ALTERNATIVE QUESTIONS IN TURKISH
Martina Gračanin-Yuksek
Middle East Technical University

I. INTRODUCTION: BACKGROUND ON ALTERNATIVE QUESTIONS

In this talk, I investigate alternative questions (AQs) in Turkish. An AQ contains a disjunction and offers the hearer a choice of alternatives from which to choose the answer, as in (1).

1. Does John drink coffee or tea?

In languages like English, the question in (1) is ambiguous between a yes/no reading, represented in (2a), and an alternative reading, represented in (2b).

2. a. Does John drink either of the two: {coffee, tea}?
   b. Which of the two does John drink: {coffee, tea}?

   *Yes/no reading*
   *Alternative reading*

In Turkish, a disjunctive question with a yes/no reading has the form in (3a), while a disjunctive question with an alternative reading looks like (3b).

3. a. Ali çay ya da/veya kahve içti mi?
   b. Ali çay mı (yoksa) kahve mı içti?

   *Yes/no question*
   *Alternative question*

‘Did Ali drink coffee or tea?’
‘Did Ali drink tea or coffee?’

Since an AQ like the one in (3b) never yields a yes/no interpretation, Turkish data offer a possibility of a more direct inspection of the structure of alternative readings.

Analyses of AQs (questions like (1), with an alternative reading in (2b)) cross-linguistically vary along two dimensions:

i. THE PROPOSED SIZE OF THE DISJUNCTS:

   a. ‘Small’ disjuncts analysis – on this analysis, the disjuncts in an AQ contain no phantom structure, i.e. they are structurally the size that can be observed on the surface (Larson 1985, Beck and Kim 2006),

   b. ‘Big’ disjuncts analysis – on this analysis, the disjuncts are bigger than on the surface and the structure involves deletion in the second disjunct (Han and Romero 2004a, 2004b; Roelofsen and Pruitt 2011; Gracanin-Yuksek 2012).

Thus, depending on which of the two approaches outlined in (ia-b) is taken, (1) has either the structure in (4) or the structure in (5a/b).
4. Does John drink [[coffee] or [tea]]?  

Small disjuncts analysis

5. a. Does [[John drink coffee] or [John drink tea]]?  

Big disjuncts analysis  
(disjunction of TPs)

b. [[Does John drink coffee] or [Does John drink tea]]?  

Big disjuncts analysis  
(disjunction of CPs)


On the analyses that propose the presence of the $Op^{\text{WH}}$, (1) has the structure in (6a/b), while on the analyses that deny the presence of such an operator, (1) has the structure in (7)=(4)/(5).

6. a. $Op_i$ [does John drink [$t_i$ coffee] or [tea]]  

Small disjuncts analysis  
+ $Op^{\text{WH}}$ movement

b. $Op^{\text{WH}}$, Did [$t_i$ John drink coffee] or [John drink tea]]  

Big disjuncts analysis  
+ $Op^{\text{WH}}$ movement

7. a. Does John drink [[coffee] or [tea]]?  

Small disjuncts analysis  
NO $Op^{\text{WH}}$ movement

b. Does [[John drink coffee] or [John drink tea]]?  

Big disjuncts analysis  
(disjunction of TPs)  
NO $Op^{\text{WH}}$ movement

c. Does [[John drink coffee] or [does John drink tea]]?  

Big disjuncts analysis  
(disjunction of CPs)  
NO $Op^{\text{WH}}$ movement

II. **CLAIM AND THE ROADMAP OF THE TALK**

**CLAIM:**

AQs in Turkish involve **big disjuncts** and the surface string is derived **via a deletion operation**.¹

The **EVIDENCE** for the claim comes from **the possibilities of the (apparent) extraposition of the second disjunct** in matrix and embedded AQs.

---

¹ I will remain agnostic as to whether in this language AQs do or do not involve an $Op^{\text{WH}}$. 
The talk will proceed as follows:

- **Section III** → Introduction to Turkish AQs

- **Section IV** → Presentation of evidence for the claim that **Turkish AQs involve big disjuncts:**
  - Extrapolation possibilities of the second disjunct in matrix and embedded clauses in conjunction with:
    - Constraints of scrambling of focused phrases in Turkish and
    - Constraints on (forward) gapping in Turkish

- **Section V** → Discussion of **how big ‘big’ actually is** (CP or smaller) – a question that I will not answer today.
  - Positions in which the question particle *mI* is allowed to appear in:
    - Polar questions,
    - Alternative questions (first *versus* the second disjunct).

