) are ill-formed not because their Accusative NPI subjects undergo raising to the matrix clause, but because they involve topicalization of an NPI, which is illicit for speakers whose judgments are accounted for in the present paper. To conclude, the present discussion suggests that NPI licensing does not present support for the obligatory Case driven raising analysis of Accusative subjects to the matrix clause.

In the next sub-section, I will present the corresponding examples from *overt*-FCCs to those given in this sub-section.

### 3.4 Accusative Negative Polarity Subjects of *Overt*-FCCs

In this sub-section, I will briefly show that the key examples involving *null*-FCCs presented in Section 3.3 can be reproduced by using *overt*-FCCs to yield similar types of judgments.

To begin with, Nominative NPI subjects can be licensed by embedded or matrix negation, as shown in (37):<sup>16</sup>

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<sup>16</sup> The facts introduced in this section concerning *overt*-FCCs reflect the judgments of my informants, who, I reported to disallow the topicalization of NPIs. These facts have not been tested against speakers whose grammar allows the topicalization of NPIs.

a. *pro* [*kimse-ø*      *gel-me-di*   *diye*] *duy-du-m*,      (*ama* *birileri*      *gel-miş*).  
           *anybody-nom* *go-neg-past*   C   *hear-pres-1sg* (but *some-people* *came-evid.past*)  
 ‘I heard that nobody came (but obviously some people came).’

b. *pro* [*kimse-ø*      *gel-di*   *diye*] *duy-ma-dı-m*.<sup>17</sup>  
           *anybody-nom* *go-past*   C   *hear-neg-pres-1sg*  
 ‘I haven’t heard that anybody came.’

\*Pelin [*kimse-yi* bu kitab-ı oku-*ma*-dı diye] bil-iyor.  
P-nom *anybody-acc* this book-acc read-*neg*-past C know-pres  
'Pelin thinks that nobody read this book.'

\*Pelin [kimse-yi Timbuktu-ya git-ti diye] duy-ma-dı.  
P-nom anybody-acc T-dat go-past C hear-neg-past  
‘Pelin hasn’t heard that anybody went to Timbuktu.’

In the next section, I will provide another set of data from Turkish that challenges an obligatory raising analysis of Accusative subjects in Turkish.

The argument I present in this section involves examples that only involve *overt*-FCCs, as *overt*-FCCs can be subject to movement, unlike *null*-FCCs.<sup>19</sup> The argument proceeds as follows.

A: *pro* [*kimse-ø*            gel-di diye] duy-*ma*-di-m.  
                                 anybody-nom go-past C hear-neg-pres-1sg  
 ‘I haven’t heard that anybody came.’

<sup>19</sup> As shown by the ungrammaticality of (ii)–(iii), *null*-FCCs can neither be postposed nor fronted in Turkish, unlike *overt*-FCCs:

(i) Pelin [Mete-ø sınıf-ta kal-dı] san-ıyor  
P-nom M-nom class-loc fail-past believe-pres  
'Pelin believes Mete to have flunked.'



Clausal constituents cannot be displaced in Turkish when they contain a trace, being subject to the *P(roper) B(inding) C(ondition)* (along the lines proposed in Fiengo 1977, but also see Collins 1994, Müller 1996 and Hiraiwa 2003 for more recent treatments). As illustrated in (40) by a postposed nominalized complement clause, extraction of a constituent out of a nominalized complement clause results in ungrammaticality, as shown in (40c):

(40)

- a. Pelin dün [Sinan-ın araba-yı vur-duğ-u-nu] duy-du.  
P-nom yesterday S-gen car-acc crash-noml-3sg.poss-acc hear-past  
‘Pelin heard yesterday that Sinan had crashed the car.’
- b. Araba-yı<sub>1</sub> Pelin dün [Sinan-ın t<sub>1</sub> vur-duğ-u-nu] duy-du.  
car-acc P-nom yesterday S-gen crash-noml-3sg.poss-acc hear-past  
‘Pelin heard yesterday that Sinan had crashed the car.’
- c. ?\*Araba-yı<sub>1</sub> Pelin dün t<sub>2</sub> duy-du [Sinan-ın t<sub>1</sub> vur-duğ-u-nu]<sub>2</sub>  
car-acc P-nom yesterday hear-past S-gen crash-noml-3sg.poss-acc

Notably, the postposing of a nominalized complement clause yields a grammatical sentence when it contains no trace as shown in (41):

(41)

- Pelin dün t<sub>2</sub> duy-du [Sinan-ın araba-yı vur-duğ-u-nu]<sub>2</sub>  
P-nom yesterday hear-past S-gen car-acc crash-noml-3sg.poss-acc  
‘Pelin heard yesterday that Sinan had crashed the car.’

In order to convince ourselves that the ungrammaticality of the sentence in (40c) can be attributed to the PBC (or whatever explains the effects that we collect under the heading of the PBC), we need to consider whether clausal constituents that contain a pronominal (overt/null *pro*) or *PRO*, but not a trace/copy, display the PBC effects when displaced. Witness the sentences below in this respect, where an infinitival (with a *PRO* subject) is embedded within a nominalized complement clause whose subject is a null *pro*:

(42)

- a. Pelin<sup>i</sup> dün [*pro*<sup>ij</sup> [*PRO*<sup>ij</sup> Sinan-ı öp-mek] iste-diğ-i-ni] söyle-di  
P-nom yesterday S-acc kiss-inf want-noml-3sg.poss-acc say-past  
‘Pelin said yesterday that she wants to kiss Sinan.’
- b. Pelin<sup>i</sup> dün t<sub>1</sub> söyle-di [*pro*<sup>ij</sup> [*PRO*<sup>ij</sup> Sinan-ı öp-mek] iste-diğ-i-ni]<sub>1</sub>  
P-nom yesterday say-past S-acc kiss-inf want-noml-3sg.poss-acc  
‘Pelin said yesterday that she wants to kiss Sinan.’

The grammaticality of (42b), in contrast to the ungrammaticality of (40c) with a trace/copy within the moved embedded clause, suggests that *pro* and *PRO* are not subject to the PBC in Turkish.

Now, I turn to *overt-FCCs*. As shown by the grammaticality of (43b), *overt-FCCs* can be postposed when they have a Nominative subject:

- 
- (ii) \*Pelin t<sub>i</sub> san-ıyor [Mete-ø sınıf-ta kal-dı]<sub>i</sub>  
P-nom believe-pres M-nom class-loc fail-past  
‘Pelin believes Mete to have flunked.’
- (iii) \*[Mete-ø sınıf-ta kal-dı]<sub>i</sub> Pelin t<sub>i</sub> san-ıyor  
M-nom class-loc fail-past P-nom believe-pres  
‘Pelin believes Mete to have flunked.’

(43)

a. Berk [Pelin-ø sınıf-ta kal-dı diye] duy-du.  
 B-nom P-nom class-loc fail-past C hear-past  
 ‘Berk heard that Pelin flunked.’

b. Berk  $t_i$  duy-du [Pelin-ø sınıf-ta kal-dı diye]<sub>i</sub>  
 B-nom hear-past P-nom class-loc fail-past C  
 ‘Pelin heard that Berk flunked.’

Keeping these findings in mind, let us consider the prediction of the obligatory raising analysis of Accusative subjects: If Accusative subjects must raise to the matrix clause, postposed FCCs must not contain Accusative subjects, or they would violate the PBC. This prediction does not hold as illustrated by the grammaticality of (44):

(44)

<sup>9</sup>Pelin  $t_2$  duy-muş [Mete-yi sınıf-ta kal-dı diye]<sub>2</sub>  
 P-nom hear-ev.past M-acc class-loc fail-past C  
 ‘Pelin apparently heard that Mete flunked.’

The grammaticality of (44) is completely unexpected under the obligatory raising analysis of Accusative subjects to the matrix clause.<sup>20,21</sup> It follows naturally however, under the optional raising analysis.

Consider now the sentences in (45), where the Accusative subject of the *overt*-FCC is in the pre-matrix-subject and post-matrix-subject positions, respectively:

(45)

a. \*Pelin Mete-yi<sub>1</sub>  $t_2$  duy-muş [ $ec_1$  sınıf-ta kal-dı diye]<sub>2</sub>  
 P-nom M-acc hear-evid.past class-loc fail-past C  
 ‘Pelin apparently heard that Mete flunked.’

<sup>20</sup> It is worth noting that a structural analysis of (44) like that in (i) is unavailable, where the Accusative subject and the rest of the clause moves separately to the post-verbal field reinstating the base order of constituents:

(i) Pelin  $t_2$  duy-muş Mete-yi<sub>1</sub> [ $t_1$  sınıf-ta kal-dı diye]<sub>2</sub>  
 P-nom hear-ev.past M-acc class-loc fail-past C

(i) is not available because otherwise we would expect a PBC effect to arise in (44) in a fashion similar to those in (45), contrary to fact.

<sup>21</sup> The grammaticality of (44) suggests, albeit not so strongly, that covert/LF raising of Accusative subjects of FCCs to matrix clause is also unavailable. This conclusion is particularly evident if we take it that rightward moved XPs are adjoined to a projection higher than VP, which is indeed reasonable given that adjunction to VP would be banned as an *Anti-Locality* violation (cf. Abels 2003, Bošković 1994, among many others). If adjunction *is* to a higher position than VP, then covert/LF movement of Accusative subject would involve *lowering* (assuming that the Accusative subject would land in Spec- $\nu$ P,  $\nu^\circ$  being the category to license Accusative Case), but importantly *lowering* is illicit in the framework adopted presently. A more reliable argument against covert/LF A-raising to matrix clause comes from binding. Consider now the data in (i), where the matrix subject NP has a pronominal variable inside, and the Accusative subjects of the *null*- and *overt*-FCCs are quantificational:

(i) a. \*[ $pro^i$  bir öğrenci-si] [her öğretmen<sup>i</sup>-i kaç-tı] san-ıyor.  
 a student-poss-nom every teacher-acc run.away-past believe-pres  
 ‘A student of his/her believes every teacher run away.’  
 b. \*[ $pro^i$  bir öğrenci-si] [her öğretmen<sup>i</sup>-i kaç-tı diye] duy-du.  
 a student-poss-nom every teacher-acc run.away-past C hear-past  
 ‘A student of his/her heard that every teacher run away.’

If covert/LF Case Driven A-raising to the matrix clause were an option, the subject QP<sub>ACC</sub> would c-command either the matrix subject NP<sub>ACC</sub> or its trace/copy, rendering variable binding an option, contrary to what we see in (ia) and (ib). I thus conclude that covert/LF A-raising of Accusative subjects is not an option in Turkish.

b. \**Mete-yi*<sub>1</sub> *Pelin* *t*<sub>2</sub> *duy-muş* [*ec*<sub>1</sub> *sınıf-ta* *kal-dı* *diye*]<sub>2</sub>  
M-acc P-nom hear-evid.past class-loc fail-past C  
‘Pelin apparently heard that Mete flunked.’

The ungrammaticality of the sentences in (45) reveals two things: (i) The empty category (indicated via *ec*) inside *overt*-FCCs cannot be a *pro* or *PRO*, but must be a *trace/copy*, hence the PBC effect; (ii) a prolepsis analysis of the present facts cannot be on the right track, which requires the subject position of *overt*-FCCs to be filled by either a null *pro*(nominal) or a *PRO*.<sup>22</sup>

In sum, the PBC effects are predicted under the optional raising analysis, but not under the obligatory raising analysis. I conclude on the basis of evidence in this and the previous sub-sections that raising of Accusative subjects in Turkish is only optional in the structural contexts studied in the current paper.

