

A-not-A Questions in Turkish

Aydoğan Yanılmaz

aydogan.yanilmaz@stonybrook.edu

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Abstract

This paper presents a formal analysis for A-not-A questions in Turkish by comparing and contrasting the similar structure in Chinese. When compared to the A-not-A questions in Chinese, Turkish A-not-A questions present a rigid range of choices. Closer investigation into the syntax of A-not-A questions reveal that there are certain syntactic constraints which eventually lead to the possibility or impossibility of various types of A-not-A questions between two languages.

1 Introduction

Even though they stand on the opposite ends of morphological classification, Chinese and Turkish have certain striking common grounds in the realm of questions. For instance, it is well known that Chinese and Turkish are *wh-in-situ* languages. Furthermore, in both languages, yes/no questions are expressed through question particles namely *-ma* in Chinese (1) and *-mI*¹ in Turkish (2):

(1) Ni xihuan pingguo **ma**?
YOU LIKE APPLE **Q**
'Do you like apples?' (Chinese)

(2) ² Sen elma sev-iyor **mu-sun**?
YOU APPLE LIKE-PRES **Q-2SG**
'Do you like apples?' (Turkish)

Despite having been unnoticed in the literature so far, another type of morphosyntactic similarity within the domain of questions between Chinese and Turkish can be found in the structure of the embedded yes/no questions. Looking at the examples below (3a) and (3b), one may easily observe that both languages make use of a shared strategy in embedded yes/no questions.

¹Upper case vowel indicates the variation that could occur in the vowel choice depending on the vowel harmony

²**Abbreviations:** Acc=Accusative, Agg=Agreement, Aux=Auxiliary, Conj=Conjunction, CONV=Converb, DAT=Dative, (-)Fut= Non-Future Tense, Gen=Genitive, MOD=Modality, Neg=Negation, Past=Past Tense, PL=Plural, Pres=Present Tense, Q=Question morpheme, sg=Singular

- (3) a. Wo xiang zhidao [ta **xihuan bu xihuan** ni].
 I WANT KNOW HE **like not like** YOU
'I wonder whether he likes you' (Chinese)
- b. Ben [o-nun sen-i **sev-ip sev-me-di-ğ-i-ni** merak
 I HE-GEN YOU-ACC **like-CONJ like-Neg-(-)FUT-AGG-ACC** WONDER
 ed-iyor-um.
 AUX-PRES.1SG
'I wonder whether he likes you' (Turkish)

As the bolded elements in (3a) and (3b) show, in order to express embedded yes/no questions both languages essentially require two copies of the same predicate (*xihuan* in Chinese and *sev* in Turkish) with negation on the second copy. Although it is obvious that there are some morphosyntactic differences such as the form of the negation (i.e., as a free morpheme in Chinese yet as a bound morpheme in Turkish) and the presence of a verbal conjunct in Turkish, and phonological differences such as the availability to drop any syllable of the first copy except for the first syllable in Chinese (...[*ta xi bu xihuan ni*]), it is crucial to note that in both languages the presence of the both copies and negation are obligatory to convey the same interpretive effect of this structure which has traditionally been called “A-not-A” questions in Chinese linguistics literature. Drawing on the apparent structural parallelism, in this paper I will refer to the equivalent structure in Turkish as “A-not-A” questions.

The syntactic structure of “A-not-A” questions in Chinese has received a great deal of attention in both descriptive and theoretical studies, which is discussed in section 2; nevertheless, to my knowledge no analysis has been put forward for the analogous structure in Turkish. This paper attempts to unearth the structural configuration of “A-not-A” questions in Turkish. The primary proposal suggested is that that “A-not-A” questions in Turkish are essentially composed of mixed categories (Borsley and Kornfilt, 2000) and thus syntactically realized within a coordinate structure. More specifically, it is claimed that the complex syntactic structure of “A-not-A” questions in Turkish involves A' movement of the arguments and adjuncts of the each νP conjunct. There seems to be convincing evidence from NPI-licensing and VP-adverbs for this proposal. The analysis suggested in this paper correctly predicts the rigid context of “A-not-A” types when compared to that of Chinese.

1.1 Puzzles

Descriptive comparisons of the “A-not-A” questions in both languages appear to yield some interesting contrasts which lead to more specific theoretical questions some of which explored in this study. Let us begin by introducing the types of “AB-not-A” questions.

In Chinese “A-not-A” questions, one of the copy or even both of the copies can cooccur with their internal arguments or adjuncts, which have conventionally labelled as “B”. Thus, when the first copy occurs with any sort of “B” then this type is called “AB-not-A” (4a), however, if the second copy has “B” then this type is labelled as “A-not-AB” (4b) or

(4) a. Ni **qu** xuexiao **bu qu**? (AB-not-A)
 YOU **go** SCHOOL **not go**

'Do you go to school?'

b. Ta **xihuan bu xihuan** zheben shu? (A-not-AB)
 HE **like not like** THIS BOOK

'Does he like this book?'

One immediate main contrast between “A-not-A” questions in Chinese and “A-not-A” questions in Turkish is that “A-not-A” questions can occur as matrix questions as illustrated in different types in Chinese (4); nevertheless, in Turkish they have limited context since they cannot function as matrix questions (5):

(5) *Arda seni sev-ip sev-mi-yor?
 ARDA YOU LIKE-CONJ LIKE-NEG-PRES.3SG

'Does Ali like you (or doesn't he like you)?'

Another significant contrast is found in the distribution of the types of “A-not-A” in both languages. As pointed out above “A-not-AB” and “AB-not-A” types are possible in Chinese, in addition to that “AB-not-AB” type where each copy retains its arguments is also possible in Chinese. All these three types can also occur in embedded questions as well. However, in Turkish “A-not-A” questions only “AB-not-A” type (3b) is possible while “A-not-AB” (6) and “AB-not-AB” (7) types yield ungrammaticality:

(6) *Ben [o-nun **sev-ip sen-i sev-me-diğ-i-ni** merak
 I HE-GEN **like-Conj you-Acc like-Neg-(-)FUT-AGG-ACC** WONDER
 ed-iyor-um
 AUX-PRES.1SG

'I wonder whether he likes you'

(7) *Ben [o-nun sen-i sev-ip o-nun sen-i
 I HE-GEN YOU-ACC LIKE-CONJ HE-GEN YOU-ACC
 sev-me-diğ-i-ni] merak ed-iyor-um
 LIKE-NEG-(-)FUT-AGG-ACC WONDER AUX-PRES.1SG

'I wonder whether he likes you'

Observing the stricter contexts of ‘A-not-A’ questions in Turkish, it would be ideal to do a comparative syntactic analysis between the two languages. However, given that there has been no previous work in Turkish for this structure, our main concern is to offer an analysis for the very structural representation of this configuration.

