

Sluicing in Turkish

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1 Introduction

Contrary to what has generally been argued, sluicing is possible in *wh*-in-situ languages such as Turkish. In fact, sluicing structures in Turkish are derived in the same way as they are derived in English. However, in addition to *wh*-features, focus features are also operative in sluicing. This view contrasts with proposals by Kizu (1998) and Kuwabara (1997) that sluicing structures in *wh*-in-situ languages are really cleft constructions.

In this study I will also suggest an explanation for a Case mismatch in Turkish sluicing structures. The (*wh*-/non-*wh*-)subject of an embedded clause bears Genitive Case (unless non-specific). However, it bears only Nominative Case if sluiced. With Hiraiwa (2001), I will assume that the phi-features of the C-T-v-V amalgamate formed by AGREE checks Genitive Case of SUB *wh*-phrase. I will also assume a Multiple Spell-Out model where the domain of each phase is sent to LF and PF as well as marked for elision. Then, in embedded CP, the TP is marked for elision before T-v-V amalgamate agrees with C^o. Before elision of TP, the SUB *wh*-phrase checks its Nominative Case. Since the C-T-v-V amalgamate is never formed, the SUB *wh*-phrase cannot bear Genitive Case.

Turkish is an agglutinative *wh*-in-situ SOV language. As shown in (1), the unmarked SOV word order of Turkish is preserved in questions. The *wh*-phrase *kimle* is in its Case-checking position and has not overtly moved to a position preceding the subject-NP *Ahmet* in contrast to the English gloss where the *wh*-phrase *who* does precede the subject¹.

- (1) Ahmet-Ø kim-le konu_-uyor-Ø?
Ahmet-NOM who-COMM talking-3S
'Who is Ahmet talking to?'

The framework of this work is the Minimalist program of Chomsky (1995, 2000).

¹ A *wh*-phrase can be scrambled to pre-subject position, but this is orthogonal to the account at hand.

i. Kimle_i Hasan _{t_i} konu_uyor?
'Who is Hasan talking with?'

Briefly, this theoretical framework assumes two interface levels: LF and PF. The basic operation in Narrow Syntax is **merge**. I assume the Multiple Spell-Out model (Uriagereka (1999), Chomsky (1999, 2000)) whereby what is sent to interface levels, LF and PF, is not the whole structure, but rather certain derivational stages of the ultimate structure.

2 Sluicing

It has been argued that sluicing is not possible in *wh*-in-situ languages because sluicing is defined as IP/TP deletion leaving in the structure only the CP where the moved *wh*-element is pronounced (Kizu (1998), Kuwabara (1997)). Nevertheless, sluicing structures do exist in Turkish.

- (2) Hasan-Ø biri-yle konu_-uyor, ama **kim-le** bil-mi-yor-um.
 Hasan-NOM one-COMM talk-PROG-3S but *pro* who-COMM know-NEG-PRES-1S
 ‘Hasan is talking to someone; but I do not know who with.’

The non-sluiced version of (2) appears in (3).

- (3) Hasan-Ø biri-yle konu_-uyor, ...
 H.-NOM one-COMM talk-PROG-3S
 ... ama [**Hasan-Ø kim-le konu_-uyor**] bil-mi-yor-um.
 ... but *pro* Hasan-NOM who-COMM talk-PROG-3S know-NEG-PRES-1S
 ‘Hasan is talking to someone; but I do not know who Hasan is talking to.’

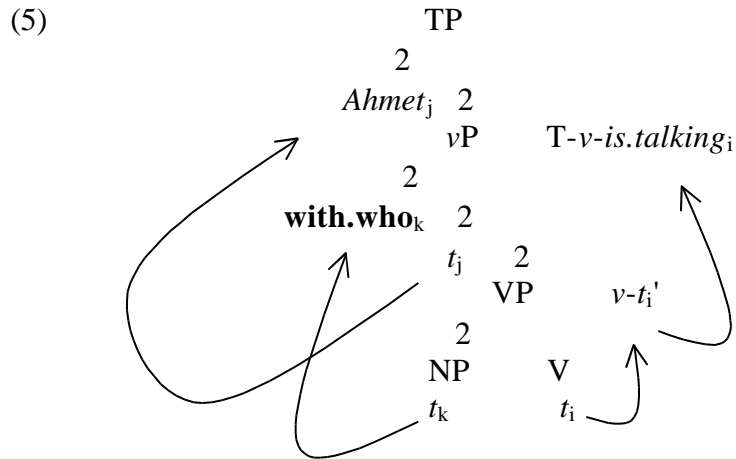
The elided phrases are struck through in (4):

- (4) . . . ~~Hasan~~ **kimle** ~~konu_-uyor~~ . . .

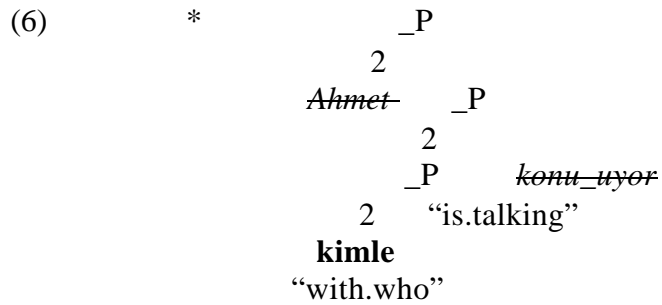
The problem is that no theory of ellipsis assumes a model where an intermediary position is pronounced while phrases above and below are elided. For example, in (4), if we assume the subject-NP Hasan to be in [Spec, TP], TP deletion would result in deletion of the *wh*-element *kimle* along with the VP.

