

RHETORICAL YES/NO QUESTIONS

IN TURKISH

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Tlin Keeli

Boğaziçi University

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## Thesis Abstract

Tlin Keeli, “Rhetorical Yes/No Questions in Turkish”

This study investigates the factors that play a role in interpreting an utterance in the form of a yes/no question as a rhetorical question. The fact that pairs of utterances marked with the same syntactic marker (question particle *mI*) can be interpreted differently as belonging to an SQ and to an RQ in Turkish has raised the question of whether intonation can mark the function of these utterances. It has been noted in this study that RQs and SQs have different acoustic properties and subjects can identify the type of an utterance through these intonational cues.

With respect to the effect of the nature of the TAM markers on the interpretation of utterances as RQs, it has been noted that RQs marked with the aorist and future can be identified more correctly in comparison to utterances marked with the past tense. It has been proposed that in addition to the difficulty in asserting the opposite of a factual event, the prosodic properties of RQs marked with the past tense can also be responsible for the poor performance of subjects in identifying them.

With respect to the effect of the nature of the constituent that the question particle *mI* is cliticized to on the interpretation of utterances as RQs, it has been noted that RQs in which the particle *mI* follows the subject are identified significantly better than RQs in which the particle *mI* is cliticized to the verb.

To conclude, the fact that utterances in the same form (that of an interrogative) can be identified as RQs or SQs through their intonation supports the claim that intonation functions as a clause-typer in Turkish that marks the function of an utterance belonging to an information-seeking question or belonging to a declarative.

## Tez Özeti

### Tülin Keçeli, “Türkçe’de Evet/Hayırlı Retorik Sorular”

Bu çalışma, evet/hayır soru yapısındaki bir cümlenin retorik soru olarak algılanmasında etkili olan faktörleri incelemektedir. Türkçe’de aynı eki (*mI* soru eki) içeren cümle çiftlerinin standart soru ve retorik soru cümlesi anlamlarına gelebilmeleri, tonlamanın bu cümlelerin fonksiyonunu belirlemede etkili olup olmadığı sorusunu akıllara getirmektedir. Bu çalışmada, retorik soru ve standart soru cümlelerinin farklı akustik özelliklere sahip olduğu ve deneklerin duydukları cümlelerin hangi soru tipine ait olduğunu bu tonlamasal ipuçları sayesinde ayırt edebildikleri belirtilmiştir.

Kullanılan zaman/durum/biçim ekinin yapısının retorik soru anlamına etkisi olup olmayacağı konusunda, geniş ve gelecek zaman eklerine sahip retorik cümlelerin geçmiş zaman ekiyle ifade edilen cümlelerle kıyaslandığında daha iyi ayırt edilebildikleri görülmüştür. Gerçekleşmiş bir olayın aksinin iddia edilmesinin zorluğuna ek olarak, geçmiş zaman ekiyle ifade edilen cümlelerin tipinin belirlenmesindeki bu düşük performansın bu cümlelerin akustik özelliğinden kaynaklandığı savunulmuştur.

Retorik cümlelerin belirlenmesinde soru ekinin (*mI*) eklendiği ögenin etkisi olup olmadığı konusunda, soru ekinin özneden sonra geldiği cümlelerin soru ekinin eylemden sonra geldiği cümlelere kıyasla oldukça iyi belirlendiği görülmüştür.

Sonuç olarak, aynı sözdizimsel yapıdaki (soru yapısı) cümlelerin tonlamalarına bakılarak standart soru mu yoksa retorik soru mu olduklarının belirlenmesi, tonlamanın Türkçe’de “cümle tipi belirleyicisi” olduğu görüşünü desteklemektedir.

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## CHAPTER I

### INTRODUCTION

#### The Aim

The thesis aims at investigating what factors play a role in interpreting an utterance in the form of a yes/no question as a rhetorical question (RQ). The questions addressed are: (i) whether intonation has a role in identifying utterances that include the question particle *mI* as RQs in Turkish; (ii) whether the type of tense, aspect and modality (hence TAM) markers has an effect on the interpretation of utterances as RQs; and (iii) whether the place of the question particle affects the interpretation of RQs.

#### The Nature of RQs

Rhetorical questions are instances of utterances whose form does not match its function. They appear in the form of a question (Sadock 1971, 1974; Han 2002; among others): a *yes/no question* (polar question) or a *wh-question* (content question) (Dryer 2005) however they do not ask for information. Rhetorical yes/no questions are identified by the presence of a question particle (i.e. Japanese, Turkish) or subject-auxiliary inversion (i.e. English) while rhetorical wh-questions are identified by the presence of a wh-element (e.g. what, where, which, etc.).

Despite their syntactic form, RQs function as declaratives in the sense that speakers do not expect an answer or information from the hearer, i.e. they do not “stop for answers to be given” or hearers do not treat the utterance as a response-seeking question (Koshik 2005). They are mostly used as a challenging statement to convey the speaker’s thoughts about the answer (Illie 1999 as cited in Lee-Goldman 2006).

In addition to this form-function mismatch, RQs are defined by their interpretation which “asserts the opposite” (Sadock 1971, 1974; Han 2002; among others). That is, if the sentence is affirmative, the communicative effect of the assertion is negative and vice versa. Examine the utterances below:

- (1) a. Who cares what you do?
- b. Is that an excuse?

(1a) and (1b) have the syntactic form of a wh-question and a yes/no question, respectively. However, when uttered as an RQ, they function as declaratives which assert that *Nobody cares what you do* and *That is not an excuse*. Note that there is no structural negation in (1a) and (1b) but the interpretations are negative. This is because RQs assert the opposite polarity, as (2a) and (2b) below (taken from Han 2002: 2a-b) illustrate.

- (2) a. Did I tell you that writing a dissertation was easy?
- b. Didn’t I tell you that writing a dissertation was easy?

The subject-auxiliary inversion marks these utterances syntactically as yes/no questions. However, as RQs they function as declaratives and they assert that *I didn't tell you that writing a dissertation was easy* and *I told you that writing a dissertation was easy*, respectively. Note that (2a) has no structural negation but the interpretation is negative and (2b) has structural negation “not” but the interpretation is affirmative.

To sum up the basic characteristics of RQs, (i) they show up in the form of a wh-question or a yes/no question; (ii) they do not seek information but rather (iii) make an assertion which is of the opposite polarity. In the following section, the types of RQs in Turkish will be discussed.

### RQs in Turkish

In the previous section, the characteristics of RQs have been noted. This part introduces the structures that display those characteristics in Turkish. They are investigated separately as *wh-RQs* and *yes/no RQs*.

#### Wh-RQs

*Wh-RQs* stand for rhetorical questions that appear in the form of a wh-question in this thesis. Even though the focus of the thesis is on yes/no RQs, wh-RQs are described briefly to show that these structures are instances of the same phenomenon in that they display the same features with respect to the form-function mismatch and the opposite polarity interpretation. The analysis in this thesis differs from Görgülü's (2006) who treats wh-RQs as constructions the interpretation of which depends on the interaction of operators (i.e. Gen-operator) and the wh-words in that intonation is

considered to be an important factor in the interpretation of utterances rather than the interaction of operators and wh-words. Table 1 below gives the list of wh-words in Turkish<sup>1</sup>.

Table 1. List of *wh*-words in Turkish

a. <i>Argument wh-phrases</i>	b. <i>Adjunct wh-phrases</i>	c. <i>D-linked wh-phrase</i>
(i) <i>kim</i> “who”	(i) <i>ne zaman</i> “when”	(i) <i>hangi</i> “which”
(ii) <i>ne</i> “what”	(ii) <i>nasıl</i> “how”	
	(iii) <i>niye/ niçin</i> “why”	
	(iv) <i>nerede</i> “where”	

Both argument and adjunct wh-phrases are given in Table 1. The wh-words in (a) generally occur in an argument position besides functioning as the complement of a postposition. The wh-words in (b) do not commonly occur in an argument position. The wh-word in (c) is taken to be a D(iscourse)-linked wh-phrase in Turkish following Pesetsky (1987) , which typically occurs in the [Spec, NP] position.

