Move to mi
But only if you can[*]

Deniz Özyildiz
University of Massachusetts, Amherst

1 Introduction

1.1 The proposal, in a nutshell

This paper aims to derive the distribution of the Turkish polar question particle *mi* by motivating a 'movement hypothesis.' I argue that, in canonical polar questions like 1, *mi* is a functional head that dominates TP. The first step of an example derivation is in 17a. Next, as in 17b, the particle obligatorily attracts a phrase to its specifier position (here, the object DP 'car' is attracted). The moved element is in the particle's c-command domain when the TP is merged. Finally, independent movement operations are free to occur. Here, in 17c, the subject of the clause is preposed.

(1) Tunç araba mı al-dı?
    Tunç car   PQ buy-PST.3S
    Did Tunç buy a car?

(2) a. [mi [Tunç car buy]]
    b. [car$_1$ [mi [Tunç $\triangle_1$ buy]]]
    c. [Tunç$_2$ [car$_1$ [mi [$\triangle_2$ $\triangle_1$ buy]]]]

Movement hypotheses have previously been explored by Besler (1999), Kahnemuyipour and Kornfilt (2011) and Kamali (2011), among perhaps others. The core of the present proposal is to diagnose the 'movement' in movement hypotheses, which, to my knowledge, has not yet been done. To avoid certain technical issues, I make slightly different assumptions than these authors. I claim that there is a single position, per clause, where *mi* can be generated, and that this position is fixed. I further argue that this position must be higher than TP. Consequently, this paper should convince the reader that although the specifics of movement hypotheses may vary, the general idea is on the right track: The particle *mi* causes phrases to raise.

I appeal to three sets of facts to motivate the movement hypothesis. First, positions where *mi* is grammatical, and those where it is not, reveal that there is an implication relation between phrases that can 'host' *mi*, and phrases that are, independently, targets for movement operations. (By "*mi*'s host," I refer to the constituent that immediately precedes *mi*.) This generalization makes movement a plausible option. Second, I argue that, if a universal quantifier hosts *mi*, the universal obligatorily scopes higher than negation. This strongly suggests that *mi* has moved the universal to a position higher than negation, and that the account can be extended to all of *mi*'s potential hosts. Third, I sketch out the prediction that, under this account, Turkish alternative questions must involve big disjuncts. This is in line with a previous, and independent, proposal by Gračanin-Yuksek (2014). A final section is devoted to examining alternative, non-movement based, accounts.

1.2   Background information on mi's distribution

The overall effect of using *mi* in a sentence is to 'turn' a declarative, as in 3a, into a polar question, in 3b. The position of the particle is apparently free. It occurs after the direct object in 3b, but it may also occur after the subject, an adverb, or the predicate, as in 3c.[1]

(3)   a.   Tunç dün   araba al-dı.
           Tunç yesterday car   buy-PST.3S
           Tunç bought a car yesterday.

      b.   Tunç dün   araba *(mı) al-dı?
           Tunç yesterday car   PQ   buy-PST.3S
           Did Tunç buy a car yesterday?   Obligatory for polar question meaning

      c.   Tunç (mu) dün   (mü) araba al-dı   (mı)?
           Tunç PQ   yesterday PQ   car   buy-PST.3S PQ
           Approximately: Did Tunç buy a car yesterday?

This list of positions where *mi* can occur is not exhaustive. The generalization seems to be that, *mi* may attach to a phrase, so long as that phrase is is directly on the clausal spine.

In single clause polar questions, *mi* is obligatory,[2] and may be expressed only once. If a sentence articulates two clauses, the particle can be expressed once per clause, as in 4.

(4)   Sen [Tunç-un dün   araba mı al-dığ-ı-nı]   duy-du-n   mu?
      2S Tunç-GEN yesterday car   PQ buy-NMZ-3S-ACC hear-PST-2S PQ
      Did you hear whether Tunç bought a car yesterday?

This observation motivates the assumption that there is a single position for *mi* in a clause. Moreover, examples where the particle follows the predicate suggest that this position can be higher than TP.

Now, the puzzling observation is that, although *mi*'s position appears to be free, it is in fact constrained. One of the goals of this paper is to argue that it is constrained in a systematic way. Sentence 5a shows that *mi* may not occur between an adjective and a modified noun, but that it

---

[1]For the sake of simplicity, I do not systematically provide fine-grained differences in appropriateness conditions associated with different positions of the particle, see Kamali (2011) for an in-depth presentation.