As demonstrated in the derivation in (5), the subject-NP *Ahmet* raises to [Spec, TP], the verbal amalgam *konu_uyor* ‘is.talking’ moves to T⁰², and the object *wh*-phrase *kimle* ‘with.who’ raises to [Spec, vP] where it checks Case features.

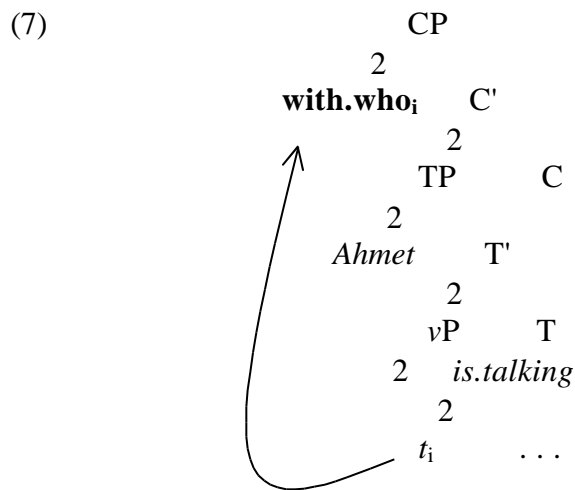
² In Ince (in progress), I argue that Turkish is an overt-V-raising language.



In (5), both the lexical verb and the subject-NP are in positions higher than the *wh*-phrase *kimle*. They cannot be elided when *kimle* is in a lower position because *kimle* would be deleted as well, as the unacceptable structure in (6) demonstrates.



In (2), we must assume that *kimle* raises to a position higher than TP, as in (7).



First, let's be clear about my theoretical assumptions. I adopt a copy theory of movement (Chomsky and Lasnik (1993)) which occurs in narrow syntax, i.e. there is no LF movement. In this theory a lower element is copied and remerged into a higher position in the structure. Both these copies remain in the structure but only one is marked for pronunciation. When the lower copy is pronounced, it is referred to as covert movement, and when the highest copy is pronounced, it is called overt movement. Whether a movement is overt or covert depends on feature strength. If the attracting feature is strong, the head of the chain formed by copy and remerge is pronounced. On the other hand, if the attracting feature is weak, the lower copy is pronounced.

Wh-features are uninterpretable. Phrases with *wh*-features must move to [Spec, CP] to have their features checked or deleted. In Turkish, *wh*-features are weak. There is a chain formed by movement (copy and merge) between the *wh*-element in its Case position and its copy in [Spec, CP]. Because *wh*-features are weak, the copy in [Spec, CP] is marked for elision and the lower copy of the *wh*-chain is pronounced.

In spite of the fact that *wh*-expressions do not raise in Turkish, there is evidence for movement of the *wh*-phrase to [Spec, CP] in Turkish sluicing structures. The evidence comes from the Case Matching requirement in (8). The sluiced phrase cannot have any case other than what its correlate has. Under a base-generation model where the sluiced *wh*-phrase is merged in [Spec, CP], one cannot account for the case which would have had to have been assigned in a case marking position or merged into the structure in a theta position with lexical case. Chomsky & Lasnik (1993) assume LF Case-checking for English. However, this is a weak argument in the case of overt-case-marking languages where case must be visible for PF as well.

(8) *Case-Matching*

The sluiced *wh*-phrase must bear the case that its correlate bears.

(from Merchant 2000:48)

Let us look at some examples of Case matching in Turkish. For example, the indirect object of the verb *ver* 'to give' bears Dative Case, (9).

(9) Hasan-Ø Ahmet-e para ver-di-Ø.

Hasan-NOM Ahmet-DAT money gave-3S

'Hasan gave money to Ahmet.'

A sluiced *wh*-phrase that is the indirect object of *ver* must also bear Dative Case (10).

(10) Hasan biri-ne para ver-mi_ ; ama kim-e/*- Ø bil-mi-yor-um.


Hasan-NOM one-DAT money gave-3S but who-DAT know-NEG-pres-1S

'Hasan gave money to someone; but I don't know who (to).'

The same holds for sluiced *wh*-phrases bearing other Cases which must match the Case of their non-sluiced counterparts. In (11), the antecedent indefinite bears Ablative case, as does the sluiced *wh*-phrase. In (12), the antecedent indefinite in subject position has Nominative case, as must its sluiced *wh*-phrase counterpart.

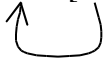
- (11) a. A: Hasan birin-den borç al-mı_.
 H.-NOM one-ABL debt took-3S
 ‘Hasan borrowed money from someone.’

B: Kim-den?
 who-ABL
 ‘Who from?’

- b. Kimden [~~Hasan kimden borç almı~~]?


- (12) a. A: Dün sen-i biri-Ø ara-dı-Ø.
 yesterday you-ACC one-NOM called-3S
 ‘Someone called you yesterday.’

B: Kim-Ø acaba?
 who-NOM [wonderment]
 ‘I wonder who.’