The sentences given in (3) below include an argument wh-phrase *kim*, an adjunct wh-phrase *ne zaman* and a D-linked wh-phrase *hangi*, respectively.

(3) a. Ali-ye ödev-ler-in-de kim yardım et-ti?

Ali-DAT homework-PL-POSS-LOC who help-PAST

‘Who helped Ali in his homework?’

<sup>1</sup> This table is taken from Görgülü (2006).

b. Ayşe ne zaman biz-e gel-di?

Ayşe when we-DAT come-PAST

‘When did Ayşe come to visit us?’

c. Hangi politikacı doğru-yu konuş-ur?

Which politician truth-ACC speak-AOR

‘Which politician tells the truth?’

Note that regardless of the nature of the wh-phrase, in appropriate contexts, the sentences above can be uttered with the following interpretations: *Nobody helped Ali in his homework*; *Ayşe never came to us*; and *No politician tells the truth*, respectively. When the form of the utterances and their interpretations are considered, they obviously possess the basic characteristics of RQs in that they are in the form of a wh-question, they do not seek information, rather make an assertion and the assertion is of the opposite polarity.

The interpretation of wh-questions as non-interrogative elements has been investigated by Görgülü (2006). He takes the interpretation of utterances as the ones in (3) to be ambiguous between an interrogative reading and non-interrogative reading and although he notes that there is an intonational difference, he does not analyze the nature of the difference and does not treat intonation as a factor relevant for the description of the clausal properties of these sentences. In this thesis, I will investigate the role of intonation in the interpretation of utterances to see whether utterances in the interrogative form with the same lexical content that can have both a question reading and a rhetorical reading are *really* ambiguous. If *not*, the only

conclusion can be that intonation is a clause typer that types an utterance as a standard question or as a rhetorical question.

Wh-RQs will not be examined in this thesis. They will only be discussed as a starting point and in order to understand the properties of RQs in general.

### Yes/no RQs

Yes/no RQs represent the rhetorical questions that include the question particle *mI* in Turkish. The particle *mI* is an unstressable clitic that places stress on the stressable syllable of the preceding word (Besler 2001; Göksel & Kerslake 2005; among others). Similar to suffixes, it undergoes vowel harmony with the preceding vowel, yielding the forms *mi*, *mu*, *mü*. It is cliticized to phrases and has freedom of movement<sup>2</sup>. It occurs either with the verb or with other constituents in the sentence and forms yes/no questions (and alternative questions) (Banguoğlu 1990; Besler 2001; Göksel and Kerslake 2005). Some examples are given below:

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<sup>2</sup> There are restrictions with respect to the distribution of the question particle. For example; within the verb complex, when the verb is marked with the past tense, the question particle (QP) follows both the agreement marker and the tense marker; however, this is not the case with other TAM markers. As in (ib), the QP occurs between the tense marker and the agreement marker.

(i)

- a. Sen bu kitab-ı oku-du-n mu?  
You this book-ACC read-PAST-AGR QP
- b. Sen bu kitab-ı oku-yacak mı-sın?  
You this book-ACC read-FUT QP-AGR

Similarly, the question particle can not be attached to the NPs which are complements of PPs. For example;

(ii)

- a. \*Ahmet ben-im mi gibi konuş-uyor?  
Ahmet I-GEN QP like speak-PROG

These discussions are out of the scope of this thesis. For detailed discussions, see Kornfilt (1997), Besler (2001) and Göksel & Kerslake (2005).

- (4) a. Ayşe kırmızı elbise-yi al-dı mı?  
 Ayşe red dress-ACC buy-PAST QP  
 ‘Did Ayşe buy the red dress?’
- b. Ayşe kırmızı elbise-yi mi al-dı?  
 Ayşe red dress-ACC QP buy-PAST  
 ‘Is it the red dress that Ayşe bought?’
- c. Ayşe mi kırmızı elbise-yi al-dı?  
 Ayşe QP red dress-ACC buy-PAST  
 ‘Is it Ayşe who bought the red dress?’

The question particle *mI* can be cliticized to the verb as in (4a) as well as to other constituents such as to the adjective phrase as in (4b) and the noun phrase as in (4c).

Among the question types that are formed by the question particle *mI*, I will investigate only RQs that are in the form of *direct yes/no questions* within the scope of this thesis (see Kornfilt 1997; Göksel and Kerslake 2005; and others for other types of questions containing *mI*, such as tag questions and alternative questions).

Direct yes/no questions are given in (5) below:

- (5) a. Sevinç mi pırasa ye-r?  
 Sevinç QP leek eat-AOR  
 ‘Is it Sevinç who eats leek?’



b. Sena kurs-a mı gid-ecek?

Sena course-DAT QP go-FUT

‘Will Sena go to the course?’

c. Ali ders çalış-tı mı?

Ali lesson study-PAST QP

‘Did Ali study?’

Note that the question particle occurs in different positions and the verb is marked with a different TAM marker in each sentence. For example; in (5a) the question particle follows the subject and the verb is marked with the aorist. In (5b) the question particle follows the spatial adjunct and the verb is marked with the future. In (5c) the question particle follows the verb which is marked with the past tense. As direct yes/no questions, with a standard question intonation, (5a) is interpreted as inquiring whether the person in question eats leek or not. (5b) is interpreted as inquiring whether it is the course that the person in question will go to or somewhere else and (5c) is interpreted as inquiring whether the person in question studied or not. However, the same sequence of words with a rhetorical question intonation are interpreted as *the person in question does not eat leeks*, *the person in question will not go to the course* and *the person in question did not study*, respectively.

I assume that utterances that share their form with yes/no questions can be interpreted as RQs in appropriate contexts. Whether the difference in interpretation is marked through intonation is the focus of this thesis. So in the following chapters it will be investigated whether native speakers when presented with different contexts can utter a sentence as a standard question (SQ) (also known as information

question) or a rhetorical question (RQ) and whether people after hearing sentences without any contexts can identify them as an SQ or an RQ. Additionally, the effect of the position of the QP and the type of the TAM marker of these utterances on the interpretation will be investigated.

In addition to the constructions that are in the form of a yes/no question and the ones that are in the form of a *wh*-question which have both an RQ and an SQ interpretation, there are other constructions in the form of an interrogative; but which can only be interpreted as an RQ (i.e. constructions which include adversative particles such as *sanki* ‘as if’, *ki*, etc.). These constructions will not be examined in detail in this thesis; however, they will be referred to in chapter 5 since they play a role in explaining the opposite polarity reading in RQs.

### Organization of the Thesis

The thesis is organized as follows. Chapter II summarizes the literature on rhetorical questions. It starts with the presentation of how RQs are marked in different languages. Then for languages which share the syntactic form of an SQ with an RQ, some semantic tests to distinguish them will be presented. Then the syntactic/semantic analyses which try to account for the opposite polarity reading and the NPI licensing in RQs will be discussed. This will be followed by the intonational analyses which will first discuss the role of intonation in identifying utterances with identical lexical content and word order but with different interpretations, and then present the literature on the intonation of RQs. The last part summarizes the literature on Turkish RQs.

To investigate whether native speakers when presented with different contexts can produce the appropriate SQ or RQ, and whether they can identify the type of pairs of sentences as SQs or as RQs when they hear them out of context, three separate tests each including a production and a perception part have been designed and conducted. Chapter III discusses the methodology of these tests.

Chapter IV presents the acoustic properties of the test items and the results of the perception tests, and will reveal the pattern of SQ intonation and RQ intonation in yes/no constructions in Turkish.

Chapter V presents the discussion of the overall results and the ways to develop the thesis.

Chapter VI gives the overall summary and concludes the thesis with the questions that are left for further study.

## CHAPTER II

### RHETORICAL QUESTIONS: AN OVERVIEW

This chapter aims at presenting an overview of the issues relating to and the literature on Rhetorical Questions (RQs). The previous analyses with respect to the syntax, semantics and intonation of RQs will be discussed in some detail.

#### Rhetorical Questions

In this thesis I follow the assumptions of the generative framework according to which there is a set of universal principles common to all human languages and the differences observed in languages are the results of parametric variations.