The outline of the paper is as follows: Section 2 discusses the literature on Chinese “A-not-A” questions, Section 3 introduces basic descriptive morphosyntactic properties of “A-not-A” questions in Turkish, Section 4 presents previous analysis of complementation in Turkish, Section 5 includes the analysis of Turkish “A-not-A” questions and Section 6 is the conclusion.

2 A-not-A questions in Chinese

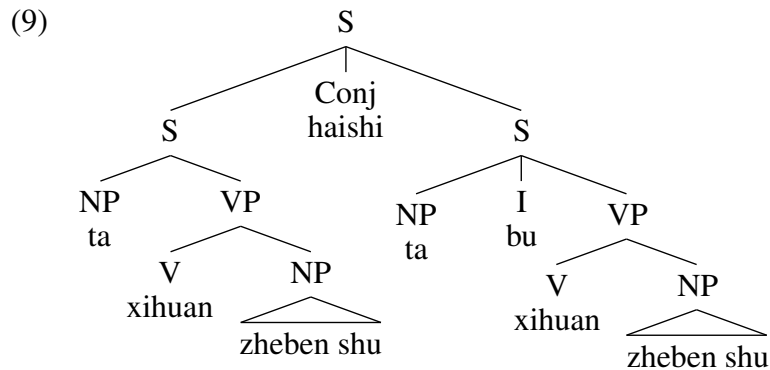
There have been various analyses of A-not-A questions in Chinese. One may categorize them as the traditional accounts, PF based accounts and full syntactic accounts.

2.1 A-not-A Qs as a type of disjunctive questions

Traditionally A-not-A questions have been assumed to derive from disjunctive questions (8) with some sort of deletion (Li and Thompson, 1979).

- (8) ta xihuan zheben shu (haishi) ta bu xihuan zheben shu?
 HE LIKE THIS BOOK OR HE NOT LIKE THIS BOOK
 ‘Does he like this book (or) doesn’t he like this book?’

The underlying structure for this proposal involves the presence of the disjunction *haishi* which coordinates two finite sentences second of which contains negation as an inflectional element, this is illustrated in (9):

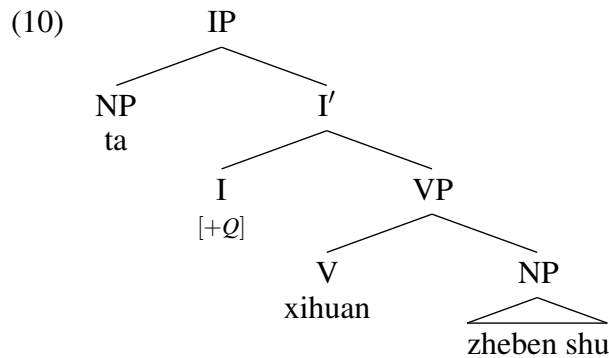


This analysis takes “AB-not-AB” type as the basic structure from which other types are transformed through the obligatory deletion of the disjunctive morpheme and the optional deletion of the phrases within either conjunct.

2.2 PF-analysis

Huang (1982, 1991) argue against the traditional account of A-not-A questions by showing that A-not-A questions cannot be the result of coordinate deletion to a disjunctive question. He claims that “AB-not-A” violates an essential coordination constraint. Specifically, he points out that “AB-not-A” type disobeys the Directionality Constraint (Ross, 1968) in that the deletion does not go forward in this type in spite of the fact that the identical elements are on the left branch of the coordinate structure.

Dispensing with the structure in (9), Huang (1991) offers the analysis in (10) for the formation of A-not-A questions:



This analysis ascertains that there is an abstract Q morpheme hosting the inflectional head position. A-not-A questions, however, are formed not in overt syntax but at PF by a morphological rule which transforms the combination of the abstract Q morpheme and the following VP into a single VP which contains the copies and the negation. The formal rule for this application is shown in (11):

- (11) A-not-A Reduplication:
 $[+A\text{-not-A}] [{}_{VP} XY] = [{}_{VP} [[X] [bu X]] Y]$

After the reduplication gets executed at PF, the derivation proceeds with movement of the abstract Q morpheme to C at LF to obtain the question reading. He shows that this analysis captures the ungrammaticality of (12) since both the wh and A-not-A morpheme cannot be raised to CP at LF:

- (12) *Shei lai-bu-lai?
 WHO COME-NOT-COME
 *Who will come or not?'

Huang also argues there are different ways for the abstract Q morpheme to be realized phonetically in Chinese dialects. In Mandarin, it is realized by a reduplication rule. In Taiwanese, on the other hand, it is realized by *kam* morpheme.

2.3 Full syntactic analysis

In addition to the PF analysis of A-not-A question, there are also analysis (Lin (1994); Hsieh (2001)) which offer a full syntactic account of A-not-A questions. What both Lin (1994) and Hsieh (2001) observe is that structure that Huang (1991) suggests in (10) cannot be right. Lin (1994) claims that [+Q] morpheme cannot be the target of long distance wh-movement at LF since only XPs can undergo wh-movement. Moreover, she maintains that negation must be syntactically present in A-not-A questions due to the fact that there are certain scope differences between disjunction and negation as shown in (13):

- (13) Li tzaiya Mary kam e lai (?)
 YOU KNOW MARY KAM WILL COME
 ‘You know whether Mary will come or not’

‘As far as you know, will Mary come or not?’