- **Section VI** → Conclusion

### III. **ALTERNATIVE QUESTIONS IN TURKISH**

In Turkish, AQs are formed by inserting after each alternative/disjunct, the particle *mI*, otherwise used as a question particle in polar questions.\(^2\) The disjuncts are optionally disjoint by the word *yoksa* ‘if not’, but the presence of *mI* after each alternative remains obligatory regardless of whether *yoksa* is present or absent.

An example of a Turkish polar question is given in (8) below, while examples in (9) illustrate AQs ((9b) is repeated from (3b) above).

8. Nermin okula **mI** gitmiş?
   Nermin school.DAT Q go,EVID./PERF.
   ‘Did Nermin go to school?’

9. Ali çay **mI** (yoksa) kahve **mI** içti?
   Ali tea Q not-if coffee Q drank
   ‘Did Ali drink tea or coffee?’

---

\(^2\) The particle *mI* is classified as a clitic (Kornfilt 1997) which undergoes vowel harmony with the constituent to its left and “does not receive word final stress, but causes the preceding syllable to be stressed.” (Aygen 2007: 2)

However, as stated in Göksel and Kerslake (2005) and Kornfilt (1997), if there are other factors affecting the stress (for example, if *mI* is preceded by a suffix which resists stress), the stress is determined by internal stress pattern of the word or phrase to which *mI* attaches.
AQs in Turkish may also be embedded, as in (10), regardless of whether the embedded clause is tensed (10a) or not (10b).  

10. a. Hasan [Ali kahve mi (yoksa) çay mi içti ] anlamı?
   Hasan [Ali coffee Q not-if tea Q drink.PAST] understand.PAST
   ‘Did Hasan figure that Ali drank COFFEE or TEA?’

   Hasan [Ali.GEN coffee Q not-if tea Q drink.N.ACC ] ask.PAST
   ‘Hasan asked whether Ali drinks/drank COFFEE or TEA.’

   a. INTERROGATIVE PARTICLE mI

   The function of the particle mI in questions is twofold:
   i. **It turns a statement into a yes/no question** (i.e. takes scope over the entire proposition),
   ii. **It functions as a question focus particle** (Kornfilt 1997), narrowing down the
      questioned part of the proposition and questioning only the phrase to which it is attached,
      i.e. taking narrow scope (Göksel and Kerslake 2005).

   While any placement of mI allows for a narrow scope interpretation, only the following
   placements also yield a wide scope reading:
   i. The placement on the predicate (sentence-finally) (Göksel and Kerslake 2005, Kornfilt
      1997, Kamali 2011), as shown in (11a), and
   ii. The placement on the immediately pre-verbal constituent (Göksel and Kerslake 2005,
       Kamali 2011), as shown in (11b).

11. a. Ali araba aldı mı?
    Ali car bought Q
    ‘Did Ali buy a car?’ / ‘Did Ali BUY a car?’

   b. Ali araba mi aldı?
    Ali car Q bought
    ‘Did Ali buy a car?’ / ‘Was it A CAR that Ali bought?’

If mI appears in a position other than those illustrated in (11), it necessarily functions as a
question focus particle, focusing the constituent to which it attaches. This will be important in the
discussion that follows.

---

3 In (10a), the AQ is embedded under the matrix predicate anla- ‘understand’ and the question takes matrix scope. In (10b), however, it appears under the predicate sor- ‘ask’, where it has embedded scope. Whether an embedded AQ receives embedded or matrix scope seems to depend on a number of factors, including the lexical semantics of the embedding predicate as well as the means of complementation (Coşkun 2010). I am not sure at the moment whether these differences play a role in the argument I am making here, but the fact that not only AQs, but also wh-phrases which occur in an embedded wh-question show parallel variability in scope suggests that the scope of an embedded interrogative element depends on factors that are independent of the structure of AQs.
IV. **Extraposition of the Second Disjunct in AQs**

### a. Matrix AQs

In matrix AQs, the second disjunct (together with *yoksa*, when present) can appear post-verbally, in an extraposed position (12b).