Accordingly, the semantics of a rhetorical question with the assertion of the opposite polarity is common to all human languages although it has different realizations in different languages. In this part, three languages are compared according to the ways they mark the difference between SQs and RQs. These languages form two groups with respect to marking the difference between SQs and RQs: one group marks the difference through intonation (i.e. English and Japanese) and the other marks the difference through morphological markers (i.e. Sunwar).

### Phonologically Marked RQs

Consider the following structures from English which has two possible interpretations:

- (1) Did I tell you that writing a dissertation was easy?
  - (i) ‘Did I tell you that writing a dissertation was easy?’
  - (ii) ‘I didn’t tell you that writing a dissertation was easy.’

The English sentence above (taken from Han 2002:2) includes a subject-auxiliary inversion, which means that it has the form of a yes/no question. However, the utterance has two distinct readings: an SQ reading as given in (i) and an RQ reading as given in (ii). The only noted difference in these utterances is an intonational one: the terminal rise in the SQ and the terminal fall in the RQ (Han 2002).

Now consider the Japanese form in (2):

- (2) Taroo-ga nani-o tabemasita ka ./?  
Taro-NOM what-ACC ate-Qu(estion)
  - (i) “What did Taroo eat?”
  - (ii) “Taroo ate nothing.”

(Matsuya & Kamiya 2008)

The Japanese sentence above (2) includes a *wh*-element *nani* ‘what’ and the question particle *ka*, which means that it has the form of a *wh*-question. However, when we

consider the interpretations given, we see that the sentence with the same lexical content can be interpreted either as an SQ as given in (i) or as an RQ as given in (ii). In terms of its lexical content, there seems to be a morphological or syntactic device that marks the sentence as an SQ or as an RQ. However, it has been noted that Japanese has two types of overt sentential particle *ka*: one with a rising pitch that denotes an SQ and the other with a falling pitch that indicates an RQ (Matsuya & Kamiya 2008).

### Morphologically Marked RQs

In Sunwar<sup>3</sup>, unlike English and Japanese, the difference between the SQ and RQ interpretation is marked morphologically. Examine the sentences (3) below:

- (3)    a. 'mar dzaw-a  
               what eat-3sg-Q  
               'What did he eat?'
- b. 'mar dzap-tu (deen-sha hana)  
               what eat-3sg-PAST-state. say-sequential condition  
               'What did he eat (so to speak)?'

(3a) is a standard *wh*-question in Sunwar, which includes the *wh*-word 'mar 'what' and the question affix -a, and a falling intonation. (3b) which is interpreted as an RQ

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<sup>3</sup> Sunwar is a language spoken in Eastern Nepal. Schaefer (1955) classifies the language as a member of the Western branch of the East Himalayan section of the Bodic division of Sino-Tibetan (cited in Shulze 1978).

shares two characteristics with the SQ just described in (3a): the question word and the falling intonation<sup>4</sup>. The difference in the two interpretations, however, is marked through the affixes used: while the question affix (-*a*) is used in an SQ, the statement affix (-*ta*) is used in an RQ.

In this part, examples have been given of languages that mark the difference in SQs and RQs either by intonation or syntactic affixes. The following part discusses the semantic tests that provide additional formal constituents which help disambiguate the interpretation in languages which do not mark the difference between an SQ and RQ syntactically (i.e. English).

#### SQs and RQs: Are they formally the same?

In the previous section, it was shown that some languages (i.e. English, Japanese) have the same lexical content for an SQ and an RQ, which raises the question of whether they are formally the same or not. In the literature, some semantic tests are provided to show that RQs are formally different from SQs in English (Sadock 1971, 1974). These tests include an introductory item, *after all*, a *yet-clause* and phrases such as *by any chance*. The structures are compared according to their well-formedness in the presence of these test items. Examine the sentences taken from Han (2002: 203) below:

- (4)    a. *After all*, do phonemes have anything to do with language?  
         b. Who helped Mary? *Yet* she managed everything herself.  
         c. Does Arthur, *by any chance*, know anything about syntax?

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<sup>4</sup> Shulze (1978) notes that the intonation falls but is taken up by the rhetorical question marker *deen-sha hana* (so to speak).

The introductory item *after all* can co-occur with an RQ, but not with an SQ. So (4a) can only be interpreted as a rhetorical question with the reading *Phonemes have nothing to do with language*. Similarly, a *yet*-clause can follow a rhetorical question, but not a standard question, which suggests that (4b) can be interpreted as a rhetorical question with the reading *Nobody helped Mary*. Phrases such as *by any chance* which signal ordinary information-seeking questions are not allowed in rhetorical questions. So (4c) can only be an SQ.

### Approaches to the Interpretation of RQs

There are a number of studies that investigate rhetorical questions (Sadock 1971, 1974; Progovac 1993; Lee 1995; Bhatt 1998; Han 2002; Schaffer 2005; Lee-Goldman 2006; Rohde 2006; Reese & Asher 2007; and many others). While discourse analysts investigate why RQs have the form they do (Frank 1990, Koshik 2003, Schaffer 2005 as cited in Lee-Goldman 2006), semanticists (Han 2002) concentrate on their interpretation and explain the opposite polarity reading with the presence of negation in the structure. However, there is not a consensus about the nature of this negation (i.e. whether it is presuppositional, syntactic, downward-entailing operator) and the level at which it is realized (i.e. whether at LF or post-LF). Syntactic analysts, on the other hand, focus only on *wh*-constructions and explain the non-interrogative reading by the interaction of operators with *wh*-words (regarded as *wh*-variables) or with the presence of other elements (i.e. NPIs) in the structure (Progovac 1993; Lee 1995). These analyses will be discussed in some detail in this part.



### Wh-words as Variables

Some linguists explain the opposite polarity reading in *wh*-RQs through the nature of the *wh*-elements which are ambiguous between NPIs and true question words based on the fact that *wh*-words can serve as NPIs in languages such as Chinese and Serbo-Croatian (Progovac 1993). According to such an account, *wh*-questions possess both a *wh*-operator and an empty polarity operator in their [Spec, CP] position. In the absence of an NPI, the empty polarity operator is suppressed, and the *wh*-word is a true question word. The *wh*-operator binds and merges with the *wh*-word. That is, the *wh*-operator dominates/c-commands the *wh*-word and forms a syntactic unit with it through merge. In the Minimalist Program, merge is triggered by feature checking, e.g. the *wh*-operator selects the *wh*-word because it has an uninterpretable Q-feature which must be checked (or deleted), due to full interpretation. So the question is interpreted as an ordinary response-seeking question

When there is an NPI in the question, on the other hand, it needs to be licensed by the empty polarity operator. In this case, the *wh*-operator is suppressed, and the *wh*-word is forced to be an NPI word. The empty polarity operator binds and merges (see above) with the NPI *wh*-word, licensing the NPI *ever* as well, and the question is interpreted as a rhetorical question as illustrated below (as cited in Han 2002: 27, 28):

(5) a. Who did Mary ever visit in Seoul?

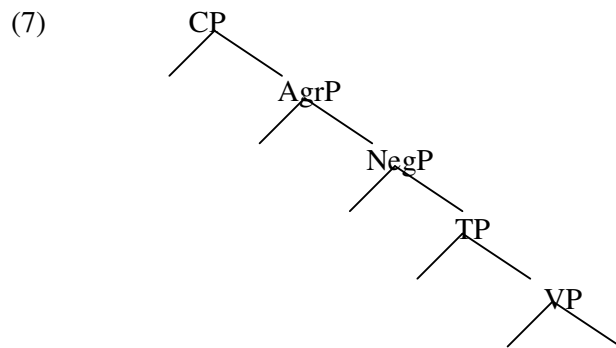
(6) a. [<sub>CP</sub> Wh-Op Polarity-Op who [<sub>C'</sub> did Mary ever visit in Seoul?]]

b. [<sub>CP</sub> Polarity-Op who [<sub>C'</sub> did Mary ever visit in Seoul?]]

- c. [<sub>CP</sub> Polarity-Op anyone [<sub>C'</sub> did Mary ever visit in Seoul?]]
- d. [<sub>CP</sub> no one [<sub>C'</sub> did Mary ever visit in Seoul?]]