[2]Some short confirmation seeking questions can be formed without *mi*. These fall outside the scope of the present investigation.

can occur at the right edge of the DP. And sentence 5b shows that *mi* may not occur between a postposition and its complement, but that it can occur at the right edge of the PP. Again, the list is not exhaustive.

(5) a. Tunç hızlı (*mı) araba-yı *(mı) al-dı?
         Tunç fast PQ   car-ACC PQ   buy-PST.3S
         Did Tunç but the fast car?

     b. Tunç araba (*mı) için *(mi) gel-di?
         Tunç car   PQ   for PQ   come-PST.3S
         Did Tunç come for the car?

Similar examples are consistent with the generalization that a phrase must be on the clausal spine to be able to host *mi*. That is, the ungrammatical versions of these sentences are perhaps ungrammatical because *mi* cannot occur within subclausal units. This claim is on the right track. But it is only part of the picture, as it does not determine *mi*'s position or how the particle syntactically combines with its host.

   In the following, I argue that the reason certain phrases can host *mi*, but not others, is that the former can move, while the latter cannot. When a phrase fails to move, I propose that it pied-pipes the smallest phrase that contains it, and that can move. This explains the position of the particle in 5. I must ultimately remain agnostic as to what drives this kind of movement, but some diagnostics are compatible with the movement to *mi* being focus driven.

2   The movement hypothesis, motivated

2.1   Core generalization: Mi entails movement

A general pattern suggests that there is an implication relation between phrases to which *mi* can attach, and phrases that can independently be shown to move. This is formulated in 6:

(6) **Core generalization**: If *mi* can attach to an XP, that XP can move.

At this stage, I appeal to both preposing and extraposing the XP to the clause as relevant notions of movement, falling under the scope of this generalization. For the sake of simplicity and generality, I refer to the position where an XP is moved from, that XP's 'canonical position.'

   If being suffixed with *mi* and being a target for movement are assumed to be two 'independent' properties, the four logically possible ways of combining them could all be attested in the language. This, however, does not obtain, which suggests that these properties are not independent.

   First, recall that example 3 showed that *mi* could attach to the subject, the direct object, or to the modifier of a predicate, and that 5b showed that *mi* could attach to a PP. All of these items can be moved away from their canonical positions, indicated by △. This is illustrated in 7a for the direct object, and in 7b, for the PP. (The pattern can be replicated for the subject and the modifier as well.)

(7) a. Araba Tunç dün   △ al-dı.
         car   Tunç yesterday   buy-PST.3S
         Cars, Tunç bought yesterday.

    b. Araba için Tunç △ gel-di.
       car   for Tunç   come-PST.3S
       Tunç came for the car.

Second, example 5 also showed that *mi* could not occur between an adjective and a modified noun phrase, nor could it occur between a postposition and its complement. The examples in 8 show that these items cannot be displaced. They are grammatical only in their canonical positions.[3]

(8)   a. (*Hızlı) Tunç [△ araba-yı] (*hızlı) al-dı   (*hızlı).
         fast   Tunç   car-ACC fast   buy-PST.3S fast
         Intended: Tunç bought the fast car.

    b. (*Araba) Tunç [△ için] (*araba) gel-di   (*araba).
         car   Tunç   for car   come-PST.3S car
         Intended: Tunç came for the car.

These two observations suggest that there might be a correlation between phrases that can host *mi* and those that can be displaced. One of the mismatching combinations of properties suggests that this claim is on the right track. To my knowledge, phrases that can host *mi*, but that cannot be displaced are simply unattested in Turkish. For potential examples, one could look at low, non accusative marked, direct objects, and low adverbs. These items naturally host *mi*, but they are typically claimed to be restricted in their movement possibilities. The preferred neutral position for these items is the immediately preverbal position.

Yet, low direct objects have been shown to move in 7a (see Gračanin-Yuksek and İşsever 2011 for further discussion.) And low adverbs are potential targets for movement as well. As shown in 9a, preposing the adverb is ungrammatical, while extraposing it is grammatical. Example 9b illustrates that low adverbs can host *mi*.

