Obligatory movement and sluicing in a wh-in situ language

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1 Introduction

• Sluicing is the elliptical operation that results in everything in a constituent question going missing except for the interrogative phrase (Ross 1969, Merchant 2001, 2004).

(1) Toby met someone at the party, but he won’t say who.

• Under the movement plus deletion analysis of Merchant, sluicing is simply PF deletion of TP. Since wh-movement occurs obligatorily, there will always be a stranded wh-phrase.

(2) ...but he won’t say [CP who [...Toby met (who) at the party]].

• What would sluicing look like in a wh-in situ language? The movement plus deletion account predicts that the entire constituent question will be deleted.

(3) ...but he won’t say [CP [...Toby met who at the party]].

• My purpose: to explore sluicing in a real wh-in situ language, Farsi, to see whether or not it looks like English’.

(4) ramin ye chiz-i xarid amma ne-mige chi. Ramin one thing-IND bought.3SC but NEG.say.3SG what

‘Ramin bought something but he won’t say what.’

⇒ I will argue that sluicing in Farsi, like in English, is derived by movement of the interrogative phrase to a position outside of TP, which is then deleted.

• What kind of movement is it? A kind of scrambling that I call focus fronting.

• Why is it obligatory in sluicing contexts? A formal property of sluicing forces focus fronting whenever TP is deleted.

• In the rest of this talk, I will

– first, set aside a nonmovement analyses of the sluicing construction in Farsi, and
– then, show that focus fronting is responsible for moving the wh-phrase out of TP, and
– finally, propose a way of making this movement obligatory in sluicing contexts

2 Basic data

2.1 Some terminology

(5) Toby met someone at the party, but he won’t say [CP who [...Toby met (who) at the party]].

– remnant = the interrogative phrase that is stranded where a constituent question is expected.
– target clause = the deleted TP (struck through).
– sluice = the remnant plus the target clause.
– antecedent clause = the TP that the target clause is identical to.
– correlate = the element (optionally present) in the antecedent clause that ‘corresponds’ to the remnant.

• A variety of remnants are possible in Farsi, licensed by a number of different question embedding predicates.

(6) kesi man-o hol dād vali ne-midunam ki. someone me-obj push gave.3SC but NEG-know.1SG who

‘Someone pushed me but I don’t know who.’

(7) mahin ye chiz-i xarid vali be sohrab ne-mige chi. Mahin one thing-IND bought.3SC but to Sohrab NEG-say.3SG what

‘Mahin bought something but she didn’t tell Sohrab what.’

(8) emruz ye film-i-ro didam. hads bezan che film-i-ro. today one movie-IND-OBJ saw.1SG guess hit.2SC what movie-IND-OBJ

‘I saw a movie today. Guess what movie.’

(9) mixastam yeki-shun-o bexaram vali ne-midunestam kudum-esh-o. wanted.1SG one-then-OBJ buy.1SG. but NEG-know.1SG which-then-OBJ

‘I wanted to buy one of them but I didn’t know which.’

(10) rostam māshin-o taamir kardo vali maalam nist kojā. Rostam car-IND repair did.3SG but clear NEG.is where

‘Rostam repaired the car but it’s not clear where.’

(11) rostam māshin-esh-o furux. yād-esh nist kei. Rostam car-IND sold memory-NEG.is when

‘Rostam sold his car; he doesn’t remember when.’

(12) navid javāher-o doszide vali na-goft chetor. Navid jewels-IND stole.3SG. but NEG-said.3SG how

‘Navid stole the jewels but he didn’t say how.’

(13) unā ham ajale darand. ne-midunam chērā. they also rush have.3PL NEG-know.1SG why

‘They, too, are in a rush. I don’t know why.’
2.2 Is Farsi sluicing actually clefting?