### 3.6 Summary of the Findings and Outlook

This evidence inspected in this section has shown that the two types of FCCs in Turkish, *null*-FCCs and *overt*-FCCs, display important parallels. The domains in which the two types show parallels are listed below:

(46)

- (i) Predicates of both types of FCCs *must* display overt agreement morphology when their subject is Nominative.
- (ii) Predicates of both types of FCCs *may* display overt agreement morphology when their subject is Accusative, but not necessarily.
- (iii) Accusative subjects of both types of FCCs can be raised to the matrix clause, but raising is not obligatory.
- (iv) The option of staying in the domain they are base-generated in is available for Accusative subjects of both types of FCCs.

Based on the parallels between *null*-FCCs and *overt*-FCCs, I proposed that the two types of FCCs are structurally identical: Since *overt*-FCCs project a CP headed by an overt C (i.e., *diye*), I propose that *null*-FCCs also project CPs, a proposal to be further elaborated on in Section 5.

The optionality of raising has the implication that movement of Accusative subjects to the matrix clause cannot be an instance of A-movement (driven by Case features), since the availability of Accusative Case on the subject of FCCs would be unaccounted for when raising does not take place (raising being optional).

Once we take it for granted that raising to the matrix clause is optional with Accusative subjects of FCCs, licensing of Accusative Case must be accomplished across a finite clausal domain (=locality domain) under the assumption that FCCs (*null* or *overt*) project CPs. Two questions arise in this vein: (i) How is Accusative Case on the subject of FCCs licensed if Nominative Case licensing on the subjects is already an option within (finite) CPs? (ii) How is Accusative Case licensing across CPs accounted for, CP being a locality domain?

The question in (i) will be specifically addressed in Section 5.1. The answer to the question in (ii) requires us to identify the exact position of Accusative subjects in the clause they are base-generated in, particularly when they do not undergo raising to the matrix clause. In the first part of the next Section, I

<sup>22</sup> Bruening (2001) claims that a pattern emerges from his investigation of Japanese facts that are comparable to those from Turkish examined in this section. The pattern that Bruening (2001) claims to have found is the following: When movement of the ECM/Accusative subject serves a binding function, PBC effects are absent. When movement of the ECM/Accusative subject serves no such function, PBC effects emerge. No such correlation holds for Turkish as my initial observations suggest. It is noteworthy that Tanaka (2002) disagrees with the judgments reported in Bruening (2001), hence rejects his claim about Japanese.

will address the question in (ii) and introduce data that indicate that Accusative subjects move to the highest position in the left periphery of their clause. This will be the key step for an analysis of the licensing of Accusative Case on the subjects of FCCs that strictly obey locality restrictions.

#### 4 Movement to the Edge and Beyond

This section aims to discuss in more detail three issues that arose in part from the discussion in the previous sections. I provide a brief summary of the content of this section:

Section 4.1: In the discussion of Accusative NPI subjects I have tentatively suggested that Accusative subjects come to hold the edge position in their clause via topicalization. It has not been made clear, however, why movement to the edge of the clause is an instance of topicalization. Can movement of Accusative subjects not be Case-driven? The investigation in this section reveals that the suggestion I made earlier, that the movement of Accusative subjects is topicalization, is on the right track.

Section 4.2: Further support for the topicalization of Accusative subjects to the edge of FCCs come from the lack of reconstruction, which is often the case with topicalization in Turkish. The evidence inspected in this sub-section involves in particular the lack of idiomatic readings and the lack of variable binding (/WCO effects).

Section 4.3: A prominent aspect of the discussion in the previous sections has been that, although they do not have to, Accusative subjects may move out of the FCCs they are base-generated in. The task of this sub-section is to understand the nature of such movement operations. The main conclusion is that movement of Accusative subjects out of FCCs also involves topicalization.

##### 4.1 Movement to the Edge *is not* Case Driven

In this section, I aim to provide support for two claims: First, Accusative subjects of FCCs occupy the highest position in their clause. Second, movement of Accusative subjects to the edge of their clause is not driven for reasons of Case licensing, but an instance of topicalization. The shape of the argument that leads to the second conclusion is as follows.

If movement to the edge is driven by Case, *any* subject with Accusative Case (features) can in principle be moved to the left periphery to get its Case licensed from the next higher domain, to the extent that locality principles are not violated. If movement of subjects is driven by discourse related properties, *some* but *not all* Accusative subjects can be moved to the left periphery of their clause (or, put differently, not all subjects with Accusative Case features can get their Accusative Case licensed). The key ingredient of the argument involves another observation, which is that Focus (contrastive/presentational) is non-peripheral in Turkish while Topic (particularly contrastive and aboutness) is left peripheral. The prediction is then the following: If licensing of Accusative Case on the subjects of FCCs involves movement driven by discourse properties, then Accusative Case of focused subjects can never be licensed in light of the claim that there is no (left) peripheral Focus in Turkish.<sup>23</sup> However, licensing of Accusative Case of topical subjects must always be an option as they are peripheral in Turkish (unless, of course, locality is violated, see Section 5.2 for discussion).

---

<sup>23</sup> Accusative objects can ‘normally’ be associated with Focus in Turkish, as shown in (i):

(i) Pelin yalnızca Pınar-ı öp-tü.  
P-nom only P-acc kiss-past  
‘Pelin only kissed Pınar.’

So, the restriction about focused Accusatives only binds subjects of FCCs. It is also worth noting that sentence initial elements, particularly contrastive and aboutness topics, can bear some degree of phonological prominence, which does not necessarily indicate that they are foci. Elizabeth Selkirk (pc.) informs me that categories that hold the sentence initial position are typically associated with prosodic prominence in English (see also Ladd 1995).

Let us consider now some actual data from Turkish. The first set of facts presented in (47) and (48) indicate that Accusative subjects cannot be associated with Presentational Focus (marked via *pf*) nor with Contrastive Focus (marked via *cf*), respectively:<sup>24</sup>

(47)

A: Mert'in partisine kimler gitmiş biliyor musun?

*Do you know who showed up at Mert's party?*

B: Mert'in kendisine sormadım ama ...

*I haven't asked Mert himself about it but ...*

a. Pelin [Sinan-*ø<sub>pf</sub>* git-ti] san-ıyor-muş.

*Null-FCC*

Pelin S-*nom* go-past believe-prog-evid.past  
'Pelin believes that Sinan went (to the party).'

b. #Pelin [Sinan-*ı<sub>pf</sub>* git-ti] san-ıyor-muş.

Pelin S-*acc* go-past believe-prog-evid.past  
'Pelin believes that Sinan went (to the party).'

c. Pelin [Sinan-*ø<sub>pf</sub>* git-ti diye] duy-muş.

*Overt-FCC*

Pelin S-*nom* go-past C hear-evid.past  
'Pelin heard that Sinan went (to the party).'

d. #Pelin [Sinan-*ı<sub>pf</sub>* git-ti diye] duy-muş.

Pelin S-*acc* go-past C hear-ev.past  
'Pelin heard that Sinan went (to the party).'

(48)

A: Mert'in partisine herkes gitmiş mi?

*Do you know if everyone (he invited) went to Mert's party?*

B: Mert'le konuşmadım ama ...

*I haven't talked to Mert but ...*

a. Pelin [*yalnızca* Sinan-*ø<sub>cf</sub>* git-ti] san-ıyor-muş.

*Null-FCC*

Pelin only S-*nom* go-past believe-prog-evid.past  
'Pelin believes that only Sinan went (to the party).'

b. #Pelin [*yalnızca* Sinan-*ı<sub>cf</sub>* git-ti] san-ıyor-muş.

Pelin only S-*acc* go-past believe-prog-evid.past  
'Pelin believes that only Sinan went (to the party).'

c. Pelin [*yalnızca* Sinan-*ø<sub>cf</sub>* git-ti diye] duy-muş.

*Overt-FCC*

Pelin only S-*nom* go-past C hear-evid.past  
'Pelin heard that only Sinan went (to the party).'

d. #Pelin [*yalnızca* Sinan-*ı<sub>cf</sub>* git-ti diye] duy-muş.

Pelin only S-*acc* go-past C hear-evid.past  
'Pelin heard that only Sinan went (to the party).'

The contrasts in (47) and (48) reveal that Nominative subjects are compatible with Focus while Accusative subjects are not, in both types of FCC. Our second prediction, which states that Accusative subjects must be compatible with Topics if movement is discourse driven, is now relevant. The data in (49) show that there is no contrast between Nominative and Accusative subjects in their compatibility with a (contrastive) Topic:<sup>25</sup>

<sup>24</sup> I use a *wh*-question context to elicit presentational focus in (41) and again a *wh*-context with the addition of the focus particle *yalnızca* 'only' to elicit contrastive focus in (42). Notice that both (41) and (42) and all the other tests in this section are applied to both types of FCCs unless independent factors prevent it.

<sup>25</sup> The context I use in (49) to elicit contrastive Topic is modeled on examples offered in Büring (2008) and more closely in Neeleman and van de Koot (2007). The following example is from Büring (2008):

A: Can'dan n'aber? Pelin onun partide ne yediğini söyledi mi?  
*What about John? Did Pelin tell you what he ate at the party?*

*Well, he didn't know about John, but...*

- |                                                                                                                                                                                                                  |                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| a. Pelin [Mete- $\emptyset_{CT}$ istakoz-dan $_{CF}$ ye-di] san-ıyor-muş.<br>P-nom M- <i>nom</i> lobster-abl eat-past believe-prog-evid.past<br>'Pelin believes that Mete ate from the lobster (at the party).'  | <i>Null-FCC</i>  |
| b. Pelin [Mete- <i>yi</i> $_{CT}$ istakoz-dan $_{CF}$ ye-di] san-ıyor-muş.<br>P-nom M- <i>acc</i> lobster-abl eat-past believe-prog-evid.past<br>'Pelin believes that Mete ate from the lobster (at the party).' |                  |
| c. Pelin [Mete- $\emptyset_{CT}$ istakoz-dan $_{CF}$ ye-di diye] duy-muş.<br>P-nom M- <i>nom</i> lobster-abl eat-past C hear-evid.past<br>'Pelin heard that Mete ate from the lobster (at the party).'           | <i>Overt-FCC</i> |
| d. Pelin [Mete- <i>yi</i> $_{CT}$ istakoz-dan $_{CF}$ ye-di diye] duy-muş.<br>P-nom M- <i>acc</i> lobster-abl eat-past C hear-evid.past<br>'Pelin heard that Mete ate from the lobster (at the party).'          |                  |

An interesting question arises concerning what would happen if we placed another Topic inside the FCC, besides an Accusative subject. As shown in the example in (50), the *Topic*<sub>Accusative Subject</sub> » *Topic*<sub>Dative Object</sub> is the only legitimate order, and it cannot be reversed, while *Topic*<sub>Nominative Subject</sub> » *Topic*<sub>Dative Object</sub> and *Topic*<sub>Dative Object</sub> » *Topic*<sub>Nominative Subject</sub> are both available:

*Does Pelin know what Filiz gave Mert?*

*Well, he didn't know about what Filiz gave Mert, but...*

- a. Pelin [Serkan- $\emptyset_{CT}$  Nilufer- $e_{CT}$  bir mix kaset ver-di] san-ıyor-muş. *Null-FCC*  
P-nom S-nom N-dat a mix-tape give-past believe-prog-evid.past  
‘Pelin believes Serkan to have given Nilufer a mix-tape.’
- b. Pelin [Nilufer- $e_{CT}$  Serkan- $\emptyset_{CT}$  bir mix kaset ver-di] san-ıyor-muş.  
P-nom N-dat S-nom a mix-tape give-past believe-prog-evid.past  
‘Pelin believes Serkan to have given Nilufer a mix-tape.’
- c. Pelin [Serkan- $i_{CT}$  Nilufer- $e_{CT}$  bir mix kaset ver-di] san-ıyor-muş.  
P-nom S-acc N-dat a mix-tape give-past believe-prog-evid.past  
‘Pelin believes Serkan to have given Nilufer a mix-tape.’
- d. \*Pelin [Nilufer- $e_{CT}$  Serkan- $i_{CT}$  bir mix kaset ver-di] san-ıyor-muş.  
P-nom N-dat S-acc a mix-tape give-past believe-prog-evid.past  
‘Pelin believes Serkan to have given Nilufer a mix-tape.’