(9)   a. (*Hızlı) Oğul (hızlı) koş-ar   (hızlı).
         fast   Oğul fast   run-AOR.3S fast
         Oğul runs fast.

    b. Oğul hızlı mı koş-ar?
         Oğul fast PQ run-AOR-3S
         Does Oğul run fast?

These movement options, although restricted or marked, should be enough to make low direct objects and adverbs well behaved with respect to the core generalization.

The final combination of properties to explore, is instanciated by phrases that can move, but that cannot host *mi*. This is attested in specific environments. Example 10a, shows that the object of an embedded clause can be moved, here to the left of the matrix subject. Yet, it is ungrammatical to attach *mi* to this DP, as shown in 10b. Recall from example 4 that *mi* can occur in embedded clauses. Thus embedding *mi* is not the factor causing the ungrammaticality of 10b.

(10)   a. (Özge-yi) kim [*pro* dün   (Özge-yi) öp-tüğ-üm-ü]   san-ıyor?
          Özge-ACC who 1S   yesterday Özge-ACC kiss-NMZ-1S-ACC believe-PRES.PROG.3S
          Who believes that I kissed Özge yesterday?

---

[3]The sentences in 8 have unintended interpretations, which are not indicated.

    b. *Kim [*pro* dün   Özge-yi   mi öp-tüğ-üm-ü]   san-ıyor?
       who 1S   yesterday Özge-ACC PQ kiss-NMZ-1S-ACC believe-PRES.PROG.3S
       Intended: *Who believes whether I kissed Özge yesterday?

The ungrammaticality of 10b is intentionally set up by including a *wh-* word in the matrix clause, which must give rise to a matrix *wh-* question interpretation. This forces the embedded *mi* to give rise to an embedded question interpretation, which is incompatible with the matrix verb 'believe.' The point is that factors independent of movement also regulate the distribution of *mi*, which makes it too strong, and undesirable, to claim that any XP that can move can host the particle.

The table in 11 sums up the discussion from this section. The first two columns provide truth values for two propositions corresponding to whether 'XP can host *mi*,' and to whether 'XP can move.' The third column provides the truth value of the implication that 'if XP hosts *mi*, XP is a target for movement.' The last column contains information about whether the combinations are attested, and refers back to the relevant examples if they are.

(11)

p = 'XP hosts *mi*'	q = 'XP moves'	p → q	attested combination?
T	T	T	yes, ex. 7
T	F	F	no
F	T	T	yes, ex. 10
F	F	T	yes, ex. 8

These facts suggest that the core generalization, that 'if XP hosts *mi*, XP can move,' holds.

2.2   Mi affects relative scope

This claim that *mi* attracts its host from a lower position raises the question of whether this movement has any detectable effect. In this section, based on novel data, I argue that *mi* has an effect on the relative scope of a universal quantifier with respect to negation. Indeed, when a universal quantifier hosts *mi*, the universal must scope higher than negation. In the absence of the particle, the universal can scope low. This suggests that *mi* forces the universal to be higher than it seems on the surface, which supports the general hypothesis that *mi*'s hosts undergo raising.

In Turkish, universal quantifiers most naturally take narrow scope with respect to clause-mate negation (Kelepir, 2001). Sentence 12 contains a universal subject, and negation on the predicate.

(12)   Herkes   Ankara-ya   git-mi-yo.
      everyone Ankara-DAT go-NEG-PRES.PROG.3S
      Everybody isn't going to Ankara.

A context like 13a makes a $\forall > \neg$ reading true and a $\neg > \forall$ reading false. Given that 12 is true in this context, it does have a reading where the universal scopes under negation, distinct from the one where it scopes higher than negation. A context like 13b makes both readings true. And although the sentence sounds strange in this context, it is true. And whether the universal must scope lower than negation, or whether it can also scope high, cannot be determined.

(13)   a. Three out of my four employees are being transferred to Ankara.

      b. None of my four employees are being transferred to Ankara.

Attaching *mi* to the clause, as in 14, does not change these two observations. It is not expected to, given that the hypothesis is that the TP has raised, without any change in its internal structure.

(14) Herkes   Ankara-ya   git-mi-yo   mu?
      everyone Ankara-DAT go-NEG-PRES.PROG.3S PQ
      Isn't everybody going to Ankara?

The challenge here is how to evaluate the relative scope of the quantifier with respect to negation, given that the 'truth' or the 'falsity' of a question cannot be determined directly. I assume that a situation in which my interlocutor assents to the question's sentence radical makes the sentence radical true. And where the radical is rejected, it is false.