- b. Kim [~~kim dün seni aradı~~] ?


The same Case matching is observed in multiple-sluicing examples as well. In (13), the indirect object *wh*-phrase *kime* has Dative Case, as it would have in its non-sluiced counterpart, and the non-specific direct object *wh*-phrase *ne* is in its bare form, as it would appear as the indefinite direct object.³

³ Non-specific direct objects in Turkish are bare, (ia), in contrast to specific direct objects which must bear an overt Accusative Case morpheme (ib).

- (i) a. Hasan-Ø elma-Ø yi-yor-Ø.
 Hasan-NOM apple-ACC eating- 3S
 ‘Hasan is eating an apple/apples.’

- b. Hasan-Ø elma-yı yi-yor-Ø.
 Hasan-NOM apple-ACC+DEF eating-3S
 ‘Hasan is eating the apple.’

- (13) Ahmet-Ø biri-ne bir_ey ver-mi_; ama **kim-e** **ne** bil-mi-yor-um.
 A.-NOM one-DAT one-thing gave-3S; but who-DAT what know-NEG-pres-1S
 ‘Ahmet gave someone something; but I don’t know what to who.’

In sluicing, the *wh*-phrase must be in the CP domain, and we have seen evidence that in Turkish as well, the sluiced phrase is in [Spec, CP]. But, for Turkish, it cannot be the *wh*-features that result in overt *wh*-movement. I propose that in sluicing structures, the *wh*-expression raises overtly to the CP-domain to check Focus-features.

It is generally assumed that the sluiced *wh*-phrase is focused. It must bear focus intonation. The unsluiced version of (14a) is de-accented with flat intonation denoted by the shadow font in (14b). This intonation is not acceptable for a sluiced *wh*-phrase.

- (14) a. John bought something, but I don’t remember **what**.
 b. John bought something, but I don’t remember *what he bought*.
 c. *John bought something, but I don’t remember *what*.

In Turkish as well, the sluiced *wh*-phrase bears the marked pronunciation of focus stress: the *wh*-phrase *kimle* ‘with.who’ in (2) must be stressed as in (15).

- (15) Hasan biri-yle konu_uyor, ama **kim-le(!)** bilmiyorum.
 H.-NOM one.with is.talking but **who.with** I.don’t.know

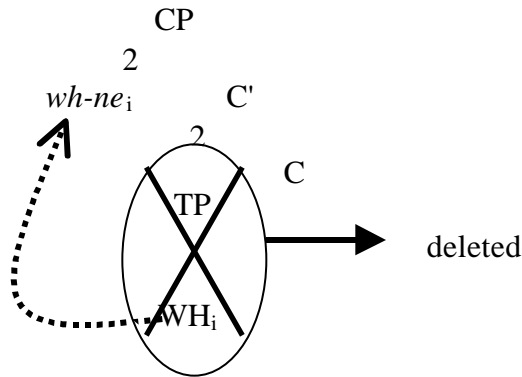
Furthermore, whenever there are focus features, the focused phrase is pronounced in the position where it checks those features. In other words, there is no covert focus-feature checking in any language. Thus, focus features must be strong, triggering overt movement, or pronunciation of the head of the focus chain.

In Turkish, with no overt *wh*-movement, it is Focus features that motivate the pronunciation of the *wh*-phrase in the CP-domain. In sluicing, the *wh*-phrase *ne* ‘what’ copies and merges to [Spec, CP] and checks both *wh*- and focus features as in (16).

- (16)
- | | |
|--|-------------------------------|
| | CP |
| | 2 |
| | <i>ne (what)</i> C' |
| | <i>wh</i> features |
| | Focus features |

TP is then deleted and the higher copy of the *wh*/Focus chain is pronounced (17). But it is focus features, rather than *wh*-features, that induce the pronunciation of the higher copy of the chain.

(17)



Another possible question possible at this point is why in non-sluiting cases a *wh*-element does not raise to CP domain overtly. In any case, it is a very general observation that generally focussed elements are pronounced in ellipsis structures. I suggest that *wh*-phrases lack +FOCUS features in non-sluiting cases.

3 Sluiting ≠ Clefting in Turkish

So far, I have argued that in sluiting the *wh*-phrase is in [Spec, CP] via movement. Let's look at arguments that the *wh*-phrase could not have been base-generated in the CP-domain. Kizu (1998) makes just that argument for Japanese and Turkish, suggesting that sluiting structures in *wh*-in-situ languages are cleft constructions.

Kizu argues that the occurrence of a Copula marker attached to a *wh*-phrase is possible in both sluiting and cleft structures, as in (18), and concludes the following:

“... , whether it is obligatory or not, it seems that the existence of copula is observed widely in sluiting constructions of wh-in-situ languages. This fact supports the idea that sluiting involves a cleft construction because the latter is a certain type of copula sentence.”

- (18) a. Mehmet birsey söyle-di ama, ne-y-**di** hatirla -mi -yor -um.
 one thing told but what-bePAST remember-NEG-PROG-1st.sg.
 ‘Mehmet said something, but I don't remember what (it) was.’