The FEmale<sub>CT</sub> pop stars wore CA Ftans<sub>F</sub>.

22

When the Nominative and the Dative NPs are associated with Topic, either *Nom » Dat* or *Dat » Nom* order is available as shown in by the grammaticality of both (50a) and (50b). However, the optionality in (50a,b) disappears when the subject NP bears Accusative Case; *Acc » Dat* order is available while *Dat » Acc* is not as shown in (50c) and (50d), respectively. The observations in (50) for *null-FCCs* hold also for *overt-FCCs*:

(51)

A: Pelin Filiz-in Mert-e ne verdiğini biliyor mu?

*Does Pelin know what Filiz gave Mert?*

B: Valla Filiz-in Mert-e ne verdiğini bilmiyormuş ama...

*Well, he didn't know about what Filiz gave Mert, but...*

- a. Pelin [Serkan- $\emptyset_{CT}$  Nilufer- $e_{CT}$  bir mix kaset ver-di diye] duy-muş. *Overt-FCC*  
P-nom S-nom N-dat a mix-tape give-past C hear-evid.past  
‘Pelin heard that Serkan gave Nilufer a mix tape.’
- b. Pelin [Nilufer- $e_{CT}$  Serkan- $\emptyset_{CT}$  bir mix kaset ver-di diye] duy-muş.  
P-nom N-dat S-nom a mix-tape give-past C hear-evid.past  
‘Pelin heard that Serkan gave Nilufer a mix tape.’
- c. Pelin [Serkan- $i_{CT}$  Nilufer- $e_{CT}$  bir mix kaset ver-di diye] duy-muş  
P-nom S-acc N-dat a mix-tape give-past C hear-evid.past  
‘Pelin heard that Serkan gave Nilufer a mix tape.’
- d. \*Pelin [Nilufer- $e_{CT}$  Serkan- $i_{CT}$  bir mix kaset ver-di diye] duy-muş  
P-nom N-dat S-acc a mix-tape give-past C hear-evid.past  
‘Pelin heard that Serkan gave Nilufer a mix tape.’

The observations in (50) and (51) suggest that a non-Accusative Topic blocks the licensing of Accusative Case on the (Topic) subject of an FCC only if the former precedes the latter and not otherwise. This has the implication that the edge requirement for Accusative Case licensing is rather strong; Accusative Case on the subject of an FCC is only legitimate if it overtly holds the highest position in its clause. Importantly, this is a requirement specifically for Accusative (Topic) subjects, which get their Case licensed by a functional head from inside the next locality domain. Quite naturally, no such requirement is predicted to be relevant for Nominative (Topic) subjects, for they get their Nominative Case licensed within the clause they are base-generated in, and the data show that the constraint is lacking here. The data above clearly show that Nominative (Topic) subjects do not have to hold the highest position in their clause.

To recap, there are two findings attained in this sub-section that are to be of significance to the analysis in Section 5. The first finding is that movement of Accusative subjects to the edge of their clause is not driven by Case. As noted earlier, an analysis that adopts Case driven movement predicts that subject NPs with any discourse function, be it Topic or Focus, should be the target of movement. The facts in (47)-(49) show that Accusative subjects of FCCs can only be associated with Topic. The second important finding of this sub-section is that having a Topical XP inside an FCC other than the Accusative subject is not sufficient for the blocking of the licensing of Accusative Case. Blocking of the licensing of Accusative Case on the subjects of FCCs only occurs if the other Topical XP holds a position higher than the Accusative subject in overt syntax.

#### 4.2 A'-Movement to the *Point of No Return*

The preceding section has demonstrated that Accusative subjects of FCCs undergo movement to the edge of their clause, and that the movement in question is an instance of topic movement. In what follows, I will show that A-bar movement to the edge cannot undergo reconstruction, which provides support for the Topicalization analysis owing to the observation that Topicalized XPs cannot undergo reconstruction in Turkish.

### 4.2.1 The Absence of Idiomatic Readings

Sportiche (2003) notes that a (non-compositional) idiom chunk with a part that is moved cannot receive the relevant idiomatic interpretation independently of the rest of the idiom unlike what happens with a name or description, and in such cases it must be understood as if it were *reconstructed*.<sup>26</sup> In what follows, I assume that this is in principle the case with idiom chunks, and when reconstruction is not an option, the idiomatic reading becomes unavailable. Witness the data in (52):

(52)

a. Öğretmen [CP [Pelin-in etekler-i]-ø tutuş-tu] san-mış. Null-FCC

teacher-nom P-gen skirts-poss-nom catch.fire-past believe-evid.past

Reading1: *The teacher believed that Pelin was very anxious.*

Reading2: *The teacher believed that Pelin's skirt caught fire.*

b. Öğretmen [CP [Pelin-in etekler-i]-ni tutuş-tu] san-mış.

teacher-nom P-gen skirts-poss-acc catch.fire-past believe-evid.past

Reading1: *\*The teacher believed that Pelin was very anxious.*

Reading2: *The teacher believed that Pelin's skirt caught fire.*

c. Öğretmen [CP [Pelin-in etekler-i]-ø tutuş-tu diye] duy-muş. Overt-FCC

teacher-nom P-gen skirts-poss-nom catch.fire-past C hear-evid.past

Reading1: *The teacher heard that Pelin was very anxious.*

Reading2: *The teacher heard that Pelin's skirt caught fire.*

d. Öğretmen [CP [Pelin-in etekler-i]-ni tutuş-tu diye] duy-muş.

teacher-nom P-gen skirts-poss-acc catch.fire-past C hear-evid.past

Reading1: *\*The teacher heard that Pelin was very anxious.*

Reading2: *The teacher heard that Pelin's skirt caught fire.*

In both (52a-b) and (52c-d), we see that the idiomatic reading is available with the Nominative subject of FCCs (along with the non-idiomatic reading) while the idiomatic reading becomes unavailable with the Accusative subjects of FCCs.

The unavailability of idiomatic readings in (52b) and (52d) suggests that Accusative subjects of FCCs undergo movement, yet crucially are not subject to reconstruction. Given Sportiche's (2003) conjecture stated at the outset, we would expect the idiomatic readings to be available if reconstruction were available. Lack of reconstruction is characteristic of topicalization in Turkish, as noted at the outset of this section.

### 4.2.2 Variable Binding and WCO

The next piece of evidence for the non-reconstruction of moved Accusative subjects involves variable binding/WCO effects. As shown by the data given in (53) and (54), a moved Nominative subject of an FCC that contains a pronominal variable can still be bound by dative object, indicating that the former can undergo reconstruction (53b/54b). If the moved subject is Accusative, however, reconstruction is not an

<sup>26</sup> This particular claim about idioms is not shared by all researchers. Nurnberg, Sag, and Wasow (1994) claim that "... idioms provide [...] no supporting arguments for the existence of syntactic transformations," because "... the meanings of most idioms have identifiable parts, which are associated with the constituents of the idioms." If the point Nurnberg, Sag, and Wasow (1994) make proves correct, then the argument from idioms weakens. Thanks to Jonathan Bobaljik (pc.) for bringing this source to my attention.



option, as suggested by the lack of binding into the Accusative subject (53c/54c). Notice that the examples in (53) involve *null-FCCs* and those in (54) involve *overt-FCCs*.<sup>27</sup>

(53)

Baseline (*Null-FCC*)

a. *pro* [<sub>CP</sub> [her danışman]<sup>i</sup>-a [*pro*<sup>i</sup> öğrenci-si]-ø tanıt-ıl-dı] san-dı-m.  
           every advisor-dat student-3sg.poss-nom introduce-pass-past believe-past-1sg  
 ‘I thought that his/her student was introduced to every advisor.’

b. *pro* [<sub>CP</sub> [*pro*<sup>i</sup> öğrenci-si]-ø [her danışman]<sup>i</sup>-a *t*<sub>SU</sub> tanıt-ıl-dı] san-dı-m.  
           student-3sg.poss-nom every advisor-dat introduce-pass-past believe-past-1sg  
 ‘I thought that his/her student was introduced to every advisor.’

c. \**pro* [<sub>CP</sub> [*pro*<sup>i</sup> öğrenci-si]-ni [her danışman]<sup>i</sup>-a *t*<sub>SU</sub> tanıt-ıl-dı] san-dı-m.  
           student-3sg.poss-acc every advisor-dat introduce-pass-past believe-past-1sg  
 ‘I thought that his/her student was introduced to every advisor.’

(54)

Baseline (*Overt-FCC*)

a. *pro* [<sub>CP</sub> [her danışman]<sup>i</sup>-a [*pro*<sup>i</sup> öğrenci-si]-ø tanıt-ıl-dı diye] bil-iyor-um.  
           every advisor-dat student-3sg.poss-nom introduce-pass-past C know-pres-1sg  
 ‘I know that his/her student was introduced to every advisor.’

b. *pro* [<sub>CP</sub> [*pro*<sup>i</sup> öğrenci-si]-ø [her danışman]<sup>i</sup>-a *t*<sub>SU</sub> tanıt-ıl-dı diye] bil-iyor-um.  
           student-3sg.poss-nom every advisor-dat introduce-pass-past C know-pres-1sg  
 ‘I know that his/her student was introduced to every advisor.’

b. \**pro* [<sub>CP</sub> [*pro*<sup>i</sup> öğrenci-si]-ni [her danışman]<sup>i</sup>-a *t*<sub>SU</sub> tanıt-ıl-dı diye] bil-iyor-um.  
           student-3sg.poss-acc every advisor-dat introduce-pass-past C know-pres-1sg  
 ‘I know that his/her student was introduced to every advisor.’

---

<sup>27</sup> The following binding facts reveal that in unaccusative/passive Nominative-Dative constructions in Turkish, a Nominative argument originates in a position lower than a Dative argument:

**(i) DAT » NOM**

- a. \*[*pro*<sup>i</sup> yazar-ın]-a [her kitap]<sup>i</sup>-ø ver-il-di.  
           writer-3sg.poss-dat every book-nom give-pass-past  
 ‘Every book was given to its writer.’  
 b. <sup>OK</sup>[her yazar]<sup>i</sup>-a [*pro*<sup>i</sup> kitab-ı]-ø ver-il-di.  
           every writer-dat book-3sg.poss-nom give-pass-past  
 ‘Every writer was given his book.’

**(ii) NOM » DAT**

- a. <sup>OK</sup>[*pro*<sup>i</sup> kitab-ı]-ø [her yazar]<sup>i</sup>-a ver-il-di.  
           book-3sg.poss-nom every writer-dat give-pass-past  
 ‘His book was given to every writer.’  
 b. <sup>OK</sup>[her kitap]<sup>i</sup>-ø [*pro*<sup>i</sup> yazar-ın]-a ver-il-di.  
           every book-nom writer-3sg.poss-dat give-pass-past  
 ‘His book was given to every writer.’

This finding here is crucial to the discussion of the examples in (53) and (54), which I will address briefly in the main text.

The linear order of embedded constituents in (53a) and (54a) indicates the canonical order of constituents in passive/unaccusative clauses, which is *Dat » Nom*, as evidenced by the binding facts in fn.27. As shown in (53b) and (54b), a Nominative subject NP that is moved across a Dative NP can be reconstructed as is indicated by the availability of variable binding in *null*- and *overt*-FCCs, respectively. Significantly, however, an Accusative subject NP that is moved across a Dative NP cannot be reconstructed, as shown in (53c) and (54c). The contrast between moved Nominative subjects and moved Accusative subjects in terms of reconstructibility presents further support for the present claim that the latter involves topicalization.<sup>28</sup>

#### 4.3 Movement of Accusative subjects out of FCCs

Our investigation so far has uncovered that movement of Accusative subjects to the matrix clause is possible yet not obligatory, and it is not Case driven. In this sub-section, I would like to address the question of what type of movement Accusative subjects undergo when they target a position in the matrix clause.