This analysis of Progovac (1993) which accounts for the RQ reading in wh-words with weak NPIs is challenged by Han (2002) since it incorrectly predicts that all wh-questions with NPIs can only have rhetorical question reading and that rhetorical wh-questions without NPIs cannot exist in the absence of the NPI.

In addition to these, this analysis incorrectly predicts that NPIs are licensed in all wh-questions since there is an empty polarity operator. However, as Lee (1995) shows only object position NPIs or verbal NPIs are allowed in wh-constructions; but not subject position NPIs. Lee proposes a basic tree structure where NegP appears above VP but below the surface subject position, following Pollock (1989).



Lee argues that NegP is activated by the argument wh-phrase in rhetorical questions while moving through its specifier on the way to [Spec, CP]. The activated NegP then licenses NPIs below it, but not ones above it. So subject NPIs cannot be licensed while object and verbal NPIs can. As can be observed, Lee (1995) does not aim to propose a structure for RQs; rather he aims at explaining how NPIs are licensed in wh-RQs. Note that yes/no RQs are not accounted for in these analyses.

### Negation in the Structure

With regards to the syntax of yes/no rhetorical questions, Sadock (1971, 1974) proposes that they have the same underlying structure (D-structure) as tag questions with falling intonation as given in (8).

- (8)    a. Syntax isn't easy, is it?  
          b. Is syntax easy?

Note that the polarity of the tag in the tag question is the same as the polarity of the rhetorical question (both positive: 'is it?' and 'is syntax easy?'). Moreover, the polarity of the body in the tag question is the same with the polarity of the assertion expressed by the rhetorical question (*Syntax isn't easy*). The D-structures of the questions in (8) are given in (9) below.

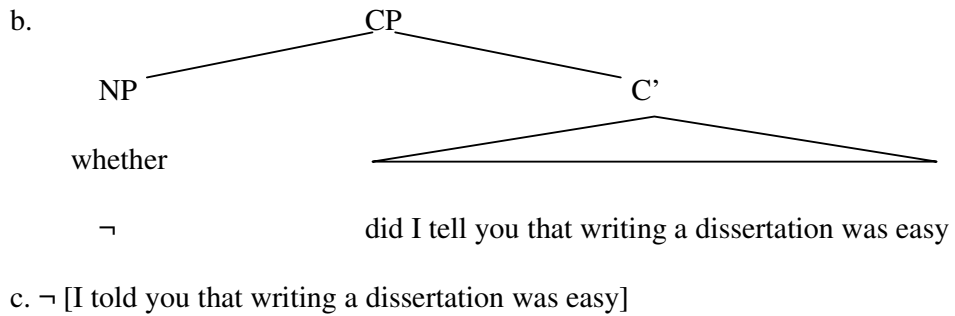
- (9)    a. [s [s Speaker-declare-Syntax isn't easy] [s Speaker-ask-Is syntax easy?]]  
          (tag question)
- b. [s [s Speaker-ask-Is syntax easy?] [s Speaker-declare-Syntax isn't easy]]  
          (rhetorical question)

To derive the surface string, Sadock claims that “part of the second conjunct of the tag question (i.e. syntax easy?), but all of the second conjunct of an RQ (i.e. Syntax isn't easy) are deleted at S-structure” (Sadock 1971; 1974 as cited in Han 2002). Han (2002) challenges this, claiming that this structure leads to an asymmetry in NPI

licensing of rhetorical questions and tag questions (see Han 2002 for further discussion). Moreover such an account does not work for rhetorical wh- questions.

An analysis that accounts for both wh-RQs and yes/no RQs has been proposed by Han (2002). According to her, a general pragmatic principle, *informativeness*, interacts with the LF output of rhetorical questions and causes it to undergo a post-LF derivation, forcing the wh-word<sup>5</sup> to map onto negative polarity. This negative polarity is “isomorphic” to negation that takes the whole sentence into its scope. This post-LF derivation gives the semantic interpretation. This is illustrated as below (Han 2002: 48a-b-c):

(10) a. Did I tell you that writing a dissertation was easy?



In the rhetorical question (10a), the covert *whether* maps onto the negative polarity at post-LF as illustrated in (10b). So the question is interpreted as *I didn't tell you that writing a dissertation was easy*, as represented in (10c).

The difference between an SQ and an RQ is attributed to the range of possible values for the wh-element. For standard yes/no questions, the possible values for *whether* are the positive polarity and the negative polarity while for rhetorical yes/no questions, there is only one possible value, the negative polarity. Similarly, for

<sup>5</sup> Han (2002) assumes that there is a covert *whether* in yes/no questions.

standard *wh*-questions, the possible values<sup>6</sup> range over a “power set”. For rhetorical *wh*-questions, on the other hand, there is only one value which corresponds to the negative quantifier.

Bhatt (1998) also claims that rhetorical question interpretation is realized at a post-LF level. However, different from Han, she claims that rhetorical negation is different from syntactic negation, and so she argues for a Downward-Entailing and Anti-Additive operator and not a full structural negation.

Matsuya and Kamiya (2008), on the other hand, introduce a presuppositional NegP (PNegP) to explain the RQ phenomenon in Japanese. Structurally, presuppositional negation is assumed to be higher than structural negation. They take a sentence such as (11) to be ambiguous between two readings: an SQ and an RQ. And they account for these interpretations as follows:

(11) Taroo-ga nani-o tabemasita ka./?

Taroo-NOM what-ACC ate-Qu(estion)

(i) ‘What did Taroo eat?’

(ii) ‘Taroo ate nothing.’

(12) (i) [<sub>CP</sub> nani<sub>i</sub> [<sub>TP</sub> [<sub>VP</sub> Taroo-ga t<sub>i</sub> tabemasi] ta ] ka (+Q)]



In (12i), *wh*-word *nani* ‘what’ moves to SPEC-CP to check *wh*-feature and the sentence becomes interrogative.

<sup>6</sup> For example; for a sentence such as “Who drinks?”, given that the domain of universe contains three individuals *Mary*, *John* and *Bill*, the possible values for the *wh*-word *who* is the power set of the set containing the three individuals, including the empty set and the unit set (Han 2002).

(12) (ii)

[CP[TP[AspP[P-NegP[NP-NegP[VP...nani-o+nullmo]NP-Neg]P-Neg+GEN]GEN]ta]ka(P.C.)

In (12ii), the polarity changer binds the null generic quantifier, changing the polarity. Then it lowers down to P-Neg. The wh-phrase is bound by *mo*<sup>7</sup> which widens the domain and connects with generic quantifier. As a result, the universal reading becomes available. Since generic quantifier is in the negation domain, the relevant interpretation becomes negative in meaning<sup>8</sup>.

### Emphatic Focus Questions

Some discourse analysts consider RQs as *emphatic focus questions* which is a sub-category of biased questions, since “they convey expectation or bias on the part of the speaker toward a specific answer to the question” (Krifka 1995; Reese & Asher 2007:2). In these studies, the difference in the interpretations of an SQ and an RQ is explained through *intonational* accounts. The fact that strong NPIs necessarily require emphatic focus has been noted and this is related to an emphatic assertion operator that “mirrors the semantic effect of *even* (domain widener)” by Krifka (1995 as cited in Reese & Asher 2007:8) but this has raised the question of whether it is the semantics of strong NPIs or whether intonational facts are responsible for the bias. Further investigations show that presence of strong NPIs is a sufficient but not a

<sup>7</sup> *mo* is a particle that expands the domain of the common noun to include all possible extensions and intensions (Kawashima 1994a as cited in Matsuya&Kamiya 2008).

<sup>8</sup> In constructions where there is sentential negation, it is claimed that two negatives cancel out each other and the result is positive.

necessary condition for bias to exist (Reese & Asher 2007) since sentences without strong NPIs also have bias when uttered with emphatic focus.

### Intonational Studies

It has been noted that the only difference in languages (the languages under inquiry being English and Japanese) that have the same syntactic form for an SQ and RQ is terminal rise for SQs and terminal fall for RQs. However, the nature of the intonational difference between SQs and RQs has not been analyzed by linguists. This part presents studies which analyze the intonational differences of utterances which function as statements and questions. This is followed by the studies which analyze the intonation pattern of RQs to investigate whether RQs pattern with statements or questions in terms of their intonational pattern.