- b. Mehmet'in kir -dig -i bir vazo-y-**du**.
 GEN break-NM-POSS one vase-bePAST
 ‘What Mehmet broke was a vase.’ (Kizu 1998:236 (14))

This argument is problematic because in Turkish cleft constructions, the clefted phrase can only bear Nominative case. In the double-object example in (19a) the subject *Hasan* has Nominative case, the direct object *kitab* ‘book’ has Accusative, and

the indirect object *Suzan* has Dative case. However, in all the clefted versions of (19a), the clefted DP can only bear Nominative case. A clefted phrase bearing the case it would have in non-cleft cases is ungrammatical.

- (19) a. Hasan-Ø Suzan-a kitab-1 ver-di-Ø.
Hasan-NOM Suzan-DAT book-ACC gave-3S
'Hasan gave Suzan book.'
- b. [Suzan-a kitab-1 ver-en] Hasan-Ø-d1.
Suzan-DAT book-ACC give-COMP Hasan-NOM-PST
'It was Hasan who gave book to Suzan.'
- c. [Hasan-in Suzan-a ver-di_-i] kitap-Ø/*1-t1.
Hasan-GEN Suzan-DAT give-COMP-POSS3S book-NOM/*ACC-PST
'It was book that Hasan gave to Suzan.'
- d. [Hasan-in kitab-1 ver-di_-i] Suzan-Ø/*-a-d1.⁴
Hasan-GEN book-ACC give-COMP-POSS3S Suzan-NOM/*DAT-PST
'It was Suzan who Hasan gave book (to).'

Compare now with the following sluicing examples. In (20a), the sluiced *wh*-phrase has Dative case, in (20b) it has Ablative case, and in (20c) it has Accusative case. In every case, the sluiced *wh*-phrase must bear the same Case as its correlate.

- (20) a. Ahmet-Ø biri-ne kitap ver-mi_, ama kim-e/*-Ø bil-mi-yorum.
 Ahmet-NOM one-DAT book gave-3S but **who**-DAT know-NEG-PRES-1S
 ‘Ahmet gave book to someone, but I do not know to who.’
 b. Ahmet-Ø biri-nden borç al-mı_, ama kim-den/*-Ø bil-mi-yor-um.
 Ahmet-NOM one-ABL debt took-3S but **who**-ABL know-NEG-PRES-1S
 ‘Ahmet borrowed book from someone, but I don’t know who from.’

⁴ Although the preceding clause of the clefted phrase is on the surface identical to a relative clause (RC), the two structures are distinct. The clefted phrase is not the external head of the preceding clause. There must be a pause between the clause and the DP as in (ia). This contrasts with RCs where there is no pause between the RC and its head, (ib).

- (i) a. (*Bu kız) dün gör-dü-üm # gelin-di. (# signifies pause) Cleft-construction
 (*this girl) yesterday see-COMP-1s # bride-PST
 'It was a bride I saw yesterday'
- b. Bu kız dün gör-dü-üm gelin-di. Relative Clause
 this girl yesterday see-COMP-1s bride-PST
 'This girl is the bride that I saw yesterday'

- c. Ahmet-Ø biri-ni döv-mü_, ama **kim-i**/*-Ø bil-mi-yor-um.
 Ahmet-NOM one-ACC beat-3S but **who-ACC** know-NEG-PRES-1S
 ‘Ahmet beat someone, but I don’t know who.’

This difference in Case is evidence that sluicing in Turkish is different from cleft constructions.

Furthermore, the fact that there is a copula does not necessarily mean that the structure must be a cleft construction. Both the past tense morpheme *-DI* and the evidential marker *-MI* can attach to sluiced *wh*-phrases with non-Nominative Case as well as to cleft heads. The fact that a tense/modality marker (and Copula) attaches to the *wh*-phrase in (21) does not necessarily mean that this example is a cleft construction. On the contrary, Case matching is observed as in sluicing in contrast to cleft constructions.

- (21) Ahmet biri-ne kitap ver-mi_-ti, ama **kim-e-ydi** hatırla-mı-yor-um.
 A.-NOM one-DAT book give-EVID-PST but who-DAT-PST remember-NEG-PRES-1S
 ‘Ahmet gave a book to someone, but I don’t remember who (it was)’

Another piece of evidence in support of a sluicing analysis and against a clefting analysis, comes from postposition pied-piping.

- (22) *Postposition Pied-Piping*
 A postposition must be pied-piped with a *wh*-item in sluicing examples.

The following examples show that postposition pied-piping is obligatory in sluicing structures in Turkish.

- (23) Hasan-Ø bir ip al-mı_, ama **kim-Ø için** bil-mi-yor-um.
 Hasan-NOM a rope bought-3S but who-NOM for know-NEG-PRES-1S
 ‘Hasan bought a rope, but I don’t know for who.’
- (24) Tartı_-ıyor-lar-dı, ama **ne-Ø hakk-ı-nda** bil-mi-yor-um.
 discussing-3P-PST but what-NOM about-POSS3S-LOC know-NEG-PRES-1S
 ‘They were discussing, but I don’t know about what.’
- (25) Bu oyun-Ø 16 yüzyıl-da ya_a-mı_ biri-Ø taraf-ı-ndan
 this play-NOM 16 century-LOC lived-EVID one-NOM by-ABL
 yaz-ıl-mı_ ama **kim-Ø tarafı-ndan** bil-mi-yor-uz.
 write-PASS-3S but who-NOM by-ABL know-NEG-PRES-1P
 ‘This play was written by someone who lived in the 16th century, but we don’t know by whom.’