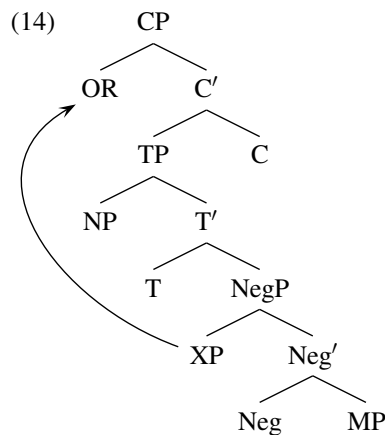
Embedded-interrogative reading:

‘You know [WILL[(COME)(Mary)] ∨ ¬ [WILL[(COME)(Mary)]]]

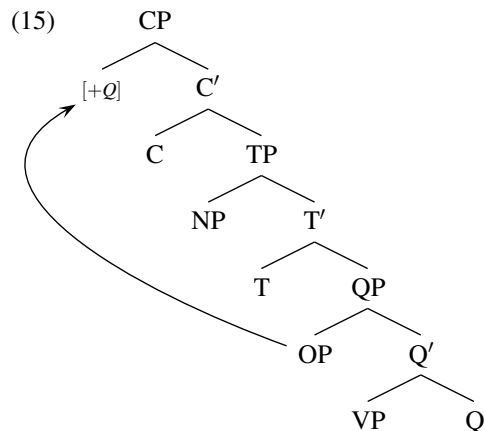
Matrix interrogative reading:

[You know[WILL[(COME)(Mary)]]] ∨ [You know[¬WILL[(COME)(Mary)]]]

In the matrix interrogative reading, disjunction takes a wide scope; in embedded-interrogative reading disjunction takes a narrow scope. Lin attributes this contrast to the presence of negation as a functional category in syntax. She assumes disjunction is in Spec, NegP and moves to Spec, CP yielding an interrogative interpretation:



Hsieh (2001) assumes that negation is syntactically present in A-not-A questions. Unlike Lin (1994), Hsieh suggests a Q(uestion)P whose head has [+WH] feature which moves to Spec, CP for feature checking.



What is common in both full syntactic analysis and PF-based analysis is that the formation of A-not-A questions are taken to be similar that that of wh-questions in that there is an A' movement at LF. In Huang's analysis, the moved element is the abstract Q morpheme, in Lin's analysis disjunction operator moves and in Hsieh's analysis, the moved element is the [+WH] feature that is being moved to Spec, CP.

3 Describing *-(y)Ip...-mA*

In Turkish, A-not-A questions can occur in various syntactic contexts such as complement of verbs, predicative adjectives, postpositions and nominals that have a question embedding feature. When selected by a verb, A-not-A questions are realized in embedded nominal-like clauses which contain two identical verbs, the first one affixed with the coordinating suffix *-(y)Ip* and second one with the verbal negation marker *-mA* along with other inflectional suffixes such as tense, agreement and case:

- (16) Ahmet Ali-nin gel-ip gel-me-yeceğ-i-ni sor-du.
 AHMET ALI-GEN COME-CONJ COME-NEG-FUT-AGG-ACC ASK-PAST.3SG
Ahmet asked whether Ali would come

However, verbal functional categories *modality* and *voice* are merged to the verb in both copies:

- (17) Ahmet Ali-nin gel-ebil-ip gel-e-me-yeceğ-i-ni sor-du.
 AHMET ALI-GEN COME-MOD-CONJ COME-MOD-NEG-FUT-AGG-ACC ASK-PAST.3SG
Ahmet asked whether Ali could come

- (18) Ahmet kitab-ın sat-**il**-ip sat-**il**-ma-dıĝ-ı-nı
 AHMET BOOK-GEN SELL-**PAS**-CONJ SELL-**PAS**-(-)FUT-AGG-ACC
 sor-du.
 ASK-PAST.3SG

Ahmet asked whether the book would be sold

Nouns and predicative adjectives that can select A-not-A complements can take either the nominal suffix to express non-factivity or the verbal suffix to express factivity on the second copy; however, as (19) shows when A-not-A questions occur as a complement of a postposition, they are not marked with the verbal inflection as in (X). Instead the non-factive nominalizing suffix *-mA*³ is used:

- (19) Ben uyu-yup uyu-ma-ma arasında kal-dı-m.
 I SLEEP-CONJ SLEEP-NEG-(-)FUT BETWEEN STAY-PAST-1SG
'I was undecided whether to sleep or not'

3.1 What is the role of *-(y)Ip*?

It is obvious that one of the key elements of in the structure of Turkish A-not-A questions is the presence of the suffix *-(y)Ip* attached to the first copy. It is natural to inquire about the syntactic and semantic contribution of this suffix in the overall architecture of A-not-A questions. Before proceeding to that, it might be noteworthy to describe its role in Turkish.

Reference grammars of Turkish (Kornfilt, 1997; Lewis, 2001; Göksel and Kerlake, 2005) demonstrate that *-(y)Ip* is a conjunction morpheme which can only conjoin verb phrases which are semantically and syntactically of equal status respect to tense/aspect/modality (Göksel and Kerlake, 2005) and *-(y)Ip* represents the very same verbal inflection suffixes that occur in the second conjunct:

- (20) Sinemaya gid-ip güzel bir film seyret-meli-yiz
 CINEMA-DAT GO-CONJ NICE A FILM WATCH-MOD-1PL
'We had better go and watch a nice movie'

- (21) Ali okul-a gid-ip ev-e gel-di.
 ALI SCHOOL-DAT GO-CONJ HOME-DAT RETURN-PAST-2SG
'Ali went to school and returned home'

By going over examples like (20) and (21) descriptive grammars demonstrate that *-(y)Ip* has a conjunctive function while conjoining the verb phrases. Diachronic studies (Erdal, 2004; Csató and Johanson, 1998) converge on the same conclusion, as well. In A-not-A questions, however, *-(y)Ip* cannot be not a conjunction suffix as both conjuncts cannot be true simultaneously (thus leading to contradiction) instead it serves as a disjunctive suffix. I assume that *-(y)Ip* has ' $\lambda Q \lambda p [Q(p)$

³Note that this suffix is homophonous with the verbal negation marker

$\vee \neg Q(p)$]’ interpretation where it conjoins the positive and the negative value of the main proposition. This analysis of $-(y)Ip$ is consistent with Karttunen’s (1977) semantics of yes/no questions where he claims that yes/no questions contain the positive and negative values of the question. Notice that there is such overt presence of a disjunctive suffix in Chinese A-not-A questions. This might in fact be one of the reasons of the availability of both direct and indirect question readings when A-not-A questions are selected by a both interrogative and declarative complement taking predicates such as ‘know.’ The equivalent of (13) in Turkish does not yield the same interpretive possibilities:

- (22) Sen Meryem’in gel-ip gel-me-yeceğ-i-ni bil-iyor-sun.
 YOU MERYEM-GEN COME-CONJ COME-NEG-FUT-AGG-ACC KNOW-PRES-2SG
‘You know whether Mary will come or not’

As illustrated in (22), Turkish A-not-A questions do not behave like their counterparts in Chinese and Taiwanese in that the disjunction cannot take wide scope which thus prohibits matrix interrogative reading in Turkish. Undoubtedly, there is a close interaction between the syntax of this structure and their semantics. In order to scrutinize the structural configuration of Turkish A-not-A question, we must first have a coherent theory of how complementation works in Turkish, which the next section presents.