12. a. Ali mi (yoksa) Ayşe mi kahve içti?
   Ali Q not-if Ayşe Q coffee drank
   ‘Was it Ali or Ayşe who drank coffee?’

   b. Ali mi kahve içti (yoksa) Ayşe mi?
   Ali Q coffee drank not-if Ayşe Q

**On a ‘small’ disjuncts analysis,** (12b) is derived from (12a)/(13a) by extraposing the *yoksa*+second disjunct, as shown in (13b).

13. a. [[Ali mi] [(yoksa) Ayşe mi]] kahve içti?
   Ali Q not-if Ayşe Q coffee drank
   = (12a)

   b. [[Ali mi] _ti_ ] kahve içti [(yoksa) Ayşe mi]? = (12b)

**On the ‘big’ disjunct analysis,** both (12a) and the string in (12b) are clausal disjunctions, with different parts of first/second disjunct deleted, as shown in (14a) and (14b).

14. a. [[Ali mi kahve içti] [(yoksa) [Ayşe mi kahve içti ]]? = (12a)
   Ali Q coffee drank not-if Ayşe Q coffee drank
   b. [[Ali mi kahve içti] [(yoksa) [Ayşe mi kahve içti ]]? = (12b)

Independent facts about Turkish grammar argue against the analyses in (13) and for the analyses in (14).

Turkish is a scrambling language, which allows scrambling of both focused and non-focused phrases in polar questions, as shown in (15b) and (16b).

15. a. **Ali** dün çay mı içti?
   Ali yesterday tea Q drink.PAST
   ‘Did Ali drink tea yesterday?’

   b. Dün çay mı içti **Ali**?
   yesterday tea Q drink.PAST Ali

16. a. **Ayşe** yarın mı okula gidecek?
   Ayşe tomorrow Q school.DAT go.FUT
   ‘Is it tomorrow that Ayşe will go to school?’
b. **Yarın mı Ayşe okula gidecek?**
   tomorrow Q Ayşe school.DAT go.FUT

However, there is a constraint, operative in Turkish, which prohibits focused material from scrambling to the right of the verb (Erguvanlı, 1984; Göksel, 1998; Göksel and Özsoy, 2000; Kural, 1992).

Thus, (17) below contrasts both with (15b), in which non-focused material scrambled to the right of the verb and and with (16b), in which focused material scrambled to the front of the sentence.\(^4\)

17. *Ayşe okula gidecek **yarın mı?**
   Ayşe school.DAT go.FUT tomorrow Q

The derivation in (13b), which assumes the ‘small’ disjunct analysis, necessarily involves moving a focused phrase rightwards across the verb, which (17) shows to be disallowed. This argues for the claim that **A Qs in Turkish are derived from big rather than from small disjuncts.**

### a. **Embedded AQs**

Embedded AQ facts can also be explained by the ‘big’ disjunct analysis of AQs. AQs can be embedded, as (18a) shows, but in contrast to matrix AQs, in embedded AQs, the second disjunct (with *yoksa*) cannot extrapose.

The second disjunct, originating in an embedded AQ, can appear neither (immediately) to the right of the embedded verb (18b), nor (immediately) to the right of the matrix verb (18c).\(^5\)

   Hasan Ali.GEN coffee Q not-if tea Q drink.N.ACC ask.PAST
   ‘Hasan asked whether Ali drinks COFFEE or TEA.’

   b. *Hasan Ali’nin kahve mi içtiğini (yoksa) çay mı sordu.
   Hasan Ali.GEN coffee Q drink.N.ACC not-if tea Q ask.PAST

   c. *Hasan Ali’nin kahve mi içtiğini sordu (yoksa) çay mı.
   Hasan Ali.GEN coffee Q drink.N.ACC ask.PAST not-if tea Q

---

\(^4\) Recall that the particle *mi* when placed on any constituent other than the predicate and the immediately preverbal constituent necessarily functions as a focus particle, i.e. focuses the phrase to which it attaches. Thus, the adverbial phrase *yarın mı ‘tomorrow?’*, because it is focused, cannot scramble to a position after the verb.

\(^5\) Example (18c) is good on a matrix questions reading, where the disjunction is at the matrix level, as in (i). Recall from (10b) that AQ embedded under the matrix predicate *sor ‘ask’ always yields narrow scope interpretation for the question. This suggests that the fact that (18c) is good on the reading in (i), but not on the relevant reading is not an effect of the interrogative embedded particle(s) taking scope at different levels, but rather of different syntactic structures.

i. Did Hasan ask whether Ali drank coffee or did Hasan ask whether Ali drank tea?
The small disjuncts analysis offers a straightforward explanation of these facts: all of the examples in (18b-c) involve the rightward movement of a focused phrase over the (embedded/matrix) verb.