- (26) Ahmet-Ø Rektörlük-te ol-acak, ama
 Ahmet-NOM Chancellor's-building-LOC be-FUT-3S but
ne zaman-a kadar bil-mi-yor-um.
 what-time-DAT until know-NEG-PRES-1S
 'Ahmet will be in the Chancellor's Building, but I don't know until when.'

Notice however that you cannot cleft *wh*-phrases with pied-piped postpositions (the clefted phrases are in bold letters).

- (27) *Yaz-ıl-an oyun-Ø **kim-Ø tarafından.**
 written-REL play-NOM who-NOM by-ABL
 'It was by whom that the play was written'
- (28) *Tartı-tık-ları **ne-Ø hakk-ı-nda-y-dı.**
 discuss-COMP-POSS3P what-NOM about-POSS3S-LOC-COP-PAST
 'It was about what that they discussed'

The same contrast between sluicing and cleft structures holds in Greek as well.

- (29) I astinomia anekrine enan apo tous Kiprious prota, ala
the police interrogated one.ACC from the Cypriots first but
 dhen ksero
not I.know
- a. { *pjos / pjon }.
which.NOM which.ACC
- b. { pjos itan /*pjon itan }.
which.NOM it.was which.ACC it.was
 'The police interrogated one of the Cypriots first, but I don't know
 { which/which it was }.' (Merchant 2001: 51 [his (51)])

Further support for the sluicing analysis comes from the fact that (*wh*-)adjuncts cannot be clefted in Turkish (30-31), whereas they can be sluiced (32-33):

- (30) *Ali-nin git-ti-i dün / ne zaman
 Ali-GEN go-COMP-POSS3S yesterday what time
 'It's yesterday that Ali went/When is that Ali went?'
- (31) *Ali-nin git-ti-i Ankara-Ø
 Ali-GEN go-COMP-POSS3S Ankara-NOM
 'It's Ankara that Ali went.'

- (32) Ali-Ø Ankara-ya git-ti-Ø, ama ne zaman bil-mi-yor-um.
 Ali-NOM Ankara-DAT go-PST-3S but what time know-NEG-PRES-1S
 ‘Ali went to Ankara, but I don’t know when.’
- (33) Ali-Ø bir yer-e git-ti-Ø, ama nere-ye bil-mi-yor-um.
 A-NOM a place-DAT go-PST-3S but where-DAT know-NEG-PRES-1S
 ‘Ali went somewhere, but I don’t know where.’

Turkish cleft constructions can be followed by the existential copula *ol-* (‘it is/was’), but sluiced adjunct *wh*-phrases cannot be:

- (34) Ahmet-in borç-Ø ver-di_-i-nin Hasan-Ø
 Ahmet-GEN debt-NOM give-COMP-POSS3S- GEN Hasan-NOM
 ol-du_-u-nu bil-iyor-um.
 be-COMP-POSS3S-ACC know-PRES-1S
 ‘I know that it is Hasan who Ahmet lent money (to).’
- (35) Hasan-a borç ver-en-in Ahmet-Ø ol-du_-u-nu bil-iyor-um.
 H.-DAT debt give-COMP-GEN A.-NOM be-COMP-POSS3S-ACC know-PRES-1S
 ‘I know that it is Ahmet who lent money to Hasan.’
- (36) Araba-yı onar-dı, ama nasıl (*ol-du_-u-nu) bil-mi-yor-um.
 car-ACC fix-PST-3S but how be-COMP-POSS3S-ACC know-NEG-PRES-1S
 ‘He fixed the car, but I don’t know how (*it was).’
- (37) Araba-yı onar-dı, ama niye (*ol-du_-u-nu) bil-mi-yor-um.
 car-ACC fix-PST-3S but why be-COMP-POSS3S-ACC know-NEG-PRES-1S
 ‘He fixed the car, but I don’t know why (*it was).’
- (38) Araba-yı onar-dı, ama ne zaman (*ol-du_-u-nu) bil-mi-yor-um.
 car-ACC fix-PST-3S but what time be-COMP-POSS3S-ACC know-NEG-PRES-1S
 ‘He fixed the car, but I don’t know when (*it was).’
- (39) Mücevherler-i sakla-dı, ama nereye (*ol-du_-u-nu) bil-mi-yor-um.
 jewels-ACC hid-PST-3S but where be-COMP-POSS3S-ACC know-NEG-PRES-1S
 ‘He hid the jewels, but I don’t know where (*it is).’

Lastly, as shown in (40) and (41), multiple sluicing is grammatical in Turkish, whereas multiple clefting is not.

- (40) Ahmet birinden bir_ey almı_; ama **kim-den ne** bil-mi-yorum.
 A.-NOM one-ABL thing borrowed-3S but who-ABL what know-NEG-PRES-1S
 ‘Ahmet borrowed something from someone; but I do not know **what from whom.**’

- (41) *Ahmet-in t_i t_j al-dı_1 Hasan(dan)_i kitap_j.
 Ahmet-GEN borrow-REL Hasan-(ABL) book-NOM.
 ‘It’s a book from Hasan that Ahmet borrowed.’