In order to do that, once again I will make use of discourse contexts of the kind utilized in Section 4.1. Consider now the dialog in (55) below and the continuation to it, which involves a long distance extracted Accusative subject out of *null*- and *overt*-FCCs (see fn.25 for an explication of the contexts to elicit contrastive Topics):

(55)

##### Context

*Aylin, Filiz, and Pelin skipped classes to go see Cat Power at a concert. Berk and Sinan were undecided about going to the concert or catching the last days of classes before the exams. In the end, both Berk and Sinan decided to go to the concert although they could not meet Aylin, Filiz, and Pelin there.*

A: Aylin’le Filiz Berk okula gitti sanıyordu. Peki, Sinan’ın ne yaptığını biliyorlar mı?

*Aylin and Filiz believed Berk to have gone to school. Do they know what Sinan did?*

B: Aylin’le Filiz Sinan’ın okula gitmediğini biliyorlardı. Bildiğim kadarıyla...

*Aylin and Filiz knew that Sinan did not go to school. As far as I know...*

- |                                                                                                                                                                                                                                                                                                                                                                                                                    |                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| <p>a. Sinan-ı yalnızca Pelin-ø [<sub>Sinanı</sub> okul-a git-ti] san-ıyor-du.<br/> S-acc only P.-nom school-dat go-past think-prog-past<br/> ‘Only Pelin thought Sinan to have gone to the school.’</p> <p>b. Sinan-ı yalnızca Pelin-ø [<sub>Sinanı</sub> okul-a git-ti diye] bil-iyor-du.<br/> S-acc only P.-nom school-dat go-past C believe-prog-past<br/> ‘Only Pelin knew that Sinan went to the school.’</p> | <p><i>Null-FCC</i></p> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|

In (55), the long distance extracted Accusative subject NP (i.e., *Sinan-ı*) gets a contrastive Topic interpretation whereas the matrix subject NP (i.e., *Pelin*) gets a contrastive Focus interpretation.

<sup>28</sup> It is worth noting that a moved Accusative subject NP, unlike a moved Nominative subject NP, undergoes a further syntactic operation that allows the licensing of its Accusative Case from the next higher clause. The observation we have made in Sections 4.2.1 and 4.2.2 fit well with a generalization stated in Bobaljik and Wurmbrand (2005:812), given in (i), based on a different set of facts from a different set of languages:

(i) *Agreement-Scope Generalization*

A DP may not be interpreted (for scope and binding) in a position lower than in the domain in which it undergoes Case/agreement-checking.

(i) effectively rules out reconstruction when movement feeds a licensing operation from another locality domain, which is indeed what we have seen in Section 4.2. I will not consider further implications of this generalization in this paper.

Crucially, when the linear order of the Accusative subject of the FCC and the matrix Nominative subject is reversed, the sentences are no longer felicitous in the same context given in (55) as shown in (56):

(56)

- A: Aylin’le Filiz Berk okula gitti sanıyordu. Peki, Sinan’ın ne yaptığını biliyorlar mı?  
*Aylin and Filiz believed Berk to have gone to school. Do they know what Sinan did?*  
 B: Aylin’le Filiz Sinan’ın okula gitmedigini biliyorlardı. Bildigim kadariyla...  
*Aylin and Filiz knew that Sinan did not go to school. As far as I know...*

- a. <sup>#</sup>*Yalnızca* Pelin-ø [Sinan-ı okul-a git-ti] san-ıyor-du. Overt-FCC  
 only P.-nom S-acc school-dat go-past believe-prog-past  
 ‘Only Pelin believed Sinan to have gone to the school.’  
 b. <sup>#</sup>*Yalnızca* Pelin-ø [Sinan-ı okul-a git-ti diye] bil-iyor-du.  
 only P.-nom S-acc school-dat go-past C know-prog-past  
 ‘Only Pelin thought that Sinan went to the school.’

The felicity contrast between (55) and (56) indicates that in this particular situation, the Accusative subject of the FCC must be extracted and be placed at the sentence-initial position. This is not unexpected in view of the fact that Accusative subjects of FCCs undergo topicalization within the clause they are base-generated in.

We have seen in Section 4.1 that Accusative subjects may remain in their clause when associated with Topic, provided they hold the edge position in their clause. The evidence we examined in this section implies that Accusative subjects of FCCs can be extracted from the clauses they are base-generated in, if the information structural need arises for them to be associated with Topic at the matrix level. As depicted schematically in (57), an Accusative subject can either be topicalized to the edge of its clause or to the edge of the matrix clause. Either Topic movement, by hypothesis, targets the edge of an FCC either as a final landing site or an intermediate landing site. The edge of an FCC thus represents the structural position in which the licensing of the Accusative feature of the subject is realized in either type of movement:

(57)



In the next section, I outline the actual framework of this paper in an attempt to account for the observations and generalizations obtained thus far.

## 5 Movement to the Edge in a Phase-Based System

Chomsky (2000, 2001) argues that feature checking, the mechanism of syntactic licensing and movement, takes place by way of an abstract operation he calls *Agree*. In this system, syntactic elements enter the derivation with *uninterpretable* features, which must be checked and deleted before a derivation is transferred to the *Articulatory-Perceptual* (PF) and *Conceptual-Intentional* (LF) interfaces. The *Agree* relation holds between two syntactic objects, the *Probe* and the *Goal*. Consider the hypothetical situation given in (58) and the basic assumptions for the Probe-Goal system in (59):

(58)

*Agree* (Chomsky 2000, 2001, 2008)



Agree( $\alpha$ ,  $\beta$ ), where  $\alpha$  is a Probe  $P$  and  $\beta$  is a matching Goal  $G$ , '»' is a c-command relation:  $\alpha$  c-commands  $\beta$ .

(59)

- (a) D(P) is the sister of  $P$ .
- (b) Locality reduces to 'closest c-command'
- (c)  $P$  and  $G$  must be active.

Chomsky (2000, 2001) supplements the theory of *Agree* by a theory of *Phases*, where the output of syntax is sent to the interfaces (Spell-Out/Transfer) not all at once as is the case in the *Extended Standard Theory*, but rather incrementally (see also Uriagereka 1999). Each such unit is called a Phase, and Chomsky contends that CP and  $v$ P (perhaps, also DP and PP, see Chomsky 2008) are Phases of the syntactic derivation whereas TP and VP are not. Once a Phase has been transferred to the interfaces, its contents are no longer accessible to the syntactic derivation. Successive cyclicity of movement operations (through edges/Spec positions of Phases) is forced by this assumption, which Chomsky (2000, 2001) proposes to capture in a principled manner by the *Phase Impenetrability Condition* (PIC). I will adopt the version of the PIC stated in Chomsky (2001):

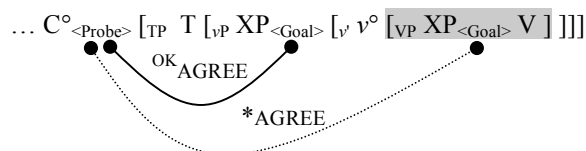
(60)

*PIC* [Chomsky 2001, p:14]

The domain of H is not accessible to operations at ZP; only H and its edge are accessible to such operations.

The practical consequence of the PIC in (60) is that a Probe (assuming here that probing is limited to phase heads as suggested in Chomsky 2008) can in principle have access to a Goal that is at the edge/Spec of the lower phase, while the complement of the lower phase is forced to Spell-Out.<sup>29</sup> As a result, any potential Goal that remains within the Spell-Out domain becomes inaccessible. This is illustrated schematically in (61) (the shaded area signals the domain of  $v^\circ$  that undergoes Spell-Out and thus transferred to PF by the introduction of  $C^\circ$ , the next higher Phase (i.e., the ZP of (60)). The bold line indicates an accessible Goal in (61) while the dotted line indicates an inaccessible Goal):

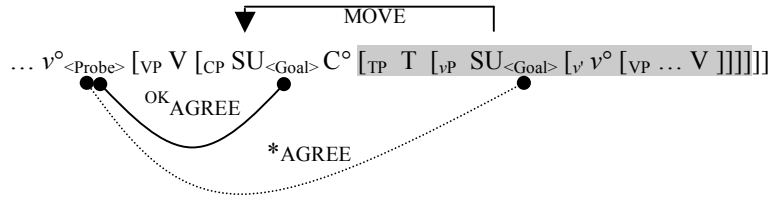
(61)



The scenario above illustrates a Phase-based understanding of licensing through an Agree relation in the context of a single clause. This conception of Agree as restricted by the PIC is relevant across clausal domains as well. For instance, the subject of the embedded clause can be accessible to the matrix  $v^\circ$  if it comes to occupy the edge of the higher next phase (=CP), but not if it stays in the base position in Spec- $v$ P, in which case the complement of  $C^\circ$ , i.e., TP, undergoes Spell-Out, as shown in (62):

<sup>29</sup> The idea that elements at the periphery/edge of one locality domain are accessible to the next higher domain is by no means new. Chomsky's (1986) *Barriers* approach to locality presents the same basic idea in a framework with different assumptions.

(62)



Having briefly outlined the basics of the *Agree-Phase* model of Chomsky's (2001) to be adopted in the present paper, I turn to some Turkish-specific assumptions.

The specific structure that I propose for Turkish FCCs is given in (63) (when realized in its full form):<sup>30</sup>

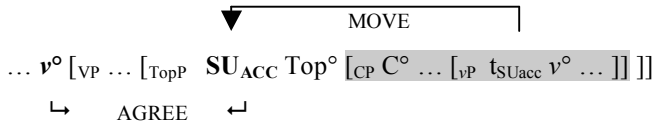
(63)

... [<sub>WhP</sub> \_\_ *Wh*<sup>o</sup> [<sub>TopP</sub> \_\_ Top<sup>o</sup> [<sub>CP</sub> \_\_ C<sup>o</sup> [<sub>TP</sub> \_\_ T<sup>o</sup> [<sub>VP</sub> SU v<sup>o</sup> [<sub>VP</sub> V<sup>o</sup> OB ]]]]]]

Following proposals by Polinsky and Potsdam (2001), and Bobaljik and Wurmbrand (2005), I assume that movement to Spec-TopP should allow an FCC subject NP to access matrix v<sup>o</sup> for licensing its Case only if the *WhP* is not projected.<sup>31</sup> It is obvious that under these assumptions, Spec-CP is the highest position in the structure (and hence the *edge*) only in the absence of TopP and *WhP*.

We have seen earlier that Accusative subjects of FCCs undergo Topic movement to the edge of their clause in Turkish. I now propose that Accusative subjects of FCCs specifically target the Spec of TopP. As noted above, Spec-TopP is the highest position in the clause unless *whP* is projected, and therefore a subject in Spec-TopP with Accusative Case features is visible to Agree in the higher clause by the PIC. This is schematically shown in (64) (the shaded area in (64) indicates the domain that undergoes Spell-Out when matrix v<sup>o</sup> is merged):

(64)

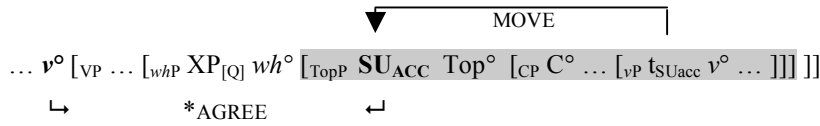


A clear prediction of the theory of *Agree-Phases*, when combined with the structure I proposed for Turkish in (63), is that movement to Spec-TopP should not be sufficient for the licensing of Accusative on the subject NP when there is motivation for *WhP* to be projected (such as *wh*-questions, relative clauses etc.). This conclusion is particularly necessary if we assume that *Wh*<sup>o</sup> is a phase head (like C<sup>o</sup> is), which forces the Spell-Out of TopP when matrix v<sup>o</sup> is merged (under the definition of the PIC adopted presently). This is shown schematically in (65):

<sup>30</sup> The functional organization of the left periphery I propose in (63) for Turkish is different from those in Bruening (2001) for Passamaquoddy and in Polinsky and Postdam (2001) for Tsez. I share, however, with these authors the view that the element establishing an Agree relation with a Probe in the higher locality domain must be at the edge of the embedded clause (see also Bobaljik and Wurmbrand 2005, and Bobaljik 2008 for a similar proposal).