On the ‘big’ disjuncts analysis, the ill-formedness of examples in (18b-c) is a bit harder to derive. On this analysis, all of the examples in (18) have the structure in (19). Different forms of the AQs (the grammatical one in (18a), as well as the two ungrammatical ones in (18b-c)) are supposed to arise from different deletion operations that apply to (19).

19. [Hasan [[Ali’ın kahve mi içtiğini] [yoksa [Ali’ın çay mi içtiğini]]] sordu.]
   Hasan Ali.GEN coffee Q drink.N.ACC not-if Ali.GEN tea Q drink.N.ACC ask.PAST

The ill-formedness of (18c) follows straightforwardly on this analysis, since no deletion operation can derive the string in (18c) from the underlying structure in (19).

The word order in (18b) would arise if the deletion operation in (20) applied.

20. [Hasan [[Ali’ın kahve mi içtiğini] [yoksa [Ali’ın çay mı içtiğini]]] sordu.]
   Hasan Ali.GEN coffee Q drink.N.ACC not-if Ali.GEN tea Q drink.N.ACC ask.PAST

Since (18b) is ungrammatical, something must be blocking such deletion operation. Ince (2009), who investigates properties of gapping in Turkish, shows that forward gapping in Turkish is a root phenomenon, i.e. applies only to matrix clauses.

Ince shows that examples like (21), which involve gapping in the embedded clause, are ungrammatical.

21. *Zeynep [Hasan’ın karidesi yediğini ] [Mehmet’in de istiridyeyi ] duydu.]
    Zeynep Hasan.GEN shrimp.ACC eat.N.ACC Mehmet.GEN and oyster.ACC heard

    ‘Zeynep heard that Hasan ate shrimp and Mehmet the oyster.’

The example improves if the rightmost conjunct extraposes to a position after the matrix verb, as in (22) (Kornfilt 2000).

22. Zeynep [Hasan’ın karidesi yediğini ] duydu [Mehmed’in de istiridyeyi.]
    Zeynep Hasan.GEN shrimp.ACC eat.N.ACC heard Mehmed.GEN and oyster.ACC heard

    ‘Zeynep heard that Hasan ate shrimp and Mehmet the oyster.’

Kornfilt (2000) proposes that the contrast between (21) and (22) is due to “a condition in Turkish syntax that precludes the generation of embedded clauses that are not verb-final and which are internal to a higher clause.” Since in (21) the embedded clause is internal to the superordinate clause, the sentence is out. In (22), on the other hand, the embedded clause is not internal to the matrix clause (is not followed by any material belonging to the higher clause) and the sentence is grammatical.
If Kornfilt is correct, the ungrammaticality of (18b) is expected, but it is puzzling that the AQ in (18c) is ill-formed, given that there also the embedded disjunct has been extraposed to a position where it is not followed by the matrix material.

Ince (2009) argues against Kornfilt’s claim, discussing examples like (23a), parallel to (22), which involve **gapping within a disjunction phrase in the embedded clause**. Ince states that (23a) only allows for the reading in (23b), but not for the one in (23c); by uttering (23a), the speaker does not assert Ahmet’s knowledge of the disjunction, but the ‘disjunction of Ahmet’s knowledge’.

23. a. Ahmet Hasan’ın pastayı yediğini biliyor, veya Meral’ın dondurmayı.
   Ahmet Hasan.GEN cake.ACC eat.N.ACC know.PRES.PROG. or Meral.GEN ice-cream.ACC
   b. ‘Either Ahmet knows that Hasan ate pasta or Ahmet knows that Meral ate ice-cream.’
   c. ‘Ahmet knows either that Hasan ate pasta or that Meral ate ice-cream.’

This suggests that the structure does not involve a disjunction of embedded clauses, but rather involves a disjunction at the matrix level, as shown in (24).

24. [[Ahmet [Hasan’ın pastayı yediğini biliyor]] veya
   Ahmet Hasan.GEN cake.ACC eat.N.ACC know.PRES.PROG. or
   [Ahmet [Meral’ın dondurmayı yediğini biliyor.]]
   Ahmet Meral.GEN ice-cream.ACC eat.N.ACC know.PRES.PROG.