### The Role of Intonation

Statements and questions have, traditionally, been associated with falling and rising intonation respectively (e.g. German, English) in general descriptive studies.

However, with the increased awareness of the use of prosody in different contexts, this kind of an association is regarded as too simplistic (Gibbon 1998). So recent literature includes studies mostly based on spontaneous speech that investigate the role of intonation in identifying the semantic function of an utterance. These studies show that the question intonation is not recognized only by the terminal fall or rise but also by more subtle features of pitch pattern that extend over the utterance such as higher pitch register (in Moroccan Arabic, Dutch, Swedish ), peak delay

(Swedish), and compressed pitch (Turkish) (Benkirane 1984; Heuven & Haan 2000; House 2004; Göksel et al. 2008 a,b; 2009).

### Higher pitch register

The study that compares declaratives with yes/no questions- both of which have a rising-falling pattern- in Moroccan Arabic shows that there is an overall rising of the whole pitch register including the onset in questions (Benkirane 1984). Benkirane (1984) shows that the average difference between the onset of a statement and the corresponding question is 3.5 semitones while the difference between the values of the peak on the nucleus is greater than 6 semitones in all cases. The results of the perception tests on different languages (i.e. Dutch, Swedish) also show that a raised F0 (higher pitch) is perceived as a question.

### Peak delay

The results of a perception test on Swedish show the importance of “timing” in the sense that an early peak is perceived as a statement and a late peak is perceived as a question similar to Neapolitan Italian (House 2004).

### Compressed pitch

A study that investigates the role of intonation in distinguishing sentences as declaratives or questions in Turkish reveals that the function of seeking for an answer (questioning) is marked by a compressed pitch that continues up to the constituent



that receives the permanent stress. Declaratives, on the other hand, are marked with a fluctuating pitch up to the constituent that has the highest pitch (Göksel et al. 2008 a,b; 2009).

### Intonation of RQs

There is not consistent evidence with respect to the intonation of rhetorical questions. Some claim that just like a declarative sentence expressing an assertion, rhetorical questions end with a falling intonation in English (Han 2002), Japanese (Matsuya & Kamiya 2008), Turkish (Görgülü 2006), etc. Banuazizi & Creswell (1999) assert that rhetorical yes-no questions fall more than regular questions; but still less than half the time. However, Bartels (1999) notes that there is a wide variation for rhetorical questions and refutes the claims that rhetorical questions rise consistently like yes-no questions in English or fall consistently like declaratives.

Other intonational studies, in addition to associating the rhetorical question reading with the rise or fall at the end, examine the whole intonation pattern of rhetorical questions. For example, Dung et al. (1998) claim that sentences marked with interrogative markers that express either doubt or assertion of a logical evidence in Vietnamese are characterized by a rising contour, an extra high register, an exaggeration of tones and a slower tempo. Dascalu (1998) claims that the intonation of rhetorical yes-no questions is sometimes different from the intonation of genuine ones in that it is low, relatively monotonous up to the final rise, which is very slight. According to Dascalu, this special intonation reflects the false interrogative character of the rhetorical question and the absence of interrogative emphasis in its semantic and intonational structure.

## Approaches to RQs in Turkish

The literature on Turkish RQs includes proposals which attribute the opposite polarity reading to the extended function of the question particle *mI*. For example, Gencan (2001) classifies RQs as a subtype of questions that do not seek an answer; but rather express denial which then shifts to negation<sup>9</sup>.

İlhan (2005) also claims that the use of the question particle can function as a means of expressing negation other than asking a question when it is cliticized to the verb or other constituents as exemplified in (13) below.

- (13) Niçin ban-a kız-ıyor-sun? O-nu ben mi davet et-ti-m?

why I-DAT get angry-PROG-2sg s/he-ACC I-NOM QP invite-PAST-1sg

‘Why are you getting angry with me? Is it me who invited him/her?’

*Int:* ‘I didn’t invite him/her so there is no sense in your getting angry with me.’

Özkan (2006), on the other hand, claims that there is not only “negation” but also “affirmation” in RQs which maps to the opposite polarity reading so “negative noun-predicate + *mI*” forms affirmation while “opposite noun- predicate + *mI*” forms negation as exemplified respectively below.

- (14) a. Bil-me-z mi-yim hepsi yalancı.

know-NEG-AOR QP-1sg all liar

‘Don’t I know that they are all liars?’ *Int:* ‘I know that they are all liars.’

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<sup>9</sup> The questions that do not seek an answer are categorized into three: (i) those that have excessive emotion; (ii) those that are uttered as result of surprise; (iii) those that express denials.

b. *Gid-ecek zaman mı-ydı?*

go-FUT time QP-PART

‘Was it the time to go?’ *Int:* ‘It wasn’t the time to go.’

Other linguists define certain environments and claim that the presence of the question particle in those syntactic environments gives rise to the opposite polarity reading. For example, Acarlar (1970) claims that the question particle is used for the negative assertion (i) in constructions where *olur mu* ‘does it happen?’ follows infinitives as exemplified in (15a); (ii) in constructions where the subordinate clause has an optative verb form and the question particle is in the matrix clause as in (15b); and (iii) in constructions where the question particle co-occurs with the particle *ki*<sup>10</sup> as in (15c).

(15) a. *Şimdi git-mek ol-ur mu?*

now go-INF be-AOR QP

‘Why go now?’ *Int:* ‘You can’t leave now.’

b. *İste-se-n gel-e-me-z mi-sin?*

want-OPT-2sg come-ABIL-NEG QP-2sg

‘Can’t you come if you want to?’ *Int:* ‘You can come if you want to.’

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<sup>10</sup> This is also noted by İlhan (2005).

c. Sema ders çalış-ıyor mu ki başarılı ol-sun?

Sema lesson study-PROG QP ki successful be-3sg

‘Is Sema studying that you expect her to be successful?’

*Int:* ‘Sema can’t be successful because she is not studying.’

Göksel and Kerslake (2005) define the environment of RQs which present “highly abnormal and shocking” events as constructions in which the verb is negated and marked with the aorist or optative as (16) exemplifies:

(16) Yepyeni çantamı arabada unut-ma-ya-yım mı?

forget-NEG-OPT-1sg QP

‘Would you believe it, I left my brand new umbrella in the taxi!’

(Göksel& Kerslake 2005:123)

Apart from these, Görgülü (2006) investigates constructions with wh-words and claims that they may not be interpreted as interrogatives. The non-interrogative reading, according to Görgülü, is available only on the following conditions: (i) the presence of Gen(eric)-operator (17a); (ii) the interaction of Gen-operator and the Negative-operator (17b); (iii) plural affixation on wh-words in the presence of Neg-operator (17c); and (iv) the overt particle *ki* in the C domain (17d):

(17) a. O-na kim inan-ır?

3sgpro-DAT who believe-AOR

(i) ‘Who believes him?’

(ii) ‘Nobody would believe him.’

b. Cem kim-i tanı-ma-z?

Cem who-ACC know-NEG-AOR

(i) ‘Who does Cem not know?’

(ii) ‘Cem would know everyone.’

c. Cem ne-ler-i bil-me-di?

Cem what-PL-ACC know-NEG-PAST

(i) ‘What did Cem not know?’

(ii) ‘(It seems) Cem would know everything.’

d. Ahmet kim-e inan-ır ki!

Ahmet who-ACC believe-AOR ki

(i) \* ‘Who does Ahmet believe?’

(ii) ‘Ahmet believes no one.’