4 Complementation in Turkish

4.1 Description

There are essentially two types of complementation in Turkish, which are traditionally labelled as finite complement clauses and nominalized non-finite complement clauses. I will refer to the former type as CP complement clauses on grounds that they can be headed by C heads such as *diye* ‘that’ which is left in accordance with the head directionality of Turkish and *ki*⁴ ‘that’ which is a borrowing Persian and right branching. I will latter type as DP complement clauses basically because of their morphosyntax. Given that A-not-A questions are only allowed in DP complement clauses, I will focus on the descriptive and formal properties of nominal like complement clauses. Kural (1994) shows that DP complement clauses have the following features: (i) Complement clause subject bears Genitive case, (ii) Subject-verb agreement is in the nominal paradigm (found in possessives) and (iii) Complement clauses are and must be case-marked. This is shown in (23):

- (23) Arda [uşağ-ın oda-yı sev-diğ-i-ni] söyle-di
 ARDA servant-Gen ROOM-ACC LIKE-(-)FUT-Agg-Acc SAY-PAST.3SG
‘Arda said that the servant (has) liked the room’

As suggested by Kural, (23) shows that the subject of the embedded clause *uşağ* is marked with genitive which agrees with its clausemate verb. The embedded verb is inflected with the matching agreement suffix and then marked with accusative case. Apart from the agreement and the case suffixes the verb is also inflected with another suffix, namely *-dik*. This suffix, along with *AcAK*,

⁴This type of complementation is non-canonical and is usually found in formal registers.

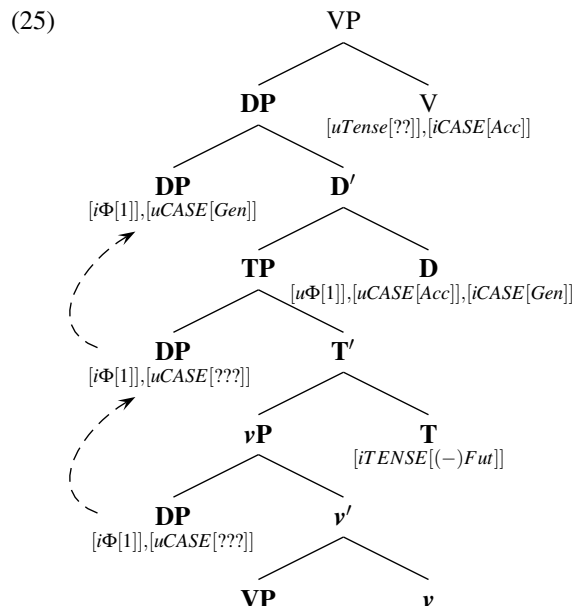
have frequently been treated as a nominalizer (Kornfilt, 2003, 2007; Keskin, 2009). However, following Kural (1994) I assume that both of these markers are able to convey certain temporal distinction that occur in past and that do not. Observe the effect of time adverbials in the examples below:

- (24) a. #Ben Ali'nin gelecek hafta uyu-duğ-u-nu bil-iyor-um.
 BEN ALI-GEN NEXT WEEK SLEEP-(-)FUT-AGG-ACC KNOW-PRES-1SG
'I know that Ali slept next week'
- b. #Ben Ali'nin geçen hafta uyu-yacağ-ı-nı bil-iyor-um
 BEN ALI-GEN LAST WEEK SLEEP-FUT-AGG-ACC KNOW-PRES-1SG
'I know that Ali will sleep last week'

As the examples (24a-b) show, it is not viable to ignore the temporal dimension of the so-called nominalized embedded verb. Indeed, the contrast exhibited in the infelicitious readings of (24a-b) clearly show that the temporal aspect of both *-dIK* and *AcAK* must be encoded in the syntax of the DP complement clauses. A detailed proposal for the syntax of the DP complement clauses is presented in the next session.

4.2 *Embedded complement clauses by Agree and M*

The analysis suggested here assumes that the complex morphosyntactic structure of the complement embedded clauses result from (successive) head movement of the verb head to the D head through T. Building on (Borsley and Kornfilt, 2000) and Kornfilt (2001, 2003, 2007) who have argued that the subject of the embedded clause moves to a higher functional category for case reasons (i.e., to check Genitive case) and Kennelly (2004) who first proposed that embedded complement clauses are DPs, I offer the structure in (25) for complement embedded clauses in Turkish. The primary motivation of this structure is the Agree based framework for case checking offered in Chomsky (2001, 2008) where it is argued that the structural case on DPs is valued through an Agree relation between the probe which and the goal. In the proposed structure, the D head functions as the probe for Genitive case and goal for the accusative case that gets checked by the V probe. It should be noted that T head in the embedded clause is a *defective* T in that it does not function as the probe for case or Φ features. Although it does have finer temporal distinctions (Kornfilt and Whitman, 2011) as the matrix T, it nevertheless is projected with the interpretable tense feature and checks the uninterpretable T feature on the embedded verb.



5 Proposal

Now that we have laid out the apparent descriptive facts and offered an analysis for the DP complement clauses, we can go back to our initial research questions and start investigating the syntax of A-not-A questions in Turkish and exploring the dynamics behind the impossibility of certain types if A-not-A questions.