In conclusion, sluicing and cleft-structures in Turkish have different properties. In sluicing structures, the sluiced *wh*-phrase appears in the case which it checks against the functional head in the elided clause. Furthermore, not only argumental- but also adjunct-*wh*-phrases can be sluiced in Turkish. Postposition pied-piping is obligatory in Turkish sluicing structures. And, multiple sluicing is permitted.

In cleft structures, on the other hand, the clefted phrase appears only in Nominative Case and can only be an argument. Neither postposition pied-piping nor multiple clefting is allowed in Turkish cleft structures.

Turkish sluicing structures cannot be reduced to cleft structures.

4 A Case Mismatch

In Turkish, embedded clauses are nominalized, and display nominal/possessive agreement. The subject of the embedded clause has Genitive Case, and the verb has possessive agreement with the Genitive Case-marked subject. The entire embedded clause is Case-marked by the matrix verb as in (42).

- (42) Ahmet [**kim-in** Ankara-ya git-ti_-i]-ni söyle-di?
 A.-NOM who-GEN Ankara-DAT go-COMP-poss3s-ACC say-Past-3s
 ‘Who₁ did Ahmet say t_1 went to Ankara?’

What’s interesting is that when we sluice the embedded clause, the subject *wh*-phrase must bear Nominative Case in contrast to its non-sluiced counterpart which must be Genitive (43).

- (43) Ahmet [**biri-nin** Ankara-ya git-ti_-i]-ni söyle-di;
 A.-NOM one-GEN Ankara-DAT go-COMP-poss3s-ACC say-Past-3s
 ama **kim** bil-mi-yor-um.
 but **who-NOM** know-NEG-PRES-1S
 ‘Ahmet said someone went to Ankara, but I don’t know **who.**’

Genitive Case on the sluiced subject *wh*-phrase is unacceptable (44).

- (44) * . . . ama **kim-in** bil-mi-yor-um.
 but **who-GEN** know-NEG-PRES-1S

One may propose, since the sluiced embedded subject in (43) cannot have Genitive case and must have Nominative case, that this is a cleft structure. First, it would be odd to have a rule that bans sluicing of only the subject of an embedded complement clause whereas sluicing of all other arguments and adjuncts are permitted.

Secondly, (45) is an example of multiple sluicing of embedded arguments with the subject still in Nominative Case. We have already seen that multiple clefting is not permitted in Turkish. Then the structure is sluicing structure not cleft structure.

- (45) Ahmet birinin biryer-e git-ti_-i-ni
 Ahmet-NOM one-GEN one.place-DAT go-COMP-POSS3S-ACC
 söyledi, ama **kim nereye** hatırla-mı-yorum.
 say-PST-3S but who-NOM where-DAT remember-NEG-PROG-1S
 ‘Ahmet said that someone went somewhere, but I don’t remember who where.’

As a possible solution, one might suggest that a *wh*-phrase sluiced out of an embedded clause can have only Default Case, Nominative presumably being the Default Case in Turkish. However, if that were the case, some other other sluiced *wh*-phrase, whether argument or adjunct, would have to bear Default Case as well. Examples (46) and (47) show that this idea cannot be correct.

- (46) Ahmet [Hasan-in bir yer-e git-ti_-i-ni] söyle-di.
 A.-NOM H.-GEN one place-DAT go-COMP-poss3s-ACC say-Past-3s
 Nere-*(ye) bil-mi-yor-um.
 where-DAT know-NEG-PRES-1S
 ‘Ahmet told me that Hasan went somewhere. I do not know where.’
- (47) Fatma [biri-nin bir yer-e git-ti_-i-ni] duy-mu_.
 F.-NOM one-GEN one place-DAT go-COMP-poss3s-ACC hear-Evid-3s
 Acaba **kim nere-ye.**
 [wonderment] who-NOM where-DAT
 ‘Fatma heard that someone went somewhere. I wonder who where.’

It is apparent that the Case mismatch in (43) is unique to sluiced *wh*-phrases in subject position of embedded complement clauses.

In the next section, I will show that the sluiced *wh*-phrase raises to matrix [Spec, CP]. In Section 4.2. I will suggest an explanation for this Case Mismatch in terms of Hiraiwa’s (2001) “Nominative-Genitive Conversion” model and Multiple Spell-Out.

4.1 The position of the embedded sluiced subject

Let us determine whether a sluiced *wh*-phrase from an embedded complement clause remains in the embedded CP or whether it raises to the matrix [Spec, CP].

Turkish has a Q-like particle *-ki* which attaches to both **yes-no** and ***wh*-interrogative** clauses, (48) and (49).

- (48) a. Ahmet gel-di mi?
A.-NOM come-Past-3s Q-particle
'Did Ahmet come?'
- b. Ahmet gel-di mi **ki**?
A.-NOM come-Past-3s Q-particle ki
'Did Ahmet come, then?'
- (49) a. Ahmet ne ye-di?
A.-NOM what eat-Past-3s
'What did Ahmet eat?'
- b. Ahmet ne ye-di **ki**?
A.-NOM what eat-Past-3s ki
'What did Ahmet eat, then?'

This *ki* cannot occur in non-interrogative environments (50).

- (50) A: Kim gel-di **ki**?
Who-NOM come-Past-3s *ki*
'Who came, then?'
- B: Ali (***ki**).
A-NOM (*ki*)
'Ali then'

It can occur in matrix clauses, but cannot occur in embedded clauses (51).