(17a) is a wh-construction where the predicate is marked with the aorist. The wh-word *kim* ‘who’ is interpreted ambiguously between an interrogative reading and a negative quantifier reading. Görgülü (2006) accounts for this ambiguity by the existence of Gen(-eric) operator, which binds the wh-word in the absence of the null-Qu operator in the C domain. In (17b), the wh-construction has the predicate marked with aorist and negation. The wh-word *kimi* ‘who-ACC’ is interpreted ambiguously between an interrogative reading and a universal quantifier reading unlike Chinese and Japanese. He notes that in those languages the wh-word has the existential quantifier reading in the scope of negation and claims that the interaction of Gen-operator with Neg-operator yields the universal quantifier reading. (17c) is a wh-

construction where the wh-word is marked with plurality and the predicate with negation. For this, he states that in the absence of negation, the sentence is interpreted only as interrogative. According to Görgülü, the interaction of negation with plural marker assigns universal quantifier interpretation to the wh-word. (17d) is different from others in the sense that it only has the non-interrogative reading and according to Görgülü, this is due to the fact that the particle *ki* occupies the C head position and binds the wh-word.

He further claims that sentences marked with TAM markers other than the aorist do not yield rhetorical question reading as exemplified below:

(18) a. Sen kime inandın?

you-NOM who-ACC believe-PAST-2sg

(i) ‘Who did you believe?’

# (ii) ‘You believed no one.’

b. Sen kime inanacaksın?

you-NOM who-ACC believe-FUT-2sg

(i) ‘Who will you believe?’

# (ii) ‘You will believe no one.’

(18a) and (18b) are marked with past and future respectively and according to Görgülü, they can have only interrogative reading.

As for the intonation pattern of rhetorical wh-questions, Görgülü states that they have a falling intonation in contrast to standard wh-questions. He does not

assign intonation as clause-typing which determines whether an utterance is an SQ or an RQ as mentioned in the discussion chapter.

With respect to the intonation of yes/no RQs, they have been noted to have a rise at the end (unlike *wh*-RQs) contrary to their SQ counterparts that have a falling intonation (Selen 1973).

### Conclusion

The literature survey has shown that languages differ with respect to how they form RQs and thus, maybe grouped as the ones that use the form of a question (i.e. English, Japanese, Turkish) and the ones that deviate from the form of a question (i.e. through a statement affix as in Sunwar). The analyses that try to account for the opposite polarity reading in RQs have been discussed in detail. It has been observed that there is not a consensus about the exact nature of RQs and these accounts have deficiencies in explaining one or another aspect of these constructions. Furthermore, intonational studies which show that the prosodic properties of RQs deviate from that of SQs and display similarities with statements have been presented. It has been noted that the difference between a statement and a question is not only marked by the terminal fall or rise but by some subtle prosodic properties that extend over the whole utterance.

## CHAPTER III

### METHODOLOGY

In order to test the role of intonation in the interpretation of interrogative structures, three tests were designed and administered. These tests included both a production and a recognition part. The test sentences and fragments were elicited from constructed dialogues. In the recording of the dialogues, informants were asked to speak in as a natural manner as possible. Subjects were then asked to listen to the recorded sentences. The purpose of all the tests was to investigate whether native speakers were able to distinguish RQs from SQs only by their intonation. Three tests were given in total; tests I and II contained a total of 45 full sentences and Test III initial fragments of 12 utterances, all of which were read out by informants. The details of these tests are presented below.

#### Recordings

#### Test Materials

The experiments employed test items read out by native speaker informants<sup>11</sup>. The designing of dialogues and sentences was done for the purpose of comparing identical sentences which only differed in their intonation. Even though spontaneous

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<sup>11</sup> All material is original and designed by myself.



speech would probably be better since it is more naturalistic, it would be difficult even impossible to elicit spontaneous speech that fulfills the requirements of the test because the test consists of pairs of sentences with an identical form (same sequence of words) but with different interpretations (as an SQ or as an RQ).

### Material for Test I

A dialogue was prepared for each test item. Minimal pairs of SQs and RQs were placed in separate dialogues. These minimal pairs are sentences in yes/no question structure which are lexically and syntactically identical but used in different contexts, one context requiring a question, the other context requiring a rhetorical question. In other words, a test item had an SQ interpretation in one dialogue while its segmentally identical equivalent had an RQ interpretation in the other. 30 such dialogues were created including 6 fillers (see Appendix B/I for the dialogues). No such two dialogues that contained minimal pairs occurred consecutively. The dialogues were read out by two informants who read the contexts silently, and crucially, the test sentences always by the same informant. Special care was taken to ensure that the dialogues were read as naturally as possible in their given contexts.

### Material for Test II

A different set of test items was prepared for this test and a context for each test item was prepared. As in Test I, a test item had an SQ interpretation in one context while it had an RQ interpretation in the other. 15 such contexts were created including 3 fillers (see Appendix B/II for the contexts). No such two contexts that contained

minimal pairs occurred consecutively. A new informant read these contexts silently first and then read out the test items in their given contexts.

### Material for Test III

Different test items were prepared for this test. No context for test items was prepared. 5 sentences as well as 2 fillers were given to a new informant and she was asked to utter the sentences in the interrogative form first as an SQ then as an RQ (see Appendix B/III for the sentences). The concept of RQ was explained to the informant through its interpretation with an example as such: for the test item *Ela denize girer mi?* ‘Ela does not go swimming’, “you know that the person in question does not go swimming so you do not ask for information but imply this fact.”

### Informants

Informants are the people who did the recording of the materials.

### Test I

Two informants participated in this test. Both of them were female standard Turkish speakers at the ages of 35 and 38. They were university graduates who work as primary school teachers in Istanbul. The recordings were done in the laboratory of that school.

### Test II

A thirty year-old female standard Turkish speaker participated in this test as an informant. She was a Boğaziçi University graduate who worked as an English teacher at the same primary school in Istanbul. The recordings were done in the laboratory of that school.

### Test III

A twenty-five year-old female standard Turkish speaker participated in this test as an informant. She was a Boğaziçi University graduate who worked as a manager assistant at a private institution. The recordings were done at the informant's house.

## The formal Properties of the Perception Tests

### Subjects

Subjects are the people who were asked to give their responses to the test items.

### Test I

Twenty subjects who are native speakers of Turkish participated in this study. The males represented 50% and the females constituted 50% of the sample. The age range of the subjects was between 21 and 49 years. The subjects were all university

graduates who work as teachers at the same primary school. The test was administered at that school.

### Test II

Twenty subjects who are native speakers of Turkish between the ages of 18 and 27 participated in this study. Half of the subjects were male and the other half were female. These subjects were Boğaziçi university students and the test was administered at Boğaziçi University.

### Test III

Twenty-three subjects who are native speakers of Turkish between the ages of 19 and 28 participated in this study. 3 of the subjects were male and the rest were female. The test was administered at Boğaziçi University women's residence hall. The subjects were either university students or university graduates.

### Test Items

Test items were extracted from the recordings using the software program *PRAAT*<sup>12</sup> (Boersma & Weenink 2006). They were at the length of less than two seconds. In this part, the formal properties of the test items will be presented.

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<sup>12</sup> Praat is a program for doing phonetics by computer. The program was developed by Paul Boersma and David Weenink of the Institute of Phonetic Sciences, University of Amsterdam. It enables users to investigate a large number of processes, such as making spectrograms and pitch analyses, looking at how the ear analyzes sounds, synthesizing speech in articulatory terms, using neural nets, describing phonetic events by means of optimality theory, and much more. It can be downloaded by free from <http://www.fon.hum.uva.nl/praat/>. (Ladefoged 2003)

## Test I & II

The items in Test I and II are grouped together since they have the same formal properties which will be explained below. Test I and Test II included 12 and 6 pairs of sentences with the same string of words but with different interpretations (SQ and RQ), respectively (Tests also included 6 and 3 fillers, respectively which gives a total of 45 sentences). Third person singular subjects were used in each sentence and they were all affirmative interrogative sentences in either the SOV or OSV orders<sup>13</sup>. There were 17 sentence pairs in the SOV order and 6 pairs in the OSV order. The reason for choosing SOV is that it is the canonical word order in Turkish and the reason for choosing OSV is that it sounds more natural in the presence of a definite and specific object. The test items displayed differences in terms of (i) the position of the question particle (1a-b-c) and (ii) the type of the TAM markers that the verb is marked with (2a-b-c-).