One appealing analysis for Turkish A-not-A questions could be to adopt Huang’s PF analysis for the formation of the A-not-A questions. One can simply assume that A-not-A questions in Turkish are created by a specific reduplication rule similar to the one in (11):

- (26) A-not-A Reduplication (for Turkish):
 $[+A\text{-not-A}] [{}_{VP} XY] = [{}_{VP} [[X\text{-Ip}] [X\text{-mE}]] Y]$

Despite its elegance in simplicity, adopting Huang’s analysis would be untenable due to certain serious empirical challenges that Turkish A-not-A questions pose. First of all, as mentioned in the section three, the formation of Turkish A-not-A questions require some of verbal functional categories to be merged before the merge of negation and disjunction. This categories cannot be assumed to be applied to a already set morphological rule; instead, complex structures such as passives and causatives must be generated within a structure dependent domain where necessary theta roles can be assigned rather than in a rigid word formation rule. Apart from this, there is sufficient convincing evidence from NPI licensing that both disjunction and negation must be present in overt syntax during the derivation of A-not-A questions in Turkish.

Developing (25), I offer the structure in (29) for Turkish A-not-A questions in embedded contexts. In this structure, I follow Lin (1994) and Hsieh (2001) in arguing that negation is syntactically

realized in the derivation of A-not-A questions moreover I also assume that disjunction has its own projection as well. $-(y)Ip$ is the head of &P which conjoins both affirmative and negative polarity (ΣP) (Laka, 1990). $-(y)Ip$ has a disjunctive function in this context, as illustrated before. Since $-(y)Ip$ already occupies the $\&^0$ position, the disjunction morpheme *veya* ‘or’ cannot occupy this position (27):

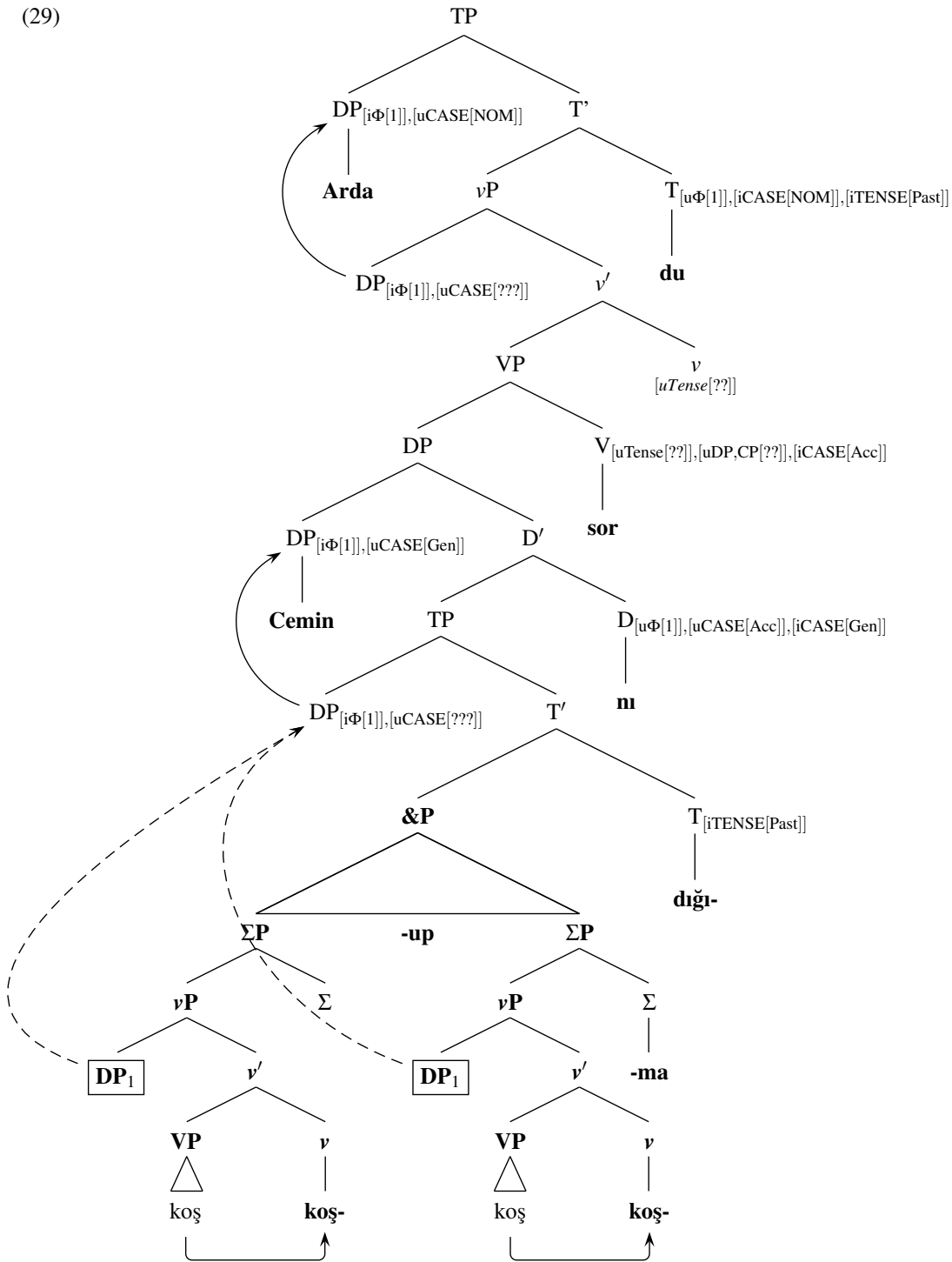
- (27) Arda [Cem’in koş-up (*veya) koş-ma-dı-ğ1-n1]
 ARDA CEM-GEN RUN-**Conj** (***or**) RUN-NEG-(-)FUT-AGG-ACC
 sor-du
 ASK-PAST.3SG
 ‘Arda asked whether Cem has/had run’

With respect to the conjunct agreement, I follow (Johannessen, 1996) who claims that head final languages have right-hand specifiers ($[\&P [\& [DP2] [\&] [DP1]]]$) in coordinate structures. The features of the highest conjunct (DP1) can percolate up to the &P and then features on T/V can AGREE with the highest conjunct. This explains the reason why $-(y)Ip$ is conjoining VPs which are of semantically equal status with respect to tense/aspect/modality. This is observed in the syntax of A-not-A questions as well since the ϕ features, tense and case appear on the rightmost conjunct. The same features cannot be attached to the leftmost conjunct only (28a) or simultaneously with the rightmost conjunct (28b)

- (28) a. *Arda [Cem’in koş-up-duğ-u-nu koş-ma] sor-du
 ARDA CEM-GEN RUN-CONJ-(-)FUT-AGG-ACC RUN-NEG ASK-PAST.3SG
- b. *Arda [Cem’in koş-up-duğ-u-nu koş-ma-dı-ğ1-n1]
 ARDA CEM-GEN RUN-CONJ-(-)FUT-AGG-ACC RUN-NEG-(-)FUT-AGG-ACC
 sor-du
 ASK-PAST.3SG

Furthermore, I argue that the external argument of the copied predicate originates under vP where it receives its theta role and then moves to Spec, DP to get its case feature valued for genitive by D.