<sup>31</sup> *WhP* and/or TopP are not projected unless there is motivation to do so. I adopt here Bošković's (1997:25) *Minimal Structure Principle*, as stated in the following: 'Provided that lexical requirements of relevant elements are satisfied, if two representations have the same lexical structure and serve the same function, then the representation that has fewer projections is to be chosen as the syntactic representation serving that function.' See also Grimshaw (1994), Radford (1994), and Speas (1994). Note that CP, unlike *WhP* and TopP, is always projected in view of the assumption that FCCs always involve a C head regardless of whether it is realized morphologically or not.

(65)



These and other predictions of the current proposal will be addressed in Section 5.2.

Next, I turn to a discussion of the first observed parallelism between *null*- and *overt*-FCCs in term of Case and Agreement properties within the framework outlined in this sub-section.

### 5.1 Once Finite always Finite but Once Nominative not always Nominative

The facts examined in Section 2 demonstrated that the following generalizations hold for both *null*- and *overt*-FCCs:

(66)

- (i) Overt agreement morphology is obligatory when FCCs have Nominative subjects.
- (ii) Overt agreement morphology on the predicate of FCCs is optional when FCCs have Accusative on the subjects.

The correlations are schematically illustrated in (67):

(67)

- (i) When the *Subject* is *NOM*
  - a. ... [FCC ... SU[ $\varphi_\alpha$ ] ... V[ $\varphi_\alpha$ ] ] ...
  - b. \*... [FCC ... SU[ $\varphi_\alpha$ ] ... V[default/ $\emptyset$ ] ] ...<sup>32</sup>
- (ii) When the *Subject* is *ACC*
  - a. ... [FCC ... SU[ $\varphi_\alpha$ ] ... V[ $\varphi_\alpha$ ] ] ...
  - b. ... [FCC ... SU[ $\varphi_\alpha$ ] ... V[ $\varphi_{\text{default}/\emptyset}$ ] ] ...

The contrast between (67ia) and (67ib), which abstractly shows that overt agreement morphology is obligatory when the subject of a FCC is Nominative, has had an important role in the current understanding of Agreement and Case going back to George and Kornfilt (1981) (cf. Chomsky 2000, 2001, 2008). Accusative subjects of FCCs, however, can either have a predicate that has the same  $\varphi$ -value as the subject NP or have one with no  $\varphi$ -value as indicated in (67ii) (or a default  $\varphi$ -value).

The analysis of these generalizations that I will propose below rests on two assumptions. One adopts a proposal made in Chomsky (2001), according to which only a Probe that has an *incomplete/defective*  $\varphi$ -set allows licensing (=valuation) of Case on a Goal. This presupposes the existence of Probes that have an *incomplete*  $\varphi$ -set. The specific Probe under discussion is *T* (although *v* is also taken to exhibit a variation in terms of  $\varphi$ -features). Chomsky (2001) restricts defectiveness to  $\varphi$ -features on *T*, claiming that *defective*  $\varphi$ -sets contain just the [person] value. Modifying slightly, I will

<sup>32</sup> [3.sg] agreement morphology is indicated by its absence in Turkish. It is thus not clear whether a verb with no overt agreement morphology has underlyingly [3.sg] morphology or no agreement at all. The latter option is only available if *Agree*(*T*,*SU*) relation does not hold in syntax (unless we assume that a default form is used as a last resort in the morphological component when *Agree* does not hold in syntax. The default form is presumably identical to [3.sg] in Turkish, which implies that the choice is contingent on one's theoretical choices and cannot be decided by the empirical facts at hand.

assume that there are two types of  $T$ , one *Agreeing* ( $T_{AGR}$ ) and the other *non-Agreeing* ( $T_{-AGR}$ ), and only the former can assign Nominative.<sup>33,34</sup>

The second assumption I make (following a suggestion by Jonathan Bobaljik (p.c.)) is that *Case Rewriting/Overwriting* is an option in Turkish. Specifically, I propose that *Case Rewriting/Overwriting* is possible when a NP that receives Case  $K$  in one structural configuration (crucially,  $K$  a structural Case, Nominative, in the present context) receives another Case  $K'$  in another structural configuration ( $K'$  also a structural Case, Accusative, in the present context), particularly when the remerger of this NP in another syntactic configuration is not barred. It is worth noting that the only Case that is realized morphologically on such an NP is  $K'$ , and not  $K$ , as implied by the name of the operation, *Case Rewriting/Overwriting*. I will not go into the technical details of how this operation works, but Béjar & Massam (1999) put forth a proposal that allows exactly this in some languages as a parametric option (see also Cowper 1988, Schütze 1993, Frampton and Guttman 1999). An illustration of a context where *Case Rewriting/Overwriting* applies will be presented in (71), where it is relevant.

Having made the basic assumptions explicit, let us consider the derivation in (69) of the sentence in (10a), repeated here as (68), whose schematic illustration is given in (67i):

(68) (=10a)

Pelin [<sub>CP</sub> sen-ø Timbuktu-ya git-ti-*n* *diye*] bil-iyor-muş.  
P-nom you-nom T-dat go-past-2sg C know-prog-evid.past  
‘Pelin thought that you went to Timbuktu.’

Let us assume that the Nominative subject of the *overt*-FCC remains in-situ (unless it is Topic, in which case it moves to Spec-TP), and the  $T$  selected is the  $T_{AGR}$ :

(69)

$$\begin{array}{c} \dots [TP \quad \underline{T_{AGR}} \quad [_{VP} \quad \underline{SU} \quad [_{V'} \quad V^{\circ} [_{VP} \dots V^{\circ} ]]]] \\ [u\varphi] \quad [i\varphi]\text{-NOM} \\ \hookrightarrow \text{AGREE} \quad \leftarrow \end{array}$$

(69) represents a trivial case in that the  $T_{AGR}$  has the potential to assign Nominative Case and get its  $[u\varphi]$  valued, which gets to be morphologically realized in PF (or in the M(orphological)S(tructure)).<sup>35</sup> Before we move on, let me briefly address the following issue: Given that there are two types of  $T$ s,  $T_{AGR}$  and  $T_{-AGR}$ , what happens if the latter is selected? I contend that there is in principle nothing that bans selection of  $T_{-AGR}$ , yet a derivation that involves  $T_{-AGR}$  cannot converge (or converges as deviant, see Chomsky 2008 for discussion). This is because  $T_{-AGR}$ , by assumption, cannot assign Case and the subject remains Caseless. Note that this scenario is only relevant if the subject NP fails to move to the edge of its clause.

<sup>33</sup> It should be noted that for Chomsky (2001:6)  $C^{\circ}$  is one-to-one associated with  $T_{COMPLETE}/T_{AGR}$  in that  $C^{\circ}$  only selects  $T_{COMPLETE}/T_{AGR}$ . From this perspective, an examples like that in (14a/70a) where the embedded verb bears no agreement morphology,  $T$  must be classified as  $T_{-AGR}$  ( $=T_{INCOMPLETE/DEFECTIVE}$ ) as discussed in the main text, and consequently its selection by  $C^{\circ}$  must be impossible (in the sense offered in Chomsky 2001). I assume, contra Chomsky (2001), that  $T$  can always be selected by  $C$  regardless of whether  $T$  is  $T_{AGR}$  or  $T_{-AGR}$ .

<sup>34</sup> The present proposal runs counter to proposals that tie the presence of Accusative Case on the subjects to the lack of tense/aspect/modality (TAM) categories in the FCCs in Turkish (under the assumption that  $T^{\circ}$  is the functional head that encodes TAM values). Aygen (2002), for instance, proposes that FCCs with Accusative subjects lack *epistemic modality*, which she assumes is the category that licenses Nominative case on the subjects of FCCs. Unfortunately, however, no substantial support is provided by Aygen (2002) for this claim.

<sup>35</sup> I assume that Nominative subjects that move to Spec-TP receive a Topic interpretation. Importantly, Spec-TP is a position that is not visible to the matrix  $v^{\circ}$ , and thus not eligible for (Accusative) *Case-Rewriting*, under the assumption that FCCs always project a CP, and CPs are phases. Note however that their movement to the edge of their clause is not banned, as will be discussed in the main text.

If it does, then Accusative Case assignment from above is always an option in the current system, unless movement is barred independently. See below for a discussion of the data that illustrate this alternative.

Consider now the sentences in (70a) and (70b), the former of which involves no morphological agreement while the latter does. Notice that both sentences in (70) have Accusative subjects:

(70)

a. Pelin [<sub>CP</sub> sen-*i* Timbaktu-ya git-ti- $\emptyset$  diye] bil-iyor-muş. (=14a)

P-nom you-*acc* T-dat go-past C know-prog-evid.past  
‘Pelin thought that you went to Timbaktu.’

b. Pelin [<sub>CP</sub> sen-*i* Timbaktu-ya git-ti-*n* diye] bil-iyor-muş. (=15a)

P-nom you-*acc* T-dat go-past-2sg C know-prog-evid.past  
‘Pelin thought that you went to Timbaktu.’

Let us first consider the derivation of (70b), which involves  $T_{AGR}$  in its derivation as shown in (71).  $T_{AGR}$  undergoes Agree with the subject NP and gets its  $[u\varphi]$  feature valued assigning Nominative Case to it. In Step II, the subject NP undergoes movement to the Spec of TopP and becomes visible to the matrix  $v^\circ$  for Agree. An Agree relation is then established between the  $v^\circ$  and the subject NP, and the subject NP receives Accusative Case (i.e., an instance of *Case Re-writing*), which is the Case that is morphologically realized in PF/MS (note that in (71) the domain that undergoes Spell-Out is shaded):

(71)

Step I

... [<sub>TP</sub>  $\overline{T_{AGR}}$  [<sub>VP</sub>  $\overline{SU}$  [<sub>v' v'°</sub> [<sub>VP</sub> ... V° ]]]]]  
[ $u\varphi$ ] [ $i\varphi$ ]-NOM  
↪ AGREE ↩

Step II

... [<sub>vP</sub>  $\overline{v^\circ}$  [<sub>VP</sub> ... [<sub>TopP</sub>  $\overline{SU}$  Top° ... [<sub>TP</sub>  $\overline{T_{AGR}}$  [<sub>vP</sub>  $\overline{t_{SU}}$  [<sub>v' v'°</sub> [<sub>VP</sub> ... V° ]]]]]]]]  
[ $u\varphi$ ] [ $i\varphi$ ]-ACC  
↪ AGREE ↩

The derivation of (70a) given in (72) involves  $T_{AGR}$ , which cannot get its  $[u\varphi]$  feature valued, nor can it assign Nominative Case to the subject NP.<sup>36</sup> If the subject NP does not undergo movement to the edge of the complement clause, it cannot receive Case, leading to non-convergence (or deviance). Suppose that it does. *Agree*( $v, SU$ ) is then possible, once again with the proviso that no higher functional head projects:

(72)

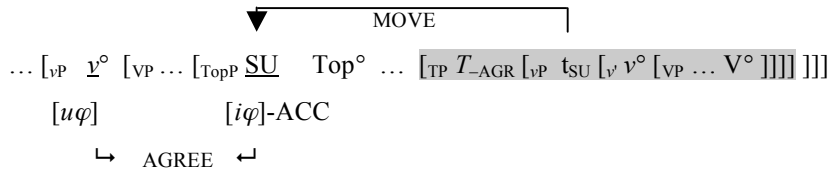
Step I

... [<sub>TP</sub>  $\overline{T_{AGR}}$  [<sub>vP</sub>  $\overline{SU}$  [<sub>v' v'°</sub> [<sub>VP</sub> ... V° ]]]]]

<sup>36</sup> For Chomsky (2001), this is a situation where a Match relation between the Probe/ $T$  and the Goal/subject NP holds without leading to Agree/Valuation. Chomsky (2001) argues that Agree is parasitic on a Match relation, which is a dependency sensitive to the type of feature that two lexical elements share.