- Sluicing-like constructions have long been known to exist in other wh-in situ languages, e.g., Japanese (Merchant 1998), Korean (Nishiyama et al. 1996), and Mandarin Chinese (Adams 2004).
- The source for these constructions is not an ordinary constituent question but rather a clefted question in which the expletive subject, copula, and cleft clause are null.


q know not

'Someone read that book, but I don’t know who it is.'

(Merchant 1998: ex. 17)

- Farsi has productive full and truncated clefting strategies (see Mikkelsen 2007 for discussion of differences between the two constructions).

\[(15) \text{Q: } \text{che kesi dar zad?} \quad \text{what someone door hit.3SG} \]

'Who knocked?'

A1: \( \text{pro rostam-e ke dar zad.} \quad \text{Rostam-is that door hit.3SG} \]

'It’s Rostam who knocked.'

A2: \( \text{pro rostam-e.} \quad \text{Rostam-is} \]

'It’s Rostam.'

\[\text{full cleft} \]

\[\text{truncated cleft}\]

- Constituent questions can be formed from either of the two types of clefts.

\[(16) \text{kesi in ketab-o xunde vali ne-midunam pro ki bud ke ketab-o} \]

someone this book-OBJ read.3SG but NEG-know.1SG who was that book-OBJ xund.

read.3SG

'Someone read this book but I don’t know who it was. that read the book.'

\[\text{full cleft} \]

\[(17) \text{kesi in ketab-o xunde vali ne-midunam pro ki bud.} \]

someone this book-OBJ read.3SG but NEG-know.1SG who was

'Someone read this book but I don’t know who it was.'

\[\text{truncated cleft} \]

- There are four reasons sluicing in Farsi should not be assimilated to a truncated cleft structure (drawn from Merchant 2001: 115-127):

1. The copula in Farsi cannot go missing. A special process of copula deletion that would apply only in truncated clefts would be stipulative.

\[(18) \text{mashine sohrab qermez-*(e).} \quad \text{car Sohrab red-is} \]

Intended: ‘Sohrab’s car is red.’

2. Clefts do not allow wh-adjuncts in pivot position. They are fine as the remnant of a sluice.

\[(19) \text{navid ye jur-i javaher-o dozdide. ne-midunam chetor (*bud).} \quad \text{Navid one way-IND jewels-OBJ stole.3SG NEG-know.1SG how was} \]

‘Navid somehow stole the jewels. I don’t know how.’

\[\text{manner adjunct}\]

\[(20) \text{vis mashin-o baraye ye dalit-i taamir karde vali ne-midunam cheri} \quad \text{Vis car-OBJ for one reason-IND repair did.3SG but NEG-know.1SG who (*bud).} \]

was

‘Vis repaired the car for some reason but I don’t know why.’

\[\text{reason adjunct}\]

\[(21) \text{rostam mashin-o ye moqeyi taamir karde vali ne-midunam kei (*bud).} \quad \text{Rostam car-OBJ one time-IND repair did.3SG but NEG-know.1SG when was} \]

‘Rostam repaired the car some time but I don’t know when.’

\[\text{temporal adjunct}\]

\[(22) \text{roya javaher-o ye jahi qayem karde vali ne-midunam kojai (*bud).} \quad \text{Roya jewels-OBJ one place-IND hiding did.3SG but NEG-know.1SG where was} \]

‘Roya hid the jewels somewhere but I don’t know where.’

\[\text{locative adjunct}\]

3. The pivot of a cleft cannot bear the differential object marker \( n\).

\[(23) \text{Q: } \text{mahin ki-o daavat kard?} \quad \text{Mahin who-OBJ invitation did.3SG} \]

‘Who did Mahin invite?’

A: \( \text{sohrab(-*)} \quad \text{bud.} \quad \text{Sohrab-OBJ was} \]

Intended: ‘It was Sohrab.’

\[\text{in contrast, the remnant of a sluice can be optionally nI-marked.}\]

\[(24) \text{mahin ye nafar-i-ro daavat karde vali be sohrab ne-mige kiro.} \quad \text{Mahin one person-IND-OBJ invitation did.3SG but to Sohrab NEG-say.3SG who-OBJ} \]

‘Mahin invited someone but she won’t tell Sohrab who.’