(29)



5.1 Internal arguments

After suggesting an analysis for intransitive predicates, we can extend our analysis for transitives and observe the syntactic behaviour of the internal argument. Notice that simultaneous presence

of the agent and the theme of the predicate within each ΣP (AB-not-AB) yields ungrammaticality (30).

- (30) *Hasan [uşağ-ın oda-yı temizle-yip uşağ-ın oda-yı
 HASAN servant-Gen room-Acc CLEAN-CONJ servant-Gen room-Acc
 temizle-me-di-ği-ni] sor-du
 CLEAN-NEG-(-)FUT-AGG-ACC ASK-PAST.3SG

It is also impossible to move the external argument and leave the internal arguments in their theta position (31):

- (31) *Hasan [uşağ-ın oda-yı temizle-yip oda-yı
 HASAN SERVANT-GEN room-Acc CLEAN-CONJ room-Acc
 temizle-me-di-ği-ni] sor-du
 CLEAN-NEG-(-)FUT-AGG-ACC ASK-PAST.3SG

The facts shown in (30) and (31) illustrate that these constituents must have been extracted from both conjuncts. Since the only way to achieve a simultaneously raising is through Across-the-Board (ATB) extraction, I argue that the movement of arguments of the predicates within A-not-A questions is made possible through ATB.

5.2 Motivation for ATB

NPIs:

The analysis that is proposed in this study for A-not-A questions in Turkish correctly predicts NPI licensing⁵ (32) due to the fact that the NPI *kimse* ‘anybody’ is c-commanded by the negation inside ΣP which can take only local scope.

The presence of negation in one conjunct is sufficient to license the NPIs in either subject position (32) or the object position (33)

- (32) Arda kimse-nin Tuba-yı sev-ip sev-me-di-ği-ni
 ARDA anybody-Gen TUBA-ACC LIKE-CONJ LIKE-Neg-(-)FUT-AGG-ACC
 sor-du
 ASK-PAST
 ‘Arda asked whether anybody likes Tuba’

- (33) Arda Tuba-nın kimse-yi sev-ip sev-me-di-ği-ni
 ARDA TUBA-GEN anybody-Acc LIKE-CONJ LIKE-Neg-(-)FUT-AGG-ACC
 sor-du
 ASK-PAST
 ‘Arda asked whether Tuba likes anybody’

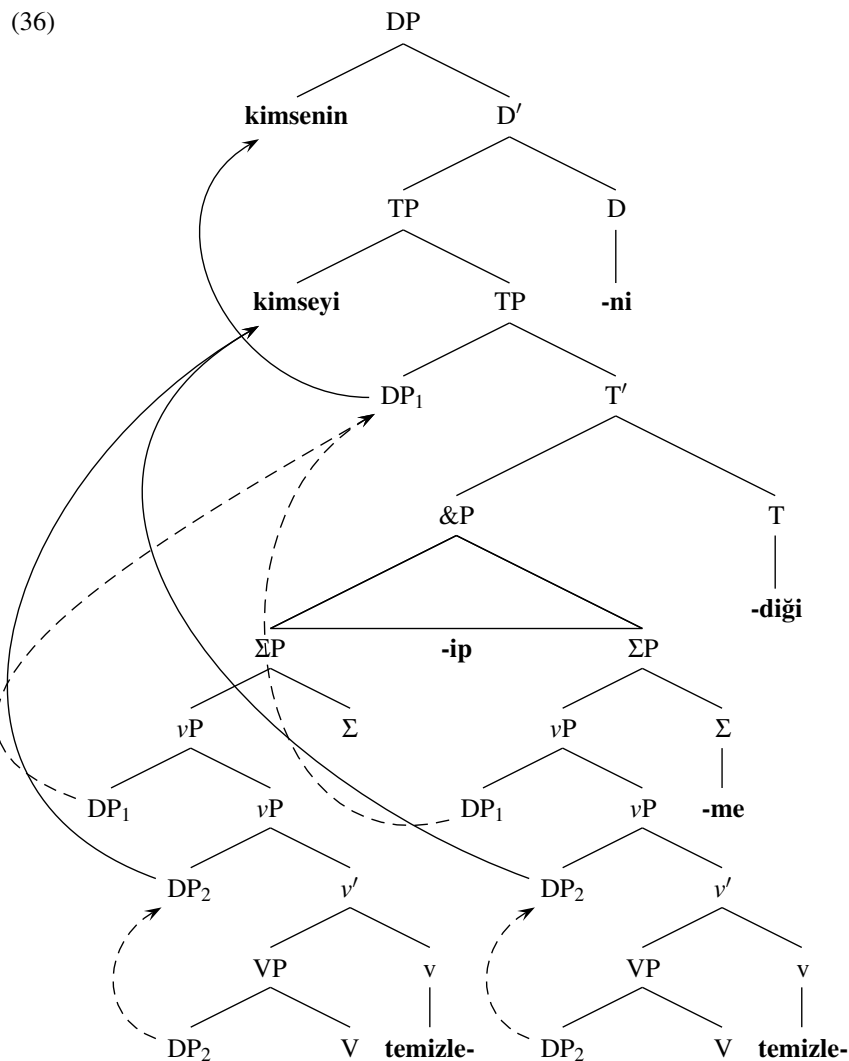
⁵(Keleşir, 2001),(Yanılmaz, 2009) show that NPIs in Turkish are licensed solely by the presence of an overt negation or yes/no question marker

Note that it is the second conjunct that has the licenser however the NPI cannot cooccur with it (34), which suggests that they must move as indicated in (36)

- (34) *Arda Tuba-nın sev-ip kimse-yi sev-me-diğ-i-ni
 ARDA TUBA-GEN LIKE-CONJ ANYBODY-ACC LIKE-NEG-(-)FUT-AGG-ACC
 sor-du
 ASK-PAST
 ‘Arda asked whether Tuba likes anybody’

The same negative marker cannot license the NPIs outside its c-command domain (35):

- (35) ***Kimse** Tuba-nın Ali-yi sev-ip sev-me-di-ğ-i-ni
anybody TUBA-GEN ALI-ACC LIKE-CONJ LIKE-**Neg**-(-)FUT-AGG-ACC
 merak ed-iyor
 WONDER AUX-PRES.3SG



As shown in the tree (36), both the subject and the object of the embedded clause move as Across-the-board extraction. The subject is extracted to Spec,TP first and then is raised to Spec, DP. The object, however, first object-shifts and moves to the edge of vP and then it adjoins to TP. It is apparent that the movement of the subject or the object NPI are A' movement, thus they can reconstruct and be licensed at LF.