- (51) a. Hasan-in ne ye-di_-i-ni duy-du-n **ki**?
H.-GEN what eat-COMP-poss3s-ACC hear-Past-2s *ki*
'What did you hear that Hasan ate, then?'
- b. *Hasan-in ne ye-di_-i-ni **ki** duy-du-n?
H.-GEN. what eat-COMP-poss3s-ACC *ki* hear-Past-2s
'What did you hear that Hasan ate, then?'

Note that in sluicing structures, *ki* can occur with the sluiced *wh*-phrase, as in (52).

- (52) A: Sen-i biri ara-dı.
 you-ACC one-NOM call-Past-3s
 ‘Someone called you.’
 B: Kim (ki)?
 who-NOM (ki)
 ‘Who (then)?’

Now, let us see whether it can occur with a *wh*-phrase sluiced out of an embedded complement clause.

In (53), the sluiced *wh*-phrase is the subject of the embedded clause. In (54), the sluiced *wh*-phrase is the indirect object of the embedded clause. Both can occur with *ki*.

- (53) Hasan sen-i biri-nin ara-dı_{-i-nı} söyle-di.
 H-NOM pron2s-ACC one-GEN call-COMP-poss3s-ACC say-Past-3s
 Kim ki?
 who-NOM ki
 ‘Hasan said that someone called you. Who, then?’
 (54) Hasan Ahmet-in birisi-ne kitab ver-di_{-i-ni} söyle-di.
 H.-NOM A.-GEN one-DAT book give-COMP-poss3s-ACC say-Past-3s
 Kim-e ki?
 Who-DAT ki
 ‘Hasan said that Ahmet gave book to someone. Who to, then?’

The non-sluiced versions of (55) and (56) appear as (57) and (58) respectively.

- (55) Hasan sen-i kim-in ara-dı_{-i-nı} söyle-di ki?
 H-NOM pron2s-ACC who-GEN call-COMP-poss3s-ACC say-Past-3s ki
 ‘Who did Hasan say called you, then?’
 (56) Hasan Ahmet-in kim-e kitab ver-di_{-i-ni} söyle-di ki?
 H.-NOM A.-GEN who-DAT book give-COMP-poss3s-ACC say-Past-3s ki
 ‘Who did Hasan say that Ahmet gave book, then?’

In both cases, *ki* is in the matrix CP domain, as expected.

The sluiced *wh*-phrases must raise to matrix [Spec, CP] in (55) and (56) because

- *ki* occurs only in matrix clauses.
- *ki* appears clause-finally, which means it is in the CP domain.

Thus, if the sluiced *wh*-phrase were in an embedded clause, it would mean that you would be deleting the subject and verb and retaining *ki* in the matrix clause and deleting everything except the *wh*-element in the embedded clause. There is no theory that can account for this kind of discontinuous ellipsis.

We must therefore assume that a sluiced *wh*-phrase raises to the matrix [Spec, CP] out of an embedded complement clause. The position of the sluiced *wh*-phrase and the elided part in (54) is as in (57).

- (57) [_{CP} Kim-e_i [_C [_{TP} ~~Hasan~~ ~~Ahmet'in t_i kitap~~ ~~verdi~~ ~~ini~~ ~~söyledi~~] ki]]?
 who-DAT H.-NOM A.-GEN book gave-ACC say-Past-3s ki

4.2 A solution to the Genitive Case mismatch

An explanation for the Case Mismatch in the sluiced subject of an embedded clause comes from adopting a modified version of Hiraiwa's (2001) Nominative-Genitive Conversion model and assuming a Multiple Spell-out theory.

First, Hiraiwa argues that the Nominative-Genitive conversion, as in (58), observed in Relative Clauses and Noun Complement Clauses in Japanese is a result of a C-T-*v*-V head amalgamate formed via AGREE. Hiraiwa suggests that the phi-features of the C-T-*v*-V amalgamate check Genitive Case of the subject DP.

- (58) a. Kinoo John **ga** katta hon
 yesterday John-NOM buy-PST-ADN book
 'the book which John bought yesterday'
- b. Kinoo John **no** katta hon
 yesterday John-GEN buy-PST-ADN book
 'the book which John bought yesterday' (Hiraiwa 2001:??)
- c. John wa [_{CP} kinoo Mary **ga** kita koto/no]
 John-TOP yesterday Mary-NOM come-PST-ADN FN/C
 wo sira-nakatta
 -ACC- know-NOT-PST
 'John didn't know that Mary came yesterday.'
- d. John wa [_{CP} kinoo Mary **no** kita koto/no]
 John-TOP yesterday Mary-GEN come-PST-ADN FN/C
 wo sira-nakatta
 -ACC- know-NOT-PST
 'John didn't know that Mary came yesterday.' (Hiraiwa 2001:??)

Second, Uriagereka (1999) and Chomsky (1999, 2000) propose a Multiple Spell-Out model whereby a derived structure is sent to LF and PF not once (Single Output Syntax), but rather in subclausal units which have syntactic uniformity. These units are called *phases* and are assumed to be ν P and CP (and maybe, DP and some PP's) in the derivation. In this model, the complement of each phase is called a **domain**, and the head and Spec(s) are called an **edge**. The domain of a phase is sent to LF and PF once the phase is derived. The material in the edge is sent to LF and PF in the next phase.