4. Pivots of clefts are restricted to DPs. A PP is ungrammatical.

\[(25) \text{Q: } \text{giti be ki dasht sohab mikard?} \quad \text{Giti with who had.3SG speaking did.3SG} \]

‘Who was Giti speaking with?’

A: \( \text{* be sirus} \quad \text{bud.} \quad \text{with Cyrus was} \]

Intended: ‘It was with Cyrus that she was speaking.’

But PPs very easily serve as the remnant in sluicing.

\[(26) \text{giti be kesi dasht sohab mikard va na-goft baki.} \quad \text{Giti with someone had.3SG speaking did.3SG but NEG-said.3SG with who} \]

‘Giti was talking with someone but she didn’t say who.’

\[\text{locative adjunct}\]
2.3 Farsi sluices are derived by movement

- Positive evidence for movement in Farsi sluicing comes from what Merchant calls FORM-IDENTITY GENERALIZATIONS. If the remnant in sluicing arrives at its position by movement then it should obey the usual constraints on movement (with the exception of island constraints).

- In English, since prepositions can either be stranded by wh-movement or piedpied, then either should be grammatical in sluicing:

(27) Peter was talking with someone, but I don’t know (with) who.

(Merchant 2001:92)

- Since Farsi does not allow preposition stranding, we predict it will not allow it under sluicing.

(28) a. bā ki ali (bā ki) harf mizad?
   with who Ali speech hit:3sg
   'Who was Ali talking with?'

b. * ki ali bā (ki) harf mizad?
   who Ali with speech hit:3sg
(29) ali bā kesi harf mizad, ammā ne-midunam *(bā) ki.
   Ali with someone speech hit:3sg but NEG-know:1sg with who
   'Ali was speaking with someone but I don’t know who.'

(Merchant 2001:96)

⇒ Sluicing in Farsi cannot be derived from a cleft structure. If the remnant arrives at its position outside of the deletion site by movement, what kind of movement is it?

3 Focus fronting

- Farsi is a wh-in situ language. Interrogative phrases need not raise to a left peripheral position.

(30) sohrāb moz-o xord.
   Sohrab banana-0bj eat:3sg
   'Sohrab ate the banana.'

(31) kī moz-o xord?
   who banana-0bj eat:3sg
   'Who ate the banana?'

(32) sohrāb chi-o xord?
   Sohrab what-0bj eat:3sg
   'What did Sohrab eat?'

- This doesn’t mean that wh-phrases are fixed in place. They can undergo the same scrambling operations that other major sentence constituents do.

3.1 The syntax of focus fronting

- One type of scrambling, FOCUS FRONTING, moves a phrase to the specifier of a focus projection, Spec-FP, where it receives a pitch accent.

(33) giti midune ke pesTE sohrāb (peste) xarid.
   Giti knows:3sg that pistachio Sohrab bought:3sg
   'Giti knows that Sohrab bought pistachios.'

(34) giti midune...

- Two essential properties of focus fronting:
  - The position of the focus fronted element is to the left of the subject but to the right of the complementizer ke.
  - The focus fronted element must bear a pitch accent and, if it is an interrogative phrase, stand in a contrastive focus relationship with another phrase.

(35) midunam ke sohrāb ye ketāb xarid vali ne-midunam CHE ketāb-i-ro
   know that Sohrab one book bought but NEG-know what book-IND-RA
   Sohrab (che ketāb-i-ro) xarid.
   bought
   'I know that Sohrab bought a book but I don’t know what book he bought.'

3.2 Farsi sluicing = focus fronting + TP-deletion

(36)
Instead, it must be sluicing itself that requires an overt interrogative remnant.⇒ only applies to interrogative phrases—cannot simply be the byproduct of Farsi’s syntax.