5.3 *ATBed VP adverbs*

NPI-adverbs:

The syntactic position of VP adverbs like *hızlı* 'quickly' indicate obligatory object shift in Turkish (Erguvanli, 1984), (Tosun, 1999).

- (37) a. *Arda [VP hızlı [VP bu kitabı oku-yor]]
 ARDA QUICKLY THIS BOOK READ-PRES.3SG
 'Arda is reading this book quickly'
- b. Arda **bu kitabı_i** [VP hızlı [VP *t_i* oku-yor]]
 ARDA **this book** QUICKLY *t* READ-PRES.3SG
 'Arda is reading this book quickly'

As predicted by the contrast above, the same effect is observed with the VP-NPI-adverbs. Both the subject and the object of the embedded clause have been moved to the left of the NPI-adverb *hiç* 'ever' in (38):

- (38) Hasan [uşağ-ın oda-yı **hiç** temizle-yip temizle-me-diğ-in-i]
 HASAN SERVANT-GEN ROOM-ACC **ever** CLEAN-CONJ CLEAN-NEG-(-)FUT-AGG-ACC
 sor-du
 ASK-PAST.3SG
 'Hasan asked whether the servant had cleaned the room ever'

Note the simultaneous presence of the NPI-adverb in both conjuncts is not allowed:

- (39) *Hasan [uşağ-ın oda-yı **hiç** temizle-yip **hiç**
 HASAN SERVANT-GEN ROOM-ACC **ever** CLEAN-CONJ **ever**
 temizle-me-diğ-in-i] sor-du
 CLEAN-NEG-(-)FUT-AGG-ACC ASK-PAST.3SG

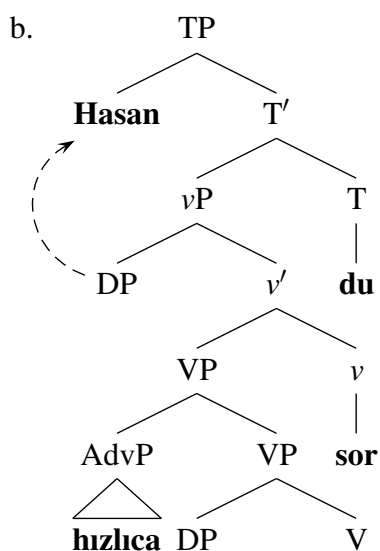
When the NPI-adverb is outside the DP domain, it can no longer be licensed:

- (40) *Hasan **hiç** [uşağ-ın oda-yı temizle-yip temizle-me-diğ-in-i]
 HASAN **ever** SERVANT-GEN ROOM-ACC CLEAN-CONJ CLEAN-NEG-(-)FUT-AGG-ACC
 sor-du
 ASK-PAST.3SG
 'Hasan asked whether the servant had cleaned the room ever'

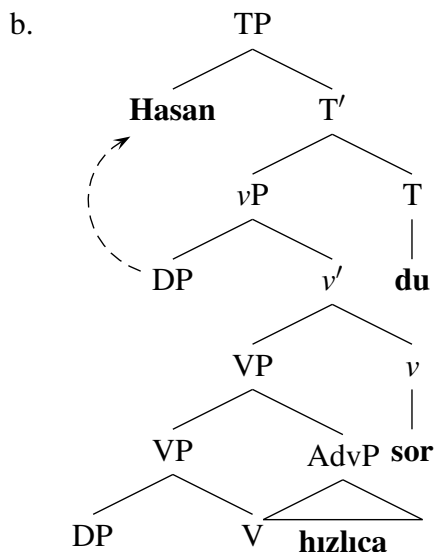
VP-adverbs:

Another piece of evidence for ATB movement of the arguments of the A-not-A predicates comes from VP-adverbs. The modificational force of the adverb *hızlıca* ‘quickly’ naturally depends on its syntactic position. When it is adjoined to VP of the main clause, then it modifies the main clause verb as in (41) and (42). In (41a) I assume that the adverb is left adjoined VP as shown in (41b) and in (42a) right adjoined as shown in (42b).

- (41) a. Hasan **hızlıca** [uşağ-ın oda-yı temizle-yip
 HASAN **quickly** SERVANT-GEN ROOM-ACC CLEAN-CONJ
 temizle-me-diğ-in-i] sor-du
 CLEAN-NEG-(-)FUT-AGG-ACC ASK-PAST.3SG
 ‘Hasan quickly asked whether the servant had cleaned the room ’