Ince concludes that forward gapping in Turkish is allowed only at the level of the matrix clause. If this argument is successful, then the ill-formedness of the example in (18b) is explained even on the ‘big’ disjunct analysis.

Example (18b) is ill-formed because it involves an illicit forward ellipsis at the level of the embedded clause, as in (25).


I conclude that the data involving extraposition of the second disjunct in matrix and embedded clauses support the ‘big’ disjuncts analysis of AQs in Turkish. We are next going to inspect exactly how big ‘big’ is.

V. **HOW BIG IS ‘BIG’?**

There are claims in the literature that the disjuncts in an AQ are the size of a CP: Gračanin-Yuksek (2012) for Croatian, Roelofsen and Pruitt (2011) for English, Uegaki (2013) for Japanese.
Given that in Turkish, each disjunct in an AQ obligatorily contains *mI*, which is the question particle in the language, a natural hypothesis is that in Turkish AQs the disjuncts are CPs.

However, a comparison of the possible placements of *mI* in polar and alternative questions sheds doubt on this hypothesis.

### a. **Placements of mI in Polar and Alternative Questions**

In polar questions, *mI* can attach to any constituent except pre-nominal modifiers and complements of postpositions.

Recall from section (IIIa) that a polar question is ambiguous between a neutral, wide scope (WS) interpretation and the focused, narrow scope (NS) interpretation only when *mI* appears on the verb (26a) or on the immediately preverbal constituent (26b).

26. a. Ahmet arabayı sattı mı?

   Ahmet car.ACC sold Q

   WS: ‘Did Ali sell the car?’

   NS: ‘Did Ali SELL the car?’

   b. Ali kitabı mı okuyor?

   Ali book.ACC Q read.PRES.PROG.


   NS: ‘Is it THE BOOK that Ali is reading?’

Placing *mI* on any other constituent only results in an obligatory NS reading (27).

27. a. Ali mı gözetmenlik yapıyor?

   Ali Q proctoring do.PRES.PROG.

   NS: ‘Is it ALI who is doing the proctoring?’

   b. Ali bugün müsaçlarını kestirecek?

   Ali today Q hair.ACC cut.CAUS.FUT

   NS: ‘Is it TODAY that Ali will have his hair cut?’

In AQs, *mI* can also attach to the subject (28a), adjunct (28b), object (28c), or verb (28d).

28. a. Ali mi (yoksa) Ayşe mi geldi?

   Ali Q not-if Ayşe Q came

   ‘Is it Ali or is it Ayşe who came?’

   b. Ali bugün mü (yoksa) yarın mı geliyor?

   Ali today Q not-if tomorrow Q come.PRES.PROG.

   ‘Is Ali coming today or tomorrow?’

   c. Hasan çayı mı (yoksa) suyu mı içti?

   Hasan tea.ACC Q not-if water.ACC Q drank

   ‘Did Hasan drink the tea or the water?’
However, in contrast to polar questions, in AQs *mI* on the verb can only take narrow scope, as in (28d), while the wide scope is impossible, as (29) shows.

29. a. *Ahmet arabayı sattı *mI* (yoksa) Hasan kredi aldı *mI*?
   Ahmet car.ACC sold Q not-if Hasan loan took Q
   Int: ‘Did Ahmet sell the car or (did) Hasan take a loan?’

   b. *Ahmet arabayı sattı *mI* (yoksa) kredi aldı *mI*?
   Ahmet car.ACC sold Q not-if loan took Q
   Int: ‘Did Ahmet sell the car or did he take a loan?’

Instead, the wide scope reading arises if *mI* appears on the immediately preverbal constituent, as in (30).

30. a. Ahmet arabayı *mI* sattı (yoksa) Hasan kredi *mI* aldı?
   Ahmet car.ACC Q sold not-if Hasan loan Q took
   ‘Did Ahmet sell the car or (did) Hasan take a loan?’

   b. Ahmet arabayı *mI* sattı (yoksa) kredi *mI* aldı?
   Ahmet car.ACC Q sold not-if loan Q took
   ‘Did Ahmet sell the car or did he take a loan?’