2) it is obligatory, and

The two unusual properties of focus fronting in Farsi sluicing—1) it is obligatory, and 2) it only applies to interrogative phrases—cannot simply be the byproduct of Farsi’s syntax.

⇒ Instead, it must be sluicing itself that requires an overt interrogative remnant.

4 Deriving sluicing in Farsi

• The semantic and phonological effects of ellipsis must be coordinated—the constituent that is deleted at PF can only go missing when semantic identity holds between the deleted phrase and the antecedent clause.

1. At PE, [E] issues the instruction that its sister not be pronounced.

2. In the semantic component, [E] imposes an identity requirement on its sister.

In English sluicing, the ellipsis feature is located on C, while, in Farsi sluicing, it is located on F.

• We can also assume that the focus head F is only present in the extended verbal projection when its specifier is filled (Rizzi 1996, 1997, Brody 1990).

• Given these two assumptions, deletion of TP without raising of an interrogative phrase to Spec-FP is impossible.

We need to put [E] on a head bearing [wvwh]—that is, an EPP-laden [wvwh]. While English has such a head, C([wvwh]) Farsi does not (it is in situ).

⇒ The two unusual properties of focus fronting in Farsi sluicing—1) it is obligatory, and 2) it only applies to interrogative phrases—cannot simply be the byproduct of Farsi’s syntax.

⇒ Instead, it must be sluicing itself that requires an overt interrogative remnant.
The [E] feature can be bundled with a [uwh] feature, so that it will only be licensed when local to a wh-phrase.

\[
\begin{array}{c}
\text{(47a)} & \text{FP} \\
\text{wh} \\
\text{\( F \)} \\
\text{\( F_{[E, uwh^*]} \)} \\
\text{\( \ldots (\text{wh}) \ldots \)} \\
\text{(47b)} & \text{FP} \\
\text{XP} \\
\text{\( F \)} \\
\text{\( F_{[E, uwh^*]} \)} \\
\text{\( \ldots (\text{XP}) \ldots \)}
\end{array}
\]

A noninterrogative DP in Spec-FP will be unable to check [E, uwh] causing the derivation of a noninterrogative sluice to crash.

\[
\begin{array}{c}
\text{(48)} & \text{midunam ke sohRAB [TP (sohrāb) otāq-esh-o tamiz kard] va ham midunam know.1sg that Sohrab room-his-obj clean did.3sg and also know.1sg ke [TP rostAM F_{[E, uwh^*]} [\ldots (rostam) otāq-esh-o tamiz kard]] that Rostam room-his-obj clean did.3sg}
\end{array}
\]

\begin{itemize}
\item Intended: ‘I know that Sohrab cleaned his room and I also know that Rostam did.’
\end{itemize}

5 Conclusion

- Sluicing in Farsi is derived by focus fronting of an interrogative phrase to Spec-FP followed by deletion of TP.
- In sluicing contexts, this movement is obligatory and applies only to interrogative phrases because the [E] feature that triggers ellipsis comes bundled with a [uwh] feature.
- The effects of this more articulated conception of the ellipsis feature are obscured in English.

\[
\begin{array}{c}
\text{(49)} & \text{English: } C_{[Q, uwh^*]} + [E, uwh^*] \rightarrow C_{[Q, E, uwh^*]} \\
\text{Farsi: } F + [E, uwh^*] \rightarrow F_{[E, uwh^*]}
\end{array}
\]

⇒ Looking at a wh-in situ language like Farsi is therefore more useful for teasing the syntax of sluicing apart from the syntax of the rest of the language.

Abbreviations

The abbreviations I use are: acc, accusative; ind, indefinite; neg, negation; nom, nominative; obj, Farsi differential object marker; pres, present; rel, relativizer; top, topic; q, question particle. Native speaker judgments were obtained from four speakers residing in Tehran, Iran and the United States.

References


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