In 13a, the question is appropriate and my interlocutor can answer positively. This question, then, has a distinct reading where the universal scopes under negation. In 13b, the question is a strange one to ask, but my interlocutor could answer positively as well. But, as previously, given that this context makes both scope readings true, it is not possible to conclude.

Finally, when the universal directly hosts *mi*, the pattern changes.

(15) Herkes   mi Ankara-ya   git-mi-yo?
      everyone PQ Ankara-DAT go-NEG-PRES.PROG.3S
      Isn't everybody going to Ankara?

This question is inappropriate in context 13a, where some people go to Ankara and some don't. My interlocutor would not assent, and would correct me by naming the three employees who are in fact going to Ankara. In context 13b, where nobody goes to Ankara, the question is appropriate and my interlocutor would agree.

Here again, the second fact alone is not enough to determine which LF is giving rise to the relevant reading. However, the question's sentence radical is false in the first context (whereas 12 and 14 were true). The conjunction of these two facts grounds the following reasoning: If the LF $\neg > \forall$ is responsible for the truth of 15 in the second context, then this LF is generally available for this sentence. Yet, the first context makes this LF true. Hence, we expect the sentence to be true in the first context. Contrary to fact. It must then be the case that the other LF ($\forall > \neg$) is responsible for the truth of the sentence in the second context, as this LF correctly predicts the sentence to be false in the first context.

The general conclusion of this section is that if a universal quantifier hosts *mi* then the universal scopes higher than negation. When *mi* is not present in the structure, or when it operates on the entire proposition, the universal can scope under negation. This strongly suggests that *mi* causes its host to raise. Now, the concern might be that the negative morpheme is linearized closer to the verb root (hence 'is lower') than T. Then, although the conclusion that *mi* is higher than negation follows from the discussion in this section, it does not follow that *mi* is higher than TP. This claim depends on the assumption that *mi* is not generated at varying heights on the clausal spine. If this assumption is granted, then *mi* must be higher than TP, as it can be linearized to the right of tense morphology, as seen in 3 and 4.

2.3 Accounting for the problematic data

2.3.1 Pied piping

A consequence of the above discussion is that, some phrases cannot host *mi* simply because they cannot undergo any movement. Though in this case, the particle occurs at the right edge of a bigger constituent. The PP example from 5 is repeated in 16: The complement of the postposition cannot host *mi* but the PP can.

(16) Tunç araba (*mı) için *(mi) gel-di?
Tunç car   PQ   for PQ   come-PST.3S
Did Tunç come for the car?

(17) a. *[car [mi [Tunç [△ for] came]]]
      b. [[car for] [mi [Tunç △ came]]]

The relevant stage of the derivation is provided in 17. In 17a, extracting the postposition's complement results in ungrammaticality. The movement of the PP, however, is unproblematic and may proceed, as in 17b. I argue the impossibility of extracting the DP 'car' results in the pied-piping of the entire PP. To do this, I show that there is a mismatch, in sentence 16 with structure 17b, between the surface position of *mi* (the right edge of PP), and the phrase on which the particle's prosodic and semantic effects are realized (the DP complement of P).

The prosody and the appropriateness of a given polar question varies with the position where *mi* is realized (Kamali, 2011). Usually, the phrase that immediately precedes *mi* is made prominent by an 'exceptionally' high pitch accent, realized on its stressed syllable.[4] This is indicated below with a superscript up arrow. The prominent phrase is also one for which alternatives are generated. This affects both the situations where a given polar question is appropriate to ask, and the kind of answer that is appropriate to give.

For questions like 18 and 19, this characterization is accurate. In 18, the particle attaches to the direct object, which receives prominence. A perfectly acceptable negative answer is to offer an alternative to the direct object, in 18a, but not, for instance, to the subject, in 18b.

(18) Tunç dün   arabá$^\uparrow$ mı al-dı?
Tunç yesterday car   PQ buy-PST.3S
Did Tunç buy a car yesterday?

   a. Hayır. Ev   al-dı.
      no   house buy-PST.3S
      No. He bought a house.

   b. Hayır. # Dilara al-dı.
      no   Dilara buy-PST.3S
      Intended: No. Dilara bought it.