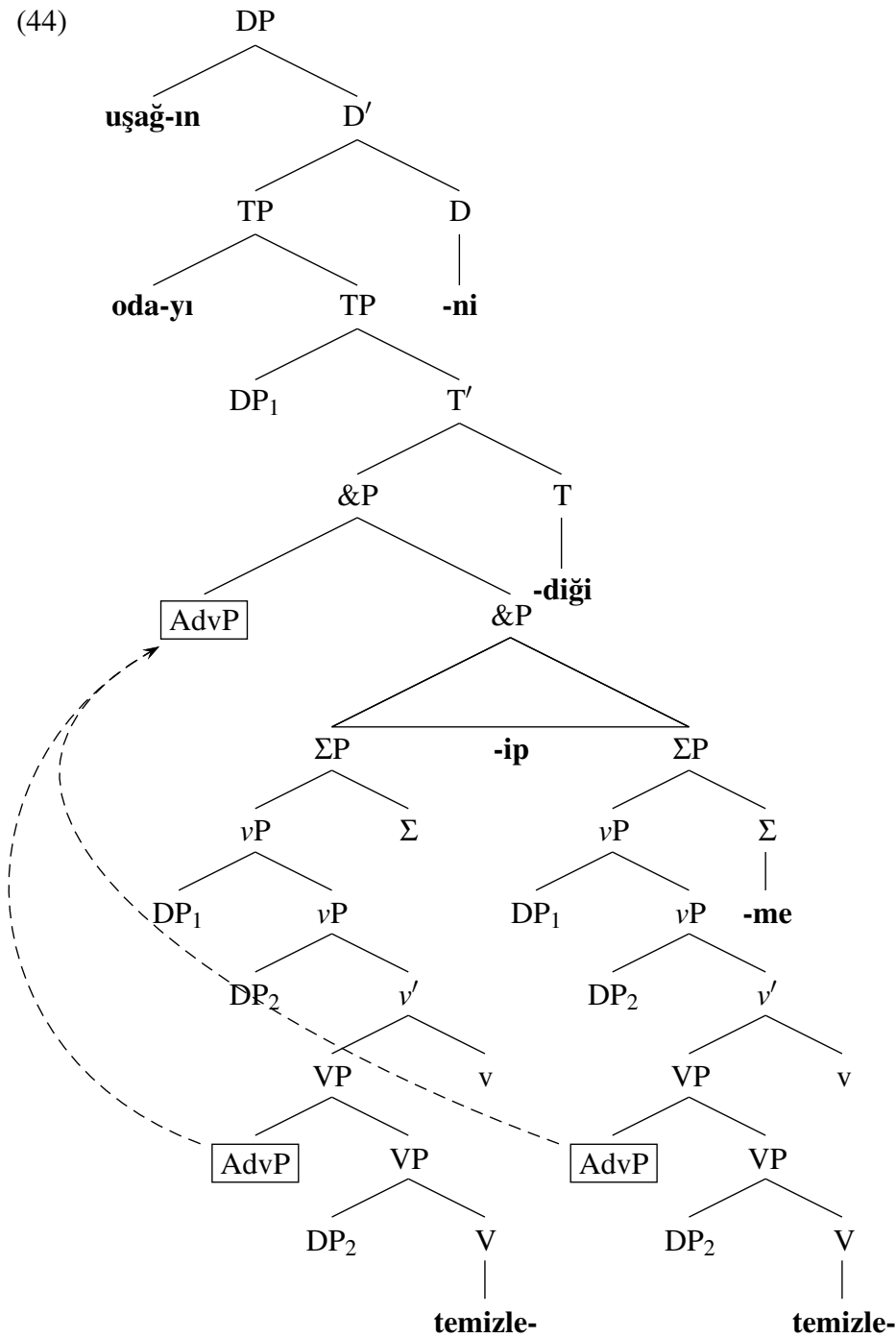
- (42) a. Hasan [uşağ-ın oda-yı temizle-yip temizle-me-diğ-in-i]
 HASAN SERVANT-GEN ROOM-ACC CLEAN-CONJ CLEAN-NEG-(-)FUT-AGG-ACC
hızlıca sor-du
quickly ASK-PAST.3SG
 ‘Hasan quickly asked whether the servant had cleaned the room ’



- (43) Hasan [uşağ-ın oda-yı **hızlıca** temizle-yip
 HASAN SERVANT-GEN ROOM-ACC **quickly** CLEAN-CONJ
 temizle-me-diğ-in-i] sor-du
 CLEAN-NEG-(-)FUT-AGG-ACC ASK-PAST.3SG
 ‘Hasan asked whether the servant had cleaned the room quickly’

In order for this adverb to modify the A-not-A predicates, there has to be no intervening elements which seem to suggest that the adverb must have originated as adjuncts to each VPs of A-not-A question and the it must have moved again in an ATB fashion to a higher functional category as shown in (44). Suppose that, there is no movement of the arguments of the verb then there cannot be the modification of the lower VP and the result becomes (41) or (42) which have a totally different meaning.

(44)



The constraints on NPI licensing and VP-adverbs paint a clearer picture with respect to the internal mechanism of Turkish A-not-A questions. Drawing conclusions from this, it is quite conceivable to argue that the each copy has its own phrasal level with its constituents. Furthermore, it seems quite clear that the certain elements within this phrasal level are bound to move in a systematic and and a orderly way.

5.4 Final Thoughts

The central question of this paper is to find out the language internal mechanism that bring about the formation of A-not-A questions in Turkish. In this paper, it is suggested that Turkish A-not-A questions occur within the positive and negative polarity phrases that are conjoined by an overt disjunction. Another significant inquiry of this paper was to scrutinize the underlying causes of the absence of certain types of A-not-A questions. The analysis suggested in (29) and (36) maintains that both the internal and the external arguments of each predicate within Polarity Phrases have to move obligatorily through ATB extraction. This mandatory movement accounts for the unavailability of A-not-AB (6) and AB-not-AB (7) types in Turkish. The third issue that is at stake in this paper is the obvious contrast between Chinese and Turkish in the availability of matrix A-not-A questions. Our current analysis does not have a coherent explanation for this. However, there are some possibilities. Firstly, as this study indicates Turkish A-not-A questions are essentially DPs even though their evolution involves various mixed categories. It might be the case that they are also concealed questions in the sense of (Heim, 1979). Since concealed questions cannot be matrix questions, A-not-A questions in Turkish cannot surface as matrix questions, either. Another possibility could be related to the syntax of the disjunction. As this paper has shown there are three key elements in the formation of A-not-A questions: (i) A, (ii) negation and (iii) disjunction. Both languages have overt access to As and to negation yet in Chinese, the disjunctive operator is not present in narrow syntax, the studies argue that there is LF movement of the disjunction to Spec, CP to check [+Q] feature/ to get question reading. However, in Turkish A-not-A questions, there is an overt disjunctive suffix which consistently has narrow scope and which does not seem to move at all. So the syntactic contrast of the disjunction might be the cause of the (un)availability of matrix A-not-A questions.

6 Conclusion

Both syntactic and semantic properties of Chinese A-not-A questions have been a hot topic in theoretical linguistics for more than 30 years. This paper has introduced a new set of A-not-A data from a genetically unrelated language but with astonishing similarities in the domain of questions. Furthermore, this study has proposed a syntactic analysis of A-not-A questions in Turkish. The analysis suggested in this paper provides corroborating evidence against a PF based reduplication rule for the formation of A-not-A questions.

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