## Step II



Since the subject NP does not establish an Agree relation with  $T_{\text{-AGR}}$ , the absence of [2sg] agreement morphology on the predicate in (70a) is accounted for by the Step I in (72). In Step II, the subject NP moves to Spec-TopP and as a result can establish an *Agree*( $v, SU$ ). Importantly, notice that the co-occurrence of Accusative Case and Topic interpretation in (70a) also receives a natural explanation under the present proposal since Accusative Case is not available unless Topicalization takes place.

To sum up, under the present proposal the observed variation in FCCs in terms of Case/Agreement properties is tied to (i) the Case assigning potential of  $T_s$ , (ii) the structural position(s) of the subjects of FCCs, and (iii) the operations that make *Case Rewriting* an option.

In what follows, I turn to issues that bear on the edge requirement on Accusative Case licensing on the subjects of FCCs.

### 5.2 *Wh*P s and Non-Peripheral Subjects of *Overt*-FCCs

The two key components of the analysis proposed at the outset of Section 5 are the following: (i) subject NPs of FCCs undergo fronting to Spec-TopP, which is placed above CP, and (ii) Case licensing (via Agree) is constrained by the PIC, which allows only the highest specifier of an FCC to be visible to the next higher locality domain. This analysis predicts that *Wh*P should block licensing of Accusative Case on the subjects of FCCs that hold Spec-TopP, given the functional structure of the left periphery proposed for Turkish in (63), where *Wh*P is located on top of TopP when projected. In this section, I will introduce data from Turkish that force the projection of *Wh*P and show that the prediction of the present analysis is borne out.

The first piece of data given in (73) shows that *overt*-FCCs that contain *wh*-phrases are ungrammatical with Accusative subjects while they are grammatical with Nominative subjects:<sup>37,38</sup>

(73)

- a. Pelin [Mert- $\emptyset$  kim-e vur-du diye] sor-du /merak et-ti.  
 P-nom M-nom who-dat hit-past C ask-past/ wonder do-past  
 ‘Pelin asked/wondered who Mert hit.’
- b. \*Pelin [Mert-i kim-e vur-du diye] sor-du /merak et-ti.  
 P-nom M-acc who-dat hit-past C ask-past/wonder do-past  
 ‘Pelin asked/wondered who Mert hit.’

Since the licensing of the Accusative Case on the subject of *overt*-FCCs is otherwise possible, the ungrammaticality of (73b) should be interpreted as stemming from the availability of the embedded question reading. In structural terms, this means that the FCC in (73b) is headed by  $Wh^{\circ}$ , which projects its own phrase on top of TopP given (63).

Importantly, however, the *wh*-phrase in (73) is not in Spec-*Wh*P in overt syntax, Turkish being a *wh*-in-situ language. I assume that it is not the *wh*-phrase itself that prevents *Agree*( $v^{\circ}, SU$ ) in (73b) in

<sup>37</sup> I mentioned at the outset of this Section that the data examined in this section only come from *overt*-FCCs. Recall from Section 2.2 that verbs like *sor-* ‘ask’ and *merak et-* ‘wonder’ can select *overt*-FCCs in Turkish, though this option is not available with *null*-FCCs. Importantly, such verbs typically opt for complements whose head has the feature [+wh]. This will be a key factor in our discussion in this section.

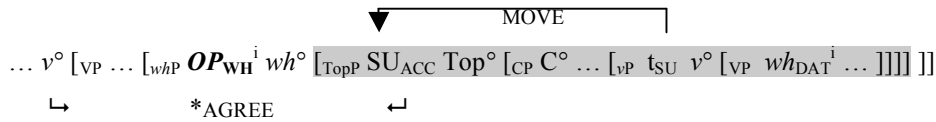
<sup>38</sup> Note that the licensing of Accusative Case on the subject of an *overt*-FCC would be possible if the Dative argument in (73b) were a non-*wh*-phrase.

Turkish, but the *wh*-OP(erator), which is base-generated in the Spec of *WhP* in clauses in which a *wh*-phrase is introduced.<sup>39</sup>

Once we assume that the *wh*-OP holds the highest Specifier position of *overt*-FCCs, i.e., Spec-*WhP*, we can account for the impossibility of the licensing of Accusative on the subject NP in (73b): Even though the Accusative subject NP moves to Spec-TopP, it is not visible to the matrix  $v^\circ$  particularly when the *WhP* is projected, as has been suggested earlier. This is because (Spec-)TopP no longer constitutes the proper edge of its clause. More explicitly, under the definition of the PIC adopted in this paper, an XP in Spec-TopP is inaccessible to the matrix  $v^\circ$  when *WhP* is present in the structure, *Wh*<sup>o</sup> being a phase head.

Consider a rough derivation of (73b) given in (74) under the present proposal. Notice that the Dative *wh*-phrase is introduced into the structure within the VP while the co-indexed OP-*wh* is base-generated in the Spec of *whP* (shaded area indicates the domain that undergoes Spell-Out when matrix  $v^\circ$  is merged):

(74)



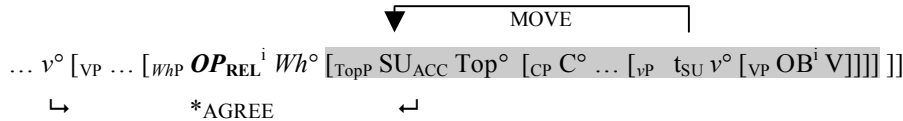
An interesting piece of support for this analysis comes from the Accusative subjects of relative clauses, whose derivation has been argued to involve a *wh*-OP in the Spec of CP (presently, *WhP*; cf. Kornfilt 1997a). The examples below from Turkish specifically show that when a clause that contains a subject NP is within a relative clause, the Accusative Case of the subject NP cannot be licensed (75b), while no such problem arises with the licensing of Nominative subjects (75a).<sup>40</sup>

(75)

- a. [(biz-im) [Mert- $\emptyset$  e<sup>i</sup> öp-tü diye] duy-duğ-umuz] kız<sup>i</sup>- $\emptyset$  hasta-y-mış.  
 we-gen M-*nom* kiss-past C hear-rel-1pl.poss girl-nom sick-cop-evid.past  
 ‘The girl that we heard that Mert kissed is sick.’
- b. \*[(biz-im) [Mert-i e<sup>i</sup> öp-tü diye] duy-duğ-umuz] kız<sup>i</sup>- $\emptyset$  hasta-y-mış.  
 we-gen M-*acc* kiss-past C hear-rel-1pl.poss girl-nom sick-cop-evid.past  
 ‘The girl that we heard that Mert kissed is sick.’

Consider a partial derivation of the sentence in (75b) given in (76):

(76)



The unavailability of Accusative Case licensing on the subject NP in (75b) is accounted for under the assumption that the derivation of relative clauses in Turkish forces the projection of *WhP* (whose Spec holds OP<sub>REL</sub> in (76)). In a nutshell, the subject NP in Spec-TopP is not visible to the matrix  $v^\circ$  in the

<sup>39</sup> I assume without discussion that the *wh*-OP base-generated at the edge of its clause unselectively binds the in-situ *wh*-phrase. It is in principle possible to assume that the *wh*-OP undergoes movement from the position a *wh*-phrase is base-merged in as argued for in Watanabe (1992). I will not consider this alternative here, however. See also Arslan (1999) for an analysis of *wh*-questions in Turkish along these lines.

<sup>40</sup> The sentence in (75b) is out with the reading in which the Accusative marked NP *Mert-i* is interpreted as the subject of the *overt*-FCC, whereas it is grammatical if the Accusative argument is interpreted as the direct object of it. The latter reading is irrelevant for our present purposes.

presence of *WhP*, a phase, since *TopP* undergoes Spell-Out when matrix  $v^\circ$  is introduced into the structure.

The present analysis makes another prediction concerning Accusative subjects of FCCs that are themselves *wh*-phrases. As a natural consequence of the assumption that *WhP* is projected in the embedded clause particularly when an embedded question reading obtains, the *wh*-OP must still be in a higher position than a subject *wh*-phrase that comes with Accusative Case features. This being the case, the prediction is that the establishment of an Agree relation between the matrix  $v^\circ$  and the *wh*-subject of an *overt*-FCC must be unavailable due to the intervention of *WhP/wh*-OP. If, however, the *WhP/wh*-OP is not in the embedded clause, as in the cases where a matrix question reading arises, there should be no blocking of the Agree relation between the Accusative subject *wh*-phrase and the matrix  $v^\circ$ .<sup>41</sup> As the (un)available readings of the sentence in (77) indicate, this prediction is also borne out:

(77)

Pelin [kim-*i* Mert-e vur-du- $\emptyset$  diye] bil-iyor

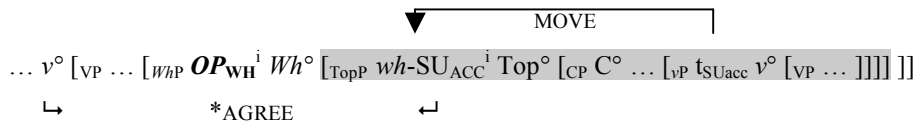
P-nom who-acc M-dat hit-past C know-pres

a. Reading1: \*Pelin knows who hit Mert.

b. Reading2: Who does Pelin know hit Mert? [Lit: Who does Pelin think hit Mert?]

The ungrammaticality of (77a) with the embedded question reading suggests that the Accusative subject *wh*-phrase fails to hold the edge of the embedded clause, *wh*-OP being in a higher position than the *wh*-subject. It is noteworthy that this is indeed necessary in order for *wh*-OP to bind the Accusative *wh*-phrase establishing an *OP-variable* relation. Consider the derivation of (77a) in light of our present analysis:

(78)

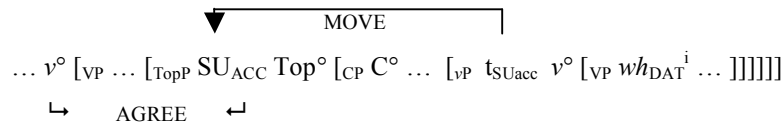


The Accusative *wh*-subject in (77a) moves to the Spec of *TopP* like any other non-*wh* Accusative subject. The reason that the Accusative *wh*-subject does not count as holding the edge of its clause is because there is independent motivation for *WhP* to project. When projected, the Spec (or the head) position of the *WhP* is the actual edge of the clause, and thus the Accusative Case on the *wh*-subject in Spec-*TopP* cannot be licensed. This is because an Agree relation between the  $v^\circ$  and the *wh*-subject cannot be established *TopP* undergoing Spell-Out when matrix  $v^\circ$  is introduced.

The grammaticality of (77b) is also expected since there is no reason for the projection of *WhP* in the complement clause, the sentence in (77b) having a matrix question reading. As shown in (79), the *wh*-OP is base-generated in the matrix Spec of *WhP*:<sup>42</sup>

(79)

[*whP* *OPWh*<sup>i</sup> *wh*<sup>°</sup> [*TopP* *Top*<sup>1°</sup> ...



<sup>41</sup> The situation is different in Tsez as reported in Polinsky and Potsdam (2001,638:fn.20). I will briefly discuss Tsez facts below.

<sup>42</sup> I assume that a binding relation holds between *wh*-OP and the *wh*-phrase. In contrast to Agree, variable binding clearly cannot be subject to the PIC, as shown by the unboundedness of variable binding relation in (i) below:

(i) *Everyone*<sup>i</sup> thinks that you believe that [*his*<sup>i</sup> mother] is beautiful.