In 19, where the particle attaches to the subject, the pattern is changes. The subject receives prominence. And in offering a negative answer to the question, alternatives can be generated for the subject, but not the object.

---

[4]Under normal circumstances, Turkish lexical stress is realized with a high pitch accent İpek and Jun (2013). When *mi* is used, the locus of the pitch accent does not seem to vary, but a change in height is audible and visible on a pitch track. This is what I mean by 'exceptional.'

(19) Túnç$^\uparrow$ mu dün araba al-dı?
Did Tunç buy a car yesterday?

    a. Hayır. # Ev aldı.
       Intended: No. He bought a house.

    b. Hayır. Dilara aldı.
       No. Dilara bought it.

Comparing the two sentences further suggests that *mi*'s effect is local. Indeed, the strangeness in answering 18 with the subject alternative in 18b supports the conclusion that the particle cannot 'associate' with a subject if it is positioned on an object.

    These diagnostics are repeated for the question in 16. Both the prosodic and the semantic effects of *mi* are realized on the DP complement of the postposition, that is, on a phrase that is not adjacent to the particle.

(20) Tunç [arabá$^\uparrow$ için] mi geldi?
     Tunç car   for   PQ come-PST.3S
     Did Tunç come for the car?

    a. Hayır. [Ev   için] gel-di.
       no   house for come-PST.3S
       No. He came for the house.

    b. Hayır. # Dilara gel-di.
       no   Dilara come-PST.3S
       Intended: No. Dilara came.

These are environments where there is a mismatch between *mi*'s 'host' and its 'associate.' The particle is not banned from operating on a phrase (the associated DP) non-locally, as long as that phrase is contained within its host (the PP). Given that the particle's host and its associate otherwise coincide, there must be an independent reason preventing this in 20. This is the restriction on extracting complements of postpositions. The position of *mi*, at the right edge of PP, is then evidence that the PP raises, a movement triggered by the impossibility of extracting the DP alone.

2.3.2 (Small) clause movement

The discussion of the core generalization above left out a pair of environments where *mi* can occur, but where it is not obvious that *mi*'s host has undergone movement. In 21a, the particle is linearized to the right of tense and agreement morphology. In 21b, the particle occurs between a predicate, and tense/agreement morphology.[5]

(21)   a. Sen araba al-dı-n   mı?
         2S car buy-PST-2S PQ
         Did you buy a car?

    b. Sen zengin mi-y-di-n?
         2S rich   PQ-COP-PST-2S
         Were you rich?

---

[5]This alternation is a well known difference between the expression of tense on a lexical verbal root and its expression on the copula (Kornfilt, 1996).

The examples can be generated by moving the TP, in 21a, and the AP small clause, in 21b, to *mi*.[6]

(22) a. [mi [you car buy-PST-2S]]
       b. [[you car buy-PST-2S] [mi △]]

(23) a. [mi [[[you rich] -COP]] -PST-2S]
       b. [[you rich] [mi [[△ -COP] PST-2S]]]

In 21a, given that the entire TP moves, no fixed and overt material is left outside, which could serve to detect whether movement occurs. This difficulty, however, should not be enough to claim that movement does not occur, as there is independent evidence in favor of it. Example 21b is more problematic. As illustrated in 24, it is ungrammatical to separate the small clause from the copula.

(24) *△ ∅-di-n   [sen zengin].
        COP-PST-2S 2S   rich
      Intended: You were rich.[7]

Ungrammaticality might arise here due to a phonological reason. Indeed, the copula here takes a reduced form and cannot stand alone.

With the assumption that there is a single fixed position for *mi*, these examples suggest that *mi* must be at least higher than TP. Furthermore, there seems to be no additional restriction on the type of phrase that the particle attracts. In the absence of such a restriction, the present account raises the questions of whether a constituent smaller than TP, such as the vP, can move to *mi* in 21a, and whether a constituent bigger than the AP small clause can move to *mi* in 21b. The answer is negative for the first question, and positive for the second.

(25) a. *[Sen araba al]-mı-dı-n?
            2S   car   buy-PQ-PST-2S
          Intended: Did you buy a car?
       b. ?[Sen zengin-∅-di-n]   mi?
            2S   rich-COP-PST-2S PQ
          Were you rich?