As for **sluicing** in a Multiple Spell-Out theory, the TP ellipsis is not an operation applied to one single structure. You first derive the ν P phase, and its domain, VP, is sent to LF and PF. Then, you derive CP phase, and elide its domain, TP. However, if you don't mark VP for elision, the material within it must be pronounced, even if you elide TP.

Under the Multiple Spell-Out theory, you must mark each lower domain for elision as well as the TP domain of the matrix CP phase in sluicing structures, as in (59). Otherwise, you would be able to pronounce low level adverbs which adjoin to VP (light manner adverbs) or ν P.

- (59) a. Step 1: [ν P ν^0 { ν P...}]
 b. Step 2: [CP C^0 {TP...}]

We now have an answer as to how it is that the sluiced *wh*-subject lacks Genitive Case.

With Hiraiwa (2001), I will assume that the phi-features of C-T- ν -V amalgamate checks Genitive Case of the subject in embedded complement clauses.

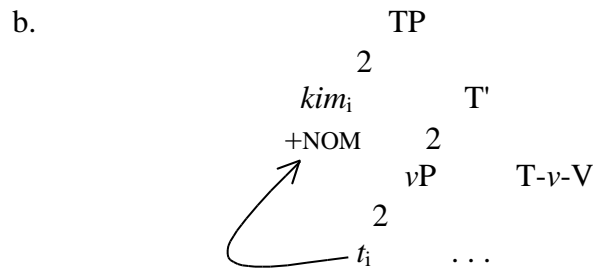
In sluicing structures, you derive the ν P phase of the embedded clause. Turkish being an overt V-raising language, the V head-raises to ν , and you mark VP for elision and send it LF (and PF). In the CP phase, you raise the subject *wh*-phrase to [Spec, TP]. The ν -V amalgamate head-raises to T^0 . At this stage the phi-features of T- ν -V amalgamate check Nominative Case of the subject *wh*-phrase. I further assume that it is the T- ν -V amalgamate that needs to agree with C^0 , not vice versa. Once the phi-features of the T- ν -V amalgamate check the case of the subject, the *wh*-subject raises to [Spec, CP]. TP is marked for elision and sent to LF (and PF).

There are two important points to keep in mind: First, since it is the T- ν -V amalgamate that must agree with C^0 , the elision of this amalgamate within TP does not cause the derivation to crash. Because C^0 does not have uninterpretable features.

Second, the *wh*-subject raises to [Spec,CP]. If it were frozen in [Spec, TP], it would be elided within TP, and would not be pronounced in the ultimate derivation. Since it is the C-T- ν -V amalgamate that checks Genitive Case on the subject, and since the T- ν -V amalgamate is elided before it agrees with C^0 , in sluicing structures there can be no Genitive Case on the subject.

So, in (53) repeated as (60a) below, the phi-features of the T-v-V amalgamate check Nominative case of *wh*-phrase **kim** ‘who’ in [Spec, TP] in the embedded clause as shown in the tree in (60b). The *wh*-phrase then raises up to the matrix [Spec, CP], having checked only Nominative Case.

- (60) a. Hasan sen-i biri-nin ara-dı_-ı-nı söyle-di.
 H-NOM pron2s-ACC one-GEN call-COMP-poss3s-ACC say-Past-3s
 Kim ki?
 who-NOM ki
 ‘Hasan said that someone called you. Who, then?’



This is different from scrambling. In Turkish a *wh*-phrase can scramble to CP domain. In contrast to sluicing cases, the subject of an embedded complement clause bears Genitive Case when scrambled (61b, 62):

- (61) a. [TP Hasan [XP [CP Ahmet’in Ankara’ya gitti_ini sanıyor.
 H.-NOM A-GEN A.-DAT go-COMP-poss3s-ACC think-PROG-3s
 ‘Hasan thinks Ahmet went to Ankara.’

- b. Ahmet’in_i [TP Hasan [XP [CP t_i Ankara’ya gitti_ini sanıyor.
-

- (62) Kimin_i [TP Ahmet [XP [CP t_i öldü_ünü sanıyor.
 who-GEN A-NOM die-COMP-poss3s-ACC think-PROG-3s
 ‘Who does Ahmet think died?’

However, a scrambled embedded subject cannot have Nominative case, (63).

- (63) a. *Ahmet_i [TP Hasan [XP [CP t_i Ankara’ya gitti_ini sanıyor
-

- b. *Kim_i [TP Ahmet [XP [CP t_i öldü_ünü sanıyor

In a scrambling structure, the T-*v*-V amalgamate agrees with C⁰, forming the C-T-*v*-V amalgamate, whose phi-features check Genitive Case of the subject.

5 Conclusion

Sluicing structures in Turkish cannot be reduced to cleft structures. The evidence comes from the case mismatch in clefting vs. sluicing, the fact that clefting is restricted to argumental phrases, and that postposition pied-piping is obligatory in sluicing, but impossible in clefting.

Although sluicing of embedded subjects seem to run counter to the Case parallelism requirement, it can be explained in terms of a C-T-*v*-V amalgamate checking Genitive Case and Multiple Spell-Out. In sluicing the embedded *wh*-subject cannot get Genitive Case because the T-*v*-V amalgamate is deleted before agreeing with C⁰. The sluiced *wh*-phrase bears only Nominative Case assigned by a T-*v*-V amalgamate.

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