### *The position of the question particle*

The question particle appeared in two distinct positions in these tests: after the verb as seen in (1a) and after the subject as seen in (1b). It has been claimed that the question particle *mI*, rather than being base generated in the C head position, enters the derivation either as a suffix on the verb which then moves to C with the verb or as a lexical item which is base generated as the sister of the maximal projection it marks (Besler 2001). Following this, I assume that base generation of

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<sup>13</sup> Turkish, like Finnish, German, Japanese, has considerably freer word order than English. The most common word order used in simple transitive sentences in Turkish is SOV, but all six permutations of a transitive sentence can be used in the proper discourse situation since the subject and object are differentiated by case-marking (Hoffman 1994).

the question particle differs when it occurs with the verb and when it occurs with other constituents such as subject. Thus, in these tests the question particle either followed the verb or the subject to investigate whether the place of it has an effect on the interpretation of RQs.

(1) a. Ali ders çalış-tı mı?

Ali lesson study-PAST QP

‘Did Ali study?’

b. Bu vazo-yu Ali mi kırdı?

this vase-ACC Ali QP break-PAST

‘Is it Ali who broke this vase?’

c. Sena o kurs-a devam ed-ecek mi?

Sena that course-DAT continue-FUT QP

‘Will Sena continue with that course?’

### *The Type of the TAM Markers*

The verbs were marked with the aorist as in (2a), past as in (2b) and future as in (2c). Past is a tense marker while the aorist and future are aspect markers following Kelepir (2001) which are claimed to be generated in Aspect Phrase<sup>14</sup>. It has been asserted that only the aorist, different from other tense/aspect/modality markers, expresses genericity/ habituality in Turkish and so contains a generic operator in the structure (Yavaş 1978, 1982; Görgülü 2006). So the reason for

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<sup>14</sup> Whether future is an aspect marker is debatable. For some it is tense, for others it is modality (Yavaş, 1980).

choosing the aorist is to see whether RQ interpretation is available in the presence of a generic marker also in yes/no RQs. The reason for choosing two other TAM markers was to investigate whether generalizations made for the aorist applied to (i) another aspectual marker (future) and (ii) to a tense marker and whether these factors have an effect on the interpretation of utterances as RQs.

(2) a. Sevinç pırasa ye-r mi?

Sevinç leek eat-AOR QP

‘Does Sevinç eat leek?’

b. Ahmet sen-i ara-dı mı?

Ahmet you-ACC call-PAST QP

‘Did Ahmet call you?’

c. Ayşe bu kitab-ı oku-yacak mı?

Ayşe this book-ACC read-FUT QP

‘Will Ayşe read this book?’

The table below illustrates the number of test items with each property in Test 1 and Test 2 (see Appendix C/I-II for the test items).

Table 2. The number of Test Items in Tests I and II Excluding Fillers and Their Formal Properties

	Aorist				Past				Future			
	Verb- <i>mI</i>		Subj- <i>mI</i>		Verb- <i>mI</i>		Subj- <i>mI</i>		Verb- <i>mI</i>		Subj- <i>mI</i>	
	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2
SQ	2	1	2	1	2	1	2	1	2	1	2	1
RQ	2	1	2	1	2	1	2	1	2	1	2	1

### Test III

Different from Test 1 and 2, this test did not contain pairs of full sentences but pairs of *fragments* which were at the length of less than one second. 10 such fragments were extracted from 10 recorded sentences that were in the form of yes/no questions, all containing a verb in the aorist followed by the particle *mI*. The test items contained fragments of the sentence in which the verb and the question particle were missing as exemplified in (3) below (See Appendix C/III for the list of the test items):

- (3) a. Ela deniz-e gid-er mi?

Ela sea-DAT go-AOR QP

‘Does Ela go to the seaside?’

‘Ela doesn’t go to the seaside.’

- b. Ela denize

Ela sea-DAT



## Procedure

### Test I

Subjects were distributed the test sheets on which there were three choices for each test item (see Appendix A/I for the sheet). They were told that they would hear a series of sentences that were extracted from dialogues. They were asked to listen to each sentence carefully and then circle the best option(s) they thought would be a suitable choice for continuing the conversation or be a response to the sentence. The subjects were given an example at the beginning of the test. They were allowed to listen to the sentences more than once if they asked for it. (4) below illustrates how this works in an example. The subjects were asked to listen to the following SQ:

(4) Test Sentence: Elif benim-le sinema-ya gel-ir mi?

‘Will Elif come to cinema with me?’

The subjects only *heard* the sentence given in (4) above. They did not see the written form of this sentence. They were asked to decide on the choice which they thought would continue the dialogue. The choices for the test item in (4) above are given in (5) below:

(5) a. Bence gelir, sıkılıyordu zaten.

‘I think she would come. She was getting bored.’

b. Doğru ya, siz konuşmuyordunuz.

‘You’re right. You were not talking to each other.’

c. Diğer ‘Other’

Given the context of (4), if the subjects chose a., they would be correctly identifying an SQ. If on the other hand, they chose b., they would be mistaking an SQ for an RQ. (The reverse would be true if the RQ pair of (4) were presented.) The choice c. was given in case subjects did not regard any of the choices appropriate and wanted to write their own answers.

## Test II

The subjects were distributed the test sheets which contained two choices for each test item that gave the possible interpretation of the item (see Appendix A/II for the sheet). The test items were not written on the sheet. The subjects were informed that they would listen to a series of sentences. They were asked to mark the choice that gives the right interpretation of the sentence they heard. (6) below illustrates how this works in an example:

(6) Test Sentence: Aslı maç izle-me-ye gid-ecek mi?

‘Will Aslı go to watch the match?’

Upon hearing this sentence, the subjects were asked to find its interpretation from the choices provided in the sheet and given in (7) below:

(7) a. Aslı'nın maç izlemeye gidip gitmeyeceğini merak ediyor.

'S/he wonders whether Aslı will go to watch the match or not.'

b. Aslı'nın maç izlemeye gitmeyeceğini söylemek istiyor.

'S/he wants to say that Aslı will not go to watch the match.'

(7a) represents a sentence in which the speaker does not know whether the person in question will go to watch the match or not. So s/he seeks information from the hearer. If the subjects chose (7a) as the correct interpretation of the sentence they heard then this would mean that they perceived the utterance as an SQ. (7b), on the other hand, represents a sentence in which the speaker has an assumption the person in question will not go to the match. If the subjects chose (7b) as the correct interpretation of the sentence, then this was taken to mean that they perceived the utterance as an RQ.

### Test III

Different from Test I&II, in this test no test sheet was distributed to the subjects. The subjects were informed that they would listen to the initial fragments of sentences in which the verb was missing. They were asked to identify these fragments as belonging to an SQ or not. They were not asked to complete the sentence. (8) below illustrates how this works in an example:

(8) Test fragment: Ela deniz-e

Ela sea-DAT

Subjects heard only the fragment given in (8) above and orally expressed whether it belonged to an SQ or not. I noted their responses down on a sheet (see Appendix A/III for the sheet).

### Conclusion

This chapter presented the methodology of the tests that were designed to test the role of intonation in the perception of utterances as SQs and RQs. Through these tests, it was investigated whether informants when presented with the appropriate contexts could utter the same sequence of words with a different intonation and whether subjects when they heard pairs of sentences in isolation could identify them as SQs or as RQs.

## CHAPTER IV

### RESULTS

This chapter presents the prosodic properties of the test items as well as the results and the analysis of the perception tests. The results will be discussed with respect to the following criteria: (i) the nature of the constituent that the question particle *mI* is cliticized to and (ii) the nature of the TAM markers. The next section will discuss the prosodic properties of the test items.

#### Analysis of Test Items

This part analyzes the prosodic properties of the utterances with the same lexical content but with different interpretations with respect to being an SQ or an RQ. What is investigated is whether the interpretational difference between these two constructions is marked through intonation or not. The aim at this point is to present a relative analysis of RQs to their SQ counterparts rather than making generalizations. Although a wider set of examples is likely to yield a more comprehensive analysis of the constructions, it is believed that the present analysis will be indicative of some basic differences between RQs and SQs.