The absence of *WhP* in the complement clause ensures that the subject NP in Spec-TopP can establish an Agree relation with the matrix  $v^\circ$  and thus no problem with the licensing of Accusative Case on the subject NP is expected.

I would like to finalize my discussion of Turkish in this section with the example in (80), which is ungrammatical regardless of what question reading arises:

(80)

- \* Pelin [Mert-e kim-i vur-du diye] bil-iyor  
 P-nom M-dat who-*acc* hit-past C know-pres  
 a. Reading1: Pelin knows who hit Mert.  
 b. Reading2: Who does Pelin think hit Mert?

The ungrammaticality of (80a) with the embedded question reading is not surprising given what we have said so far: Since *WhP*, a phase, is projected in the complement clause, Agree( $v, SU$ ) is impossible due to the PIC.

The ungrammaticality of (80b) cannot be tied to presence of the phasal projection *WhP*, since *WhP* is projected at the matrix clause level in (80b), and not at the complement clause level. The key assumption in an attempt to account for (80b) is that the Accusative subject in (80) does *not* occupy Spec-TopP or Spec-CP. Given that assumption, the reading in (80b) can be ruled out. That is because either  $Top^\circ$  or  $C^\circ$  (both phase heads) will prevent the establishment of an Agree relation between the matrix  $v^\circ$  and the FCC-subject, again, a PIC effect.

I suggest that the ungrammaticality of (80b), in particular, provides another argument against an LF Topicalization analysis of Accusative subject NPs in Turkish. As the reader can verify, if LF Topicalization were possible, there would be nothing to block the licensing of Accusative on the subject of the FCC in (80b) since Agree( $v, SU$ ) would be an option.<sup>43</sup>

Before I close this section, I would like to very briefly review the Tsez facts that are examined in Polinsky and Potsdam (2001) for their similarities to those from Turkish reported in this sub-section.

In a nutshell, Tsez is a language that allows a matrix verb to agree with an Absolutive NP in a finite embedded clause as shown in (81) (data due to Polinsky and Potsdam 2001,584:1b):

(81)

- enir [uza magalu bac'ruhi] b-iyxo  
 mother boy bread.III.Abs ate III-knows  
 'The mother knows the boy ate the bread.'

Polinsky and Potsdam (2001) show that both in-situ and (edge-) moved *wh*-phrases block agreement of matrix verbs in Tsez with an embedded Absolutive NP. The example in (82), where a *wh*-phrase is fronted to hold the edge of the finite embedded clause, is cited from Polinsky and Potsdam (2001,634:109b):<sup>44</sup>

<sup>43</sup> LF movement can be successfully implemented if one adopts a *Single Cycle Model* of syntax of the sort suggested in Bobaljik (2002), where the interpretive components see only the final syntactic representation, including the output of covert (here, LF) movement. Bobaljik (2008) argues that such a model provides the natural grounds to account for long distance agreement in Tsez, where the edge effect is claimed to hold over an LF position (see Polinsky and Potsdam 2001). See the discussion of Tsez in the main text.

<sup>44</sup> There are a number of other potential interveners in Tsez that Polinsky and Potsdam (2001) report. I will limit my attention to *wh*-intervenors here. See Section 6.1 for more discussion.

(82)

enir [na c'ohor-a micxir b-ok'ak'-ru-li] r / \*b -iyxo  
 mother where thief-Erg money.III III-steal-PSTPRT-NMLZ IV / \*III -knows  
 'The mother knows where the thief stole the money.'

As shown in (82), while the matrix verb *-iyxo* 'know' can agree with the Class IV complement clause, it cannot agree with the Absolutive argument *micxir* 'money' within the complement clause in the presence of the *wh*-phrase.

Under the functional structure that Polinsky and Potsdam (2001) propose, where CP is higher than TopP (cf. the structure I proposed for Turkish in (63)), a *wh*-phrase that holds the Spec of CP (either via fronting in overt syntax or via LF movement) blocks the agreement of an embedded Absolutive NP with a matrix verb.

Significantly, Polinsky and Potsdam (2001, 638:fn.20) report that an Absolutive *wh*-phrase that holds the edge in its clause can trigger agreement on the matrix verb, as shown in (83):

(83)

enir [sebi y-ak'-ru-li] y-iy-x-anu  
 mother wh.II.abs II-go-PSTPRT-NMLZ II-know-PRES-NEG  
 'The mother does not know who [of woman] left.'

The availability of agreement is predicted under Polinsky and Potsdam's (2001) proposal as the Absolutive NP is a *wh*-phrase that holds the highest position in its clause, Spec-CP.

At first glance, the grammaticality of (83) is surprising given the ungrammaticality of the Turkish example in (77a) (with the embedded question reading). Recall that Accusative Case of a *wh*-subject cannot be licensed in Turkish even when the *wh*-phrase appears at the left edge of its clause. The analysis I proposed for this fact is that it is not the *wh*-subject that holds the Spec of *WhP* but the *wh*-OP coindexed with it. This analysis, as it stands, cannot account for the grammaticality of (83) in Tsez.

The solution I offer here rests on the assumption that *wh*-phrases in these languages display a differing behavior. More specifically, I propose that Tsez, unlike Turkish, allows *wh*-phrases to move to Spec-*WhP* and adjoin to *wh*-OP in LF, which makes it possible for *wh*-phrases themselves to take an active part in the Agree relation established with the matrix *v*. Assuming that Turkish rules out this option, we can account for the contrast between (83) in Tsez and (77a) in Turkish.<sup>45</sup>

This conjecture is a tenable one once we acknowledge that the two languages under discussion exhibit a more general contrast in terms of the availability of covert/LF operations. One relevant observation concerns the placement of Topics. In Turkish, Topics are configurational and accordingly their position must be established at surface structure (i.e., a certain isomorphism holds between LF and PF). Topics in Tsez, however, do not have this property, and thus they do not have to establish their position at surface structure. As Polinsky and Potsdam (2001) claims, Tsez (primary) topics undergo

<sup>45</sup> Branigan and MacKenzie (2002) show in their discussion of Innu-Aimûn (Algonquian) that cross-clausal agreement is allowed across a *wh*-phrase in Spec-CP (data due to Branigan and MacKenzie 2002, 397:34a):

(i) Mâ tshi-tshissenim-âu [<sub>CP</sub> tân ishphish Pûn utshimâma aimiepan Mânîua]?  
 Q 2-know-3sg when Paul boss called Marie  
 'Do you know when Paul's boss called Marie?'

The matrix verb in (i) displays agreement with the subject of the embedded clause *Pûn*, as indicated by the [3sg] morphology on the matrix verb, despite the presence of a *wh*-phrase at the edge of the embedded clause. Bobaljik (2008) raises some concerns, however, about the nature of long distance agreement in Innu-Aimûn and some other languages studied (Blackfoot, Cree, Fox, Alutor and Chukchi). Bobaljik (2008) notes that these languages present evidence for a proxy/prolepsis analysis (cf. Polinsky 2003) and furthermore no evidence has been presented showing that the agreement controller is in a *finite* clause in some of these languages. There is evidence from Chukchi, for instance, that the agreement controller is in a finite clause yet such examples are amenable to a proxy/prolepsis analysis.

movement at LF (see also Bobaljik 2008). I contend that the discrepancies between Turkish and Tsez noted above can be analyzed under the conjecture entertained presently.

## 6 Remaining Issues

### 6.1 Non-Intervening *Adverbial Intervenors*

The evidence inspected thus far reveals that licensing of Accusative Case on the subject of FCCs is blocked when they are not located at the *edge* of the FCC (either because of the projection of *WhP* or because of the non-movement of the subject NP to Spec-TopP). The edge requirement is a strong one and subjects of FCCs that do not hold the edge position cannot have their Accusative Case licensed.

This picture is somewhat tainted by an example reported in Section 3.1. Recall from the example in (20), repeated below in (84), that Accusative subjects of FCCs in Turkish may follow adverbs that obligatorily modify embedded predicates:

- (84)  
 Pelin [*dün*      Metin-*i* sınav-a   gir-di]      san-ıyor.  
 P-nom   *yesterday* M-acc exam-dat enter-past believe-pres  
 ‘Pelin believes that yesterday, Metin took an exam.’

It seems that adverbs constitute an exception to the edge requirement of Accusative subjects. The question is, what does this exception follow from? Before I propose an analysis of the exceptional character of sentences like (84), once again I will turn to some relevant facts in Tsez.

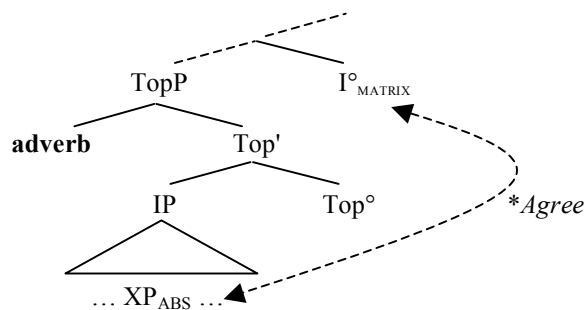
Polinsky and Potsdam (2001) report that there are a number of potential intervenors in Tsez that prevent a ‘topical’ Absolutive NP from establishing an Agree relation with matrix T. As noted in the previous section, *wh*-phrases are intervenors. Importantly for our present purposes, fronted/topicalized adverbs also block Agree( $T_{\text{matrix}}$ ,  $NP_{\text{ABS-embedded}}$ ) in Tsez. Adverbials that are in their base positions, however, do not block Agree, as Polinsky and Potsdam (2001) note. The relevant examples are cited from Polinsky and Potsdam (2001, 635:111a,b):

- (85)  
 a. enir      [ uza      hul      magalu      b-ac’-ru-li ]      *r* / *b* -iy-xo  
     mother-dat boy-erg yesterday bread-III.abs III-eat-pastpart-noml]-IV IV/III -know-pres  
     ‘The mother knows the boy ate bread yesterday.’  
 b. enir      [ hul      uza      magalu      b-ac’-ru-li ]      *r* / \**b* -iy-xo  
     mother-dat yesterday boy-erg bread-III.abs III-eat-pastpart-noml]-IV IV/III -know-pres  
     ‘The mother knows the boy ate bread yesterday.’

As shown in (85a), when an adverb holds its base position, matrix verb can show morphological agreement with the embedded Absolutive NP ‘magalu.’ This option is not available, however, when the adverb ‘hul’ undergoes topicalization in (85b).

Details of the analysis aside, Polinsky and Potsdam (2001) propose that long distance agreement is computed at LF, and a topicalized adverbial as in (85b) holds the Spec of TopP, preventing the Absolutive NP from holding the same position, and thus blocking agreement with matrix T/I. This analysis is roughly illustrated in (86), where the functional structure offered by Polinsky and Potsdam (2001) for Tsez is employed:

(86)

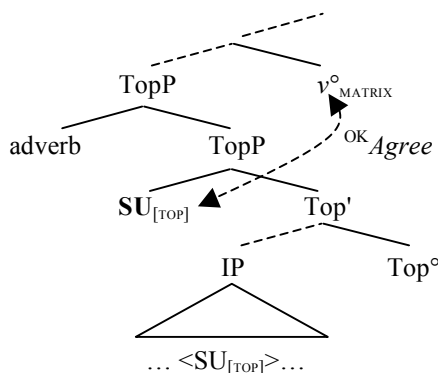


A key ingredient of the analysis Polinsky and Potsdam (2001) offered is that TopP has a unique Specifier position.<sup>46</sup>

Turning to the Turkish example in (84), where the ‘fronted’ adverb does not block the licensing of Accusative Case on the subject, I propose that the ‘fronted’ adverb is adjoined to TopP (keeping to the Specifier-Adjunct distinction in Chomsky 1995). A key component of the analysis of (84) under the present proposal concerns the definition of the *edge* of a (locality) domain. Recall that I proposed in Section 5 that *the edge* of a locality domain corresponds to *the SPEC of the highest XP*. Given this definition, elements adjoined to XP are irrelevant to the identification of the edge.