The ungrammaticality of 25a can be accounted for with the independent claim that Turkish has V-to-T movement (Kural, 1993, Gračanin-Yuksek and İşsever, 2011), and that there is no constituent smaller than TP that contains the verb and all of its arguments overtly. The option of moving the TP, however, is always available. This would explain the relative acceptability of 25b. I must remain agnostic as to what causes the degradation of this sentence. Utterances of this form are common in colloquial speech.

3   The geometry of alternative questions

Alternative questions are constructed by attaching *mi* to each disjunct, as in 27. Evidence that Turkish alternative questions involve big disjuncts (containing elided material) is that, strings that

---

[6]YangSuk Yoo, p.c., points out that this type of complement to specifier movement could be problematic. This difficulty is anticipated by Kahnemuyipour and Kornfilt (2011: fn11), and need not be a problem if additional functional projections exist between *mi* and T.

[7]I do not know if any native speaker accepts this sentence with the non-reduced form of the copula: *idin sen zengin*.

do not form constituents on the surface can serve as alternatives. (See Gračanin-Yuksek 2014 for independent discussion.)

(26) Gökben çay mı iç-ti   (yok-sa) Canan kahve mi?
      Gökben tea PQ drink-PST.3S not-if   Canan coffee PQ
      Did Gökben drink tea or Canan coffee?   Alternative question

Now, the structure proposed for simple polar questions directly makes the prediction that the disjuncts must be at least as big as the projection hosting *mi*, and perhaps bigger, given that material can precede the particle's host. For simplicity, the derivation for the first disjunct of 27, an alternative question with a null subject and narrow focus on the disjunct, is provided in 28.

(27) Çay mı iç-ti   (yok-sa) kahve mi?
      tea PQ drink-PST.3S not-if   coffee PQ
      Did they drink tea or coffee?   Alternative question

(28) a. [mi [3S tea drink-PST.3S]]
      b. [tea [mi [3S △ drink-PST.3S]]]

The full alternative question is derived by the conjunction of two similar structures followed by TP ellipsis, independently argued by İnce (2009) to be available in Turkish.

(29) [tea [mi [3S △$_{tea}$ drink-PST.3S]]] or [coffee [mi [3S △$_{coffee}$ ~~drink-PST.3S~~]]]

4 Alternative geometries

4.1 Alternatives to a movement based generalization

The difference between positions where *mi* is licensed and those where it is not cannot be captured by appealing to an 'intervention effect' in certain structural relations, nor by providing a 'list' of category labels to which *mi* cannot attach to. One would need to refer to both a structural relation and a category label at the same time. Such accounts are strictly less economical and less general than the movement based proposal.

Compare the VP and the PP examples, though the reasoning can be extended to other examples discussed in the paper. The particle can occur between a verb and its DP complement, but it cannot occur between a postposition and its DP complement. Consequently, both the general claims that *mi* cannot intervene in a head complement relation, and that *mi* cannot attach to DPs, are immediately falsified. A specific restriction, that combines reference to both a structural relation and a category label would give the intended result. For instance, '*mi* cannot occur between a head and a complement, if the head is a postposition.' But, the undesirable consequence of this approach is that similar restrictions would have to be multiplied.

A second alternative could simply list environments in which *mi* cannot occur. Based on the facts presented above, it holds that *mi* cannot occur 'within' a DP or a PP. In fact, the particle must occur on a phrase that is directly on the clausal spine, on arguments and modifiers of a predicate. The first part of this characterization is on the right track. However, the particle can occur on constituents that do not originate on the clausal spine to the extent that these constituents can be extracted and raised to positions on the spine.

In example 30a, the particle occurs between a possessor and a possessed noun phrase. Based on surface structure, it is 'within' the possessive DP. Nevertheless, 30b suggests that, unlike adjectives, the possessor can undergo overt movement to the spine (the possessor precedes the subject in this example). And according to the movement hypothesis the possessor is on the spine in 30a as well.

(30) a. Tunç Güncel-in   mi araba-sı-nı   al-dı?
          Tunç Güncel-GEN PQ car-3S.POSS-ACC buy-PST.3S
          Did Tunç buy Güncel's car?

     b. Güncel-in   mi Tunç [△ araba-sı-nı]   al-dı?
          Güncel-GEN PQ Tunç   car-3S.POSS-ACC buy-PST.3S
          Did Tunç buy Güncel's car?

This does not falsify the claim that *mi* cannot occur inside subclausal constituents, but makes such a formulation misleading, given examples like 30a.