Aygen (2007) argues that *mI* in polar questions in which it appears on the verb occupies C⁰ position in overt syntax. The ungrammaticality of examples in (29) then might suggest that the disjuncts in a Turkish AQ, while clausal, do not contain C⁰ position, i.e. are not as big as the CP.

However, in Gračanin-Yuksek (2012), I argue that in Croatian, AQs involve a disjunction of polar questions (CPs). However, although a yes/no interrogative CP in Croatian obligatorily involves the interrogative clitic *li*, in an AQ, this clitic can only appear in the first disjunct, not in the second, as in (31). This is reminiscent of the situation in Turkish.

31. a. Da *li* Petar prodaje auto ili Marija diže kredit?
   that Q Petar sells car or Marija lifts loan
   ‘Is Petar selling the car or is Marija taking a loan?’

   b. *Da *li* Petar prodaje auto ili (da) *li* Marija diže kredit?
   that Q Petar sells car or that Q Marija lifts loan

Moreover, at least in some languages, there is overt evidence that AQs involve a disjunction of CPs (contra Han and Romero 2004a, b), as shown below by examples from English, where the fronted auxiliary appears in both disjuncts, and Japanese and Korean, where the question particle may show up on the verb in each disjunct.
32. a. Did John drink wine or did he drink beer?
   b. Taro-wa kohii-o non- da- no ocha-o non- da- no? Japanese
      Taro.TOP coffee.ACC drink.PAST.Q tea.ACC drink.PAST.Q (Uegaki 2013: 5)
      ‘Did Taro drink coffee or tea?’
      Chelswu.NOM coffee.ACC drink.PAST.Q if-not tea.ACC drink.PAST.Q (H&R 2004a)
      ‘Which of these two things did Chelswu drink: coffee or tea?’

It is therefore worth considering whether examples in (29) are ill-formed due to the lack of 
C⁰ position within the disjuncts, but due to some independent fact about Turkish grammar.

Indeed, the data in (33) below suggests that the first disjunct (and by the Law of the Coordination 
of Likes (Williams 1981), the second one as well) does contain the C⁰ position. They show that 
ml with a WS interpretation actually can appear on the verb in the first disjunct, as long as it 
doesn’t appear on the verb in the second disjunct.

33. Ahmet arabayi satti mi (yoksa) Hasan kredi mi aldr?
   Ahmet car.ACC sold Q not-if Hasan loan Q took
   ‘Did Ahmet sell the car or Hasan take a loan?’

Thus, the problem with the examples in (29) might not lie in their syntax. It is possible that the 
problem is in the intonation.

Göksel and Kerslake (2005) state that a polar question with ml involves a high rise in the 
tonation just before ml, followed by falling intonation.

The same source states that in an AQ, each alternative has a high rise followed by a fall, 
sometimes with a rise in the juncture point between the two alternatives.

Kornfilt (1997) states that in a polar question, with ml on the predicate, as in (26a), the stress 
falls on the predicate, followed by a drop in the pitch immediately after the intonation peak.

Kornfilt also discusses contrastive stress, stating that in contrastive constructions, the pitch is 
higher, and the drop in pitch after the stress is more pronounced.

It seems to me that an AQ with WS reading and ml on the verb in each disjunct require:

- Each disjunct to be pronounced with the intonation of the polar question, so a rise on the 
predicate, followed by a fall on ml, and
- The drop in pitch to be more audible after the focused constituent (the TP), as required by 
the contrastive intonation (since the two TPs are being contrasted).

It is possible that not both of these requirements can be met, which might explain why such 
questions are ill-formed.
If this is on the right track, we might have a way of reconciling the possibilities of \( ml \) placement in AQ (compared to polar questions) with the claim that the disjuncts are as big as CPs.

VI. **Conclusion**

In this talk, I presented evidence for the analysis of AQs in Turkish on which they involve a disjunction of clauses. I argued for this claim based on the extraposition possibilities of the second disjunct in both matrix and embedded AQs.

Finally, I discussed the actual size of the disjuncts in an AQ. We have seen that there is evidence both for and against the claim that disjuncts in a Turkish AQ are CPs. I offered no definitive answer to this question. Instead, I speculated that if the disjuncts in an AQ are indeed CPs, the impossibility of \( ml \) to appear on the verb is a result of conflicting requirements on the intonation that such a question would pose.
References
Uegaki, Wataru. 2013. Japanese alternative questions are disjunctions of polar questions. Ms. MIT.