Consider the derivation of (84) depicted in (87) below schematically (irrelevant parts of the derivation and other details are omitted):

(87)



As shown in the derivation in (87), although the adverb occupies a higher position than the Accusative subject of the FCC, the adverb does not count as the edge of the clause it is base-generated in. This is because it is adjoined to TopP. The Accusative subject NP, however, is at the Spec position (of *TopP*), which is what determines *the edge* of a domain (in addition to the head position of *Top*), and thus chosen by the matrix Probe *v* for Agree.

To sum up, under the current proposal, sentences like (84) where an adverb precedes an Accusative subject inside an FCC do not raise any problems for the edge requirement on the licensing of Accusative Case on the subjects. The reason for this is that fronted adverbs do not occupy the edge in their clause, under the definition of an edge adopted in this paper.

## 6.2 A-Binding and the Edge of CPs

In this final sub-section, I would like to extend the present proposal to capture some Turkish facts that were originally used to support the S'-Deletion analysis, which were later used by other researchers to support the (obligatory) raising analysis of Accusative subjects in Turkish (cf. Moore 1998, Özsoy 2001).

<sup>46</sup> This assumption is implicit in Polinsky and Potsdam’s (2001) proposal.

I first review George and Kornfilt's (1981) discussion of the relevant facts and then turn to an evaluation of their approach.

George and Kornfilt (1981) argue that *null*-FCCs contrast in transparency, depending on the agreement morphology on the predicate and the Case on the subject of *null*-FCCs. They present evidence to the effect that while those FCCs with a Nominative subject and an agreeing predicate are opaque, those FCCs with an Accusative subject and a non-agreeing predicate are transparent. The evidence in question involves A-binding (see also Moore 1998). Compare the data in (88) and (89) (G&K stand for *George and Kornfilt*):<sup>47</sup>

(88)

a. \**Sen<sub>i</sub> kendin<sub>i</sub> başarı-ya ulaş-mış-sın] san-ıyor-sun.* (G&K 1981, 121:46)  
 you-nom yourself-nom success-dat reach-evid.past-2sg believe-prog-2sg

'You believe yourself to have succeeded.'

b. \**Biz<sub>i</sub> birbirimiz<sub>i</sub> viski-yi iç-ti-k] san-ıyor-uz.* (G&K 1981, 119:36)

we-nom each other-nom whiskey-acc drink-past-1pl believe-prog-2sg

'We believe each other to have drunk the whiskey.'

(89)

a. *Sen<sub>i</sub> kendin-i başarı-ya ulaş-mış] san-ıyor-sun.* (G&K 1981, 121:45)  
 you-nom yourself-acc success-dat reach-evid.past believe-prog-2sg

'You believe yourself to have succeeded.'

b. *Biz<sub>i</sub> birbirimiz-i viski-yi iç-ti] san-ıyor-uz.* (G&K 1981, 119:35)

we-nom each other-acc whiskey-acc drink-past believe-prog-2sg

'We believe each other to have drunk the whiskey.'

George and Kornfilt (1981) suggest that the lack of A-binding in (88), as opposed to its presence in (89), show that (88) exhibits a full clausal structure, while (89) does not.

For the sake of completeness, I provide below the corresponding data from *overt*-FCCs, which demonstrate that we obtain parallel judgments those given in (88) and (89):

<sup>47</sup> Aygen (2002:121) challenges George and Kornfilt's (1981) conjecture by suggesting that the reflexive in (88a) may be interpreted with an emphatic reading. Aygen proposed that when interpreted as such the reflexive is an adjunct to the null (*pro*) subject of the FCC, as shown in (i):

(i) *Sen<sup>i</sup> [pro<sup>i</sup> kendin<sup>i</sup> başarı-ya ulaş-mış-sın] san-ıyor-sun.*  
 you-nom yourself-nom success-dat reach-evid.past-2sg believe-prog-2sg

'You believe that you have succeeded yourself=on your own.'

'\*You believe yourself to have succeeded.'

Aygen's analysis predicts that the emphatic reading of the reflexive must be available even when a matrix adverb (such as *still* 'hala' which is only compatible with imperfective predicates) intervenes between the matrix subject and the embedded *pro* subject and/or the reflexive. This prediction is not borne out, however, as shown in (ii):

(ii) \**Sen<sup>i</sup> hala [pro<sup>i</sup> kendin<sup>i</sup> başarı-ya ulaş-mış-sın] san-ıyor-sun.*  
 you-nom still yourself-nom success-dat reach-evid.past-2sg believe-prog-2sg

A: '\*You believe that you have succeeded yourself=on your own.'

B: '\*You believe yourself to have succeeded.'

As indicated by the translations, neither the emphatic nor the non-emphatic readings of the reflexive are available. I contend that the grammaticality of (i) is not relevant to George and Kornfilt's (1981) discussion and the availability of the emphatic reading in (i) simply demands a different structural analysis, where the adjunct reflexive with the emphatic reading is in the matrix clause and adjoined to the matrix subject. This explains why the reading in (A) is out in (ii) since the matrix adverb cannot break their adjacency.



(90)

- a. \*Biz<sup>i</sup> kendimiz-ø<sup>i</sup> başarı-ya ulaş-tık diye düşün-üyor-uz.  
 we-nom ourselves-nom success-dat reach-past-1pl C consider-pres-1pl  
 ‘We consider ourselves to have succeeded.’
- b. \*Biz<sup>i</sup> birbirimiz-ø<sup>i</sup> viski-yi iç-ti-k diye] bil-iyor-uz.  
 we-nom each other-nom whiskey-acc drink-past-1pl C know-pres-2sg  
 ‘We think of each other to have drunk the whiskey.’

(91)

- a. Biz<sup>i</sup> kendimiz-*t*<sup>i</sup> başarı-ya ulaş-tı diye ] düşün-üyor-uz.  
 we-nom ourselves-acc success-dat reach-past C consider-pres-1pl  
 ‘We consider ourselves to have succeeded.’
- b. Biz<sup>i</sup> birbirimiz-*t*<sup>i</sup> viski-yi iç-ti diye ] bil-iyor-uz.  
 we-nom each other-acc whiskey-acc drink-past C know-pres-2sg  
 ‘We think of each other to have drunk the whiskey.’

I have argued in this paper on the basis of other evidence that *null*-FCCs project a full clausal structure like *overt*-FCCs, and they cannot be treated as reduced in structure as claimed under George and Kornfilt’s (1981) S’/CP-deletion analysis and the obligatory raising analysis proposed subsequently. It is worth noting that the obligatory raising analysis of the data above is valid even under the assumption that the relevant clauses are full *CP*s (an assumption I adopted in this paper), since as I noted in Section 1 that raising out of *CP*s is an option that is theoretically available, in reference to work by Bošković (2007), Epstein and Seely (2006), Ferreira (2004), Fujii (2005), McCloskey (2000), Tanaka (2002), Ura (1994). This being the case, the burden is on the non-obligatory-raising analysis defended in the present paper: Can it account for the acceptability of (89) and (91) without resorting to raising to the matrix clause? I will address this question below, but prior to this, I will take note of a piece of data from English for its relevance to my analysis.

Lasnik and Saito (1992,110) show that an anaphoric direct object in English can take a matrix subject as its antecedent when it is fronted/topicalized within the embedded clause while binding of the anaphoric direct object by the matrix subject is not possible as expected under Condition A. Witness the contrast in (92) with the relevant readings:

(92)

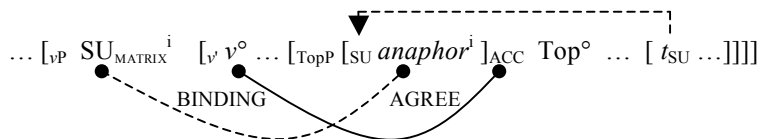
- a. \*John<sub>i</sub> thinks that Mary likes himself<sub>i</sub>.  
 b. John<sub>i</sub> thinks that *himself*<sub>i</sub>, Mary likes *t*<sub>i</sub>.

At first glance, it appears somewhat surprising that the anaphoric direct object can get the matrix subject as its antecedent when it is topicalized. (92) presents an interesting example for the effect that movement to the periphery extends binding domains (see Lasnik et al. 2005 for discussion).

Turning to the data in (89) and (91) with those from (92) in mind, I would like to propose that A-binding in (89) and (91) can be accounted for without assuming obligatory raising to the matrix clause.

For concreteness, let us adopt a Phase-based understanding of Condition A (à la Chomsky 2008), where the locality of anaphors is subject to the PIC (as defined in Section 5). Given this, the anaphoric Accusative subjects in (89) and (91) in Spec-TopP can be accessed by the matrix subject in Spec-*vP* or in a higher position such as Spec-TP. The idea is schematically illustrated in (93):

(93)



The anaphoric subject is moved to Spec-TopP, where it is accessible to matrix  $v^\circ$  for licensing of Accusative Case and to the matrix subject for A-binding. If we take the analogy of (89/91) to the English example in (92b), it is obvious that there is no need for the anaphoric Accusative subject to undergo movement to the matrix clause to take the matrix subject as referent. The present analysis, which highlights the movement of Accusative subjects to the edge of their clause, provides us with sufficient tools to account for the data under discussion.

## 7 Summary and Conclusions

In this paper I have offered arguments in support of a claim that has gained popularity in recent years in works by Bobaljik and Wurmbrand (2005), Bruening (2001), Chomsky (2000, 2001), and Polinsky and Potsdam (2001), among others; that is, a category  $K$  of a lower locality domain  $L$  may be accessible to a probe/licensor  $P$  in the next higher locality domain  $L'$  if  $K$  holds the Specifier position of the highest projection in  $L$ . The gist of this claim is that  $K$  in  $L$  must be *close enough* to establish an *Agree* (à la Chomsky 2001) relation with  $P$  in  $L'$ , and otherwise *Agree* cannot be established  $P$  in  $L'$  (cf. Bobaljik's 2008 *close enough effect*).

The nature of the licensing relation between  $P$  in  $L'$  and  $K$  in  $L$  investigated in this paper has been one of Case Licensing, specifically the licensing of Accusative Case on the subjects of *Finite Complement Clauses* (FCCs) in Turkish. The examination of facts from Turkish has revealed that the *close enough effect* on long distance  $\varphi$ -agreement holds for Case licensing.

The movement operation that brings a subject NP to the edge of its FCC to be close enough to get its Accusative Case licensed by the matrix Probe  $v^\circ$  is Topicalization in Turkish, hence an A'-operation.

A significant piece of support for the *close enough effect* on cross clausal Case licensing comes from sentences that involve embedded *wh*-questions, in that *wh*-phrases force the projection of a higher functional head *WhP* on top of the position that a Topicalized subject NP holds. The projection of *WhP* is what in principle erases the effects of Topicalization, since a Topicalized subject NP no longer holds the edge position in such clauses. In other words, a Topicalized subject NP is not *close enough* to the matrix licensor in the presence of *WhP*.

Another issue I addressed in this paper is the optional availability of morphological agreement on the embedded verb when the subject of a complement CP bears Accusative Case. I proposed an analysis of these facts assuming that  $T$  comes in two varieties, as *Agreeing-T* and *Non-Agreeing-T*, adapting a proposal put forth in Chomsky (2001), and that *Case Rewriting* (in PF/Morphological Structure) is an option (at least in Turkish, presumably as a parametric option).

In closing the paper, I wish to mention an important conclusion of the investigation undertaken in this paper. The observation that Case licensing is possible on a subject NP when it is *close enough* to its licensor has the implication that Case licensing does not require a Spec-Head configuration and *Agree* is sufficient as proposed in Chomsky (2000 et seq.; but see Bošković 2007, Epstein & Seely 2005, Koopman 2006 for opposing views). I will have to leave a comparison of diverging views on this matter to future research.

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To be added...

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