4.2 Constituency based hypotheses

An immediate consequence of the movement hypothesis is that *mi* and its host do not form a constituent. This section explores the alternative hypotheses that they do, by *mi* adjoining to its host, or by *mi* taking its host as a complement.

4.2.1 Adjunction

Adjuncts are typically characterized by optionality and transparency to selection. The particle *mi* displays is not transparent, and it seems to interfere in selection.

Sentence 31a illustrates optionality and transparency for an adjective modifying a noun phrase. The postposition takes the noun phrase as a complement, regardless of the presence of the adjective. Sentence 31b illustrates that *mi*, is not licensed in this configuration. This suggests that it is not a typical adjunct.

(31) a. Tunç [(hızlı) araba] için gel-di.
          Tunç fast   car   for come-PST.3S
          Tunç came for the (fast) car.

     b. *Tunç [araba mı] için gel-di?
           Tunç car   PQ for come-PST.3S
          Intended: Did Tunç come for the car?

4.2.2 Complementation

Complementation typically closes off the c-command domain of the complement. If *mi* took its host as a complement, then, it is expected that the host's c-command domain be closed off. Yet, a DP to which *mi* is attached behaves as if it were taking scope from the spine.

This is illustrated in 32a. The subject of the sentence can bind an object anaphor, regardless of whether it hosts *mi*. If a DP is the complement of a postposition, however, as in 32b, the DP can not bind the anaphor, presumably because it does not c-command the anaphor.

(32) a. Ayna-da   Elif$_i$ (mi) kendi$_i$-ni   gör-dü
       mirror-LOC Elif   PQ   REFL-ACC see-PST.3S
       {Did Elif see/Elif saw} herself in the mirror
     b. *Ben [Elif$_i$ yüzünden] kendi$_i$-ni   öp-tü-m.
       1S   Elif   because.of REFL-ACC kiss-PST-1S
       *I kissed Elif because of herself.

Constituency based hypotheses seem to make wrong predictions, and should be dispreferred over the non-constituency based account presented in this paper.

5   Conclusion

In this paper, I have argued that *mi* is a functional head that is positioned higher than TP. Two pieces of evidence were presented to suggest that that the particle attracts a phrase that is in its c-comand domain to its specifier position. The first piece of evidence was a generalization that draws an implication relation between the possibility for an XP to host *mi* and the possibility for that XP to undergo independent movement operations. The second piece of evidence was the direct observation that *mi* affects scope relations within a clause, in a direction consistent with the raising of its host.

The proposal was shown to make a prediction for the geometry of alternative questions that was consistent with an existing proposal, formulated on the grounds of independent evidence. Alternatives were explored and were shown to make incorrect predictions. This suggests that although some details remain to be worked out, a movement based account of *mi*'s distribution is on the right track.

References

Besler, Dilek. 1999. The question particle and movement in Turkish. Master's thesis, Boğaziçi University, İstanbul.

Gračanin-Yuksek, Martina. 2014. Alternative questions in Turkish. Workshop in Altaic Formal Linguistics 10 Presentation.

Gračanin-Yuksek, Martina, and Selçuk İşsever. 2011. Movement of bare objects in Turkish. *Dilbilim Araştırmaları* 2011:33–49.

İnce, Atakan. 2009. Dimensions of ellipsis: Investigations in Turkish. Doctoral Dissertation, University of Maryland.

İpek, Canan, and Sun-Ah Jun. 2013. Towards a model of intonational phonology of Turkish: neutral intonation. In *Proceedings of meetings on acoustics*, Vol. 19.

Kahnemuyipour, Arsalan, and Jaklin Kornfilt. 2011. The syntax and prosody of Turkish 'pre-stressing' suffixes. In *Interfaces in linguistics*, 205–221. Oxford University Press, Oxford.

Kamali, Beste. 2011. Topics at the PF interface of Turkish. Doctoral Dissertation, Harvard University.

Kelepir, Meltem. 2001. Topics in Turkish syntax: Clausal structure and scope. Doctoral Dissertation, MIT.

Kornfilt, Jaklin. 1996. On copular clitic forms in Turkish. *ZAS Papers in Linguistics* 6:96–114.

Kural, Murat. 1993. V-to (-I-to)-C in Turkish. *UCLA Occasional Papers in Linguistics* 11:17–54.