## Acoustic Analysis

The acoustic factor under consideration as potentially providing the difference between pairs of sentences that have the same lexical content but interpreted as an SQ or as an RQ was fundamental frequency (F0) in this analysis<sup>15</sup>. Fundamental frequency reflects the rate of vibration in the vocal folds and is used as an acoustic factor in intonational studies. It is roughly equivalent to pitch. While the pitch of a recorded sound can not be measured, the fundamental frequency of the sound wave, which is the acoustic correlate of pitch, can be measured (Ladefoged 2003).

In this study, the first step was to transfer the recordings to be analyzed onto a computer. Then F0 values of SQs and RQs were measured by the software program *PRAAT* to compare the pairs of sentences in terms of the following properties:

1. The overall mean pitch
2. The dislocation of the peak
3. Ascending/ descending pattern
4. The terminal pitch value
5. The terminal fall/ rise

These terms and how they were used in comparing SQs and RQs are explained in detail below. The figure below illustrates a sample pitch chart. The middle of the panel shows the acoustic waveform and the fundamental frequency (F0), a record of frequency of vibration of the vocal folds as calculated from the glottal pulses in the waveform, with time on the x-axis and frequency (in Hz) on the

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<sup>15</sup> There are other acoustic factors such as intensity, a measure of acoustic energy. The intensity of a sound is measured by taking the amplitude of the waveform at each moment in time during a window, squaring it (to make it a positive number), finding the mean of all the points in the window, and then taking the square root of this mean. This is the so-called rms (root mean square) amplitude (Ladefoged 2003).

y-axis. The bottom panel shows the words in the utterance. And the vertical dots show the word boundaries.

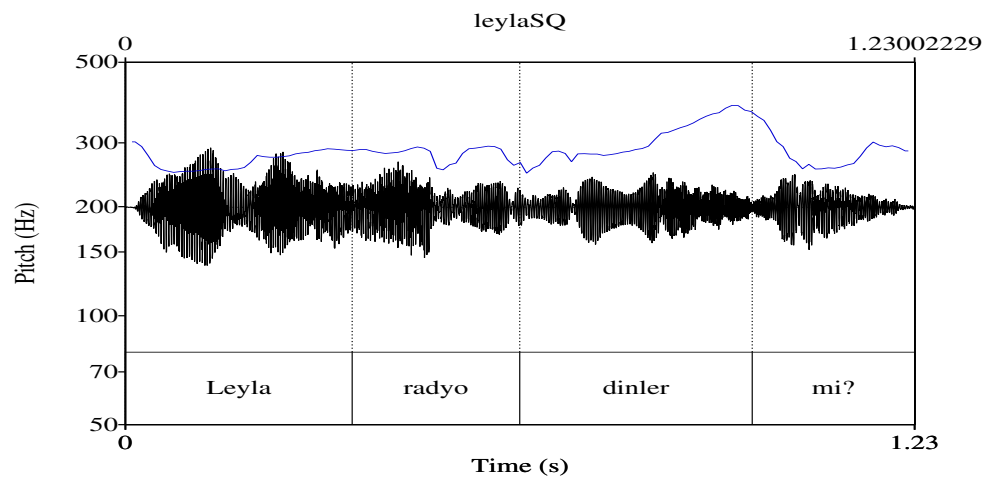


Fig. 1 Sample pitch chart of the sentence *Leyla radyo dinler mi?* ‘Does Leyla listen to the radio?’

#### The overall mean pitch

The mean pitch of an item (e.g. a word) is the average F0 value of that item. The overall mean pitch is the average F0 value of the whole utterance. When the overall mean pitch of an utterance is stated to be higher in an SQ, it does not refer to a value higher than a predetermined value (i.e. 300 Hz) but to one that is higher than its RQ counterpart.

#### The dislocation of the peak

In Turkish, constituents that host the question particle *mi* behave like focus constituents in that they have the prominent stress which is realized with a high rise

before the question particle *mI* that is followed by a falling intonation<sup>16</sup> (Besler 2001; Göksel & Kerslake 2005). I refer to the high rise mentioned in the literature as *peak* and this corresponds to the highest point in the acoustic waveform.

There are different views about where the peak occurs. The general view is that it is on the constituent that immediately precedes the question particle, i.e. if *mI* follows the verb, the peak is on the verb; if it follows the subject, it is on the subject. However, there are cases where it occurs in a position other than the constituent it is cliticized to (i.e. when it occurs with other focus constituents) (Besler 2001; Göksel & Kerslake 2005). Examine the sentences below:

- (1) a. ALİ mi ders çalıştı?  
Ali.NOM mI lesson study-PAST.3sg  
'Is it Ali who studied?'
- b. ALİ ders çalıştı mı?  
Ali.NOM lesson study-PAST.3sg mI
- (i) 'Did Ali study?'
- (ii) 'As for Ali, did HE study?'

In (1a) the question particle follows the subject which has the prominent stress represented in capitals. In (1b), however, the prominent stress is still on the subject even though the question particle does not follow it. These two sentences differ with respect to their interpretations. (1a) questions whether the person who studied is Ali or not while (1b) has two interpretations, one which straightforwardly questions

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<sup>16</sup> Following Ergenç (1989: 63- 38), Fidan (2002) claims that Turkish has interrogative intonation only in *wh*-questions. Yes/no interrogatives are marked through a syntactic marker (question particle *mI*) in Turkish and hence have no interrogative intonation.



whether Ali studied or not, the other where Ali is contrasted with a previously mentioned person (Göksel and Kerslake 2005)<sup>17</sup>.

In the present work, the term *dislocation of the peak* stands for such cases, i.e. cases where the peak is observed in a position other than the position that immediately precedes the question particle. This is illustrated in Fig. 2.

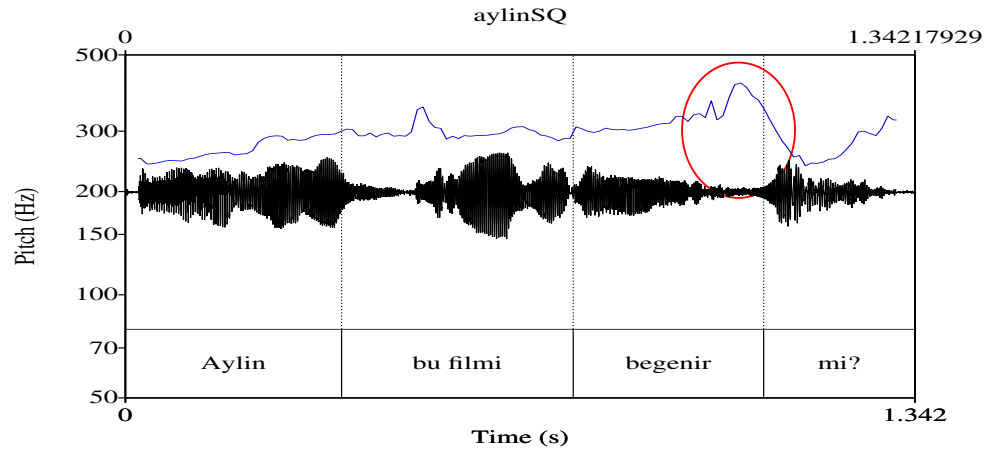
As can be observed from the charts, in the first chart the peak is on the verb which immediately precedes the question particle and this is the expected focus position in the presence of *mI*. In the second chart, however, the peak is on the subject even if it is not followed by *mI*<sup>18</sup>. This is what I refer to as *peak dislocation*.

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<sup>17</sup> “It is mostly the pitch that indicates which word received the contrastive stress. In every case the stressed word has a higher pitch and a greater length, but not a greater intensity” (Ladefoged 2003: 92). However, an increase in pitch does not always correlate with stress since it is possible to emphasize words without using an increase in pitch. So it is difficult to measure stress which is indicated by some combination of frequency, duration and intensity and there is no known algorithm that measures it (Ladefoged 2003).

<sup>18</sup> Note that there is another peak on the object. The subject is considered to host the highest pitch here because the maximum pitch is on the subject with 369 Hz and the mean pitch of this word is 312 Hz. The maximum pitch of the object, on the other hand, is 365 Hz and the mean pitch of the object is 271 Hz. What is significant here is that the highest pitch is *not* on the verb but on another constituent.

(a) SQ:



(b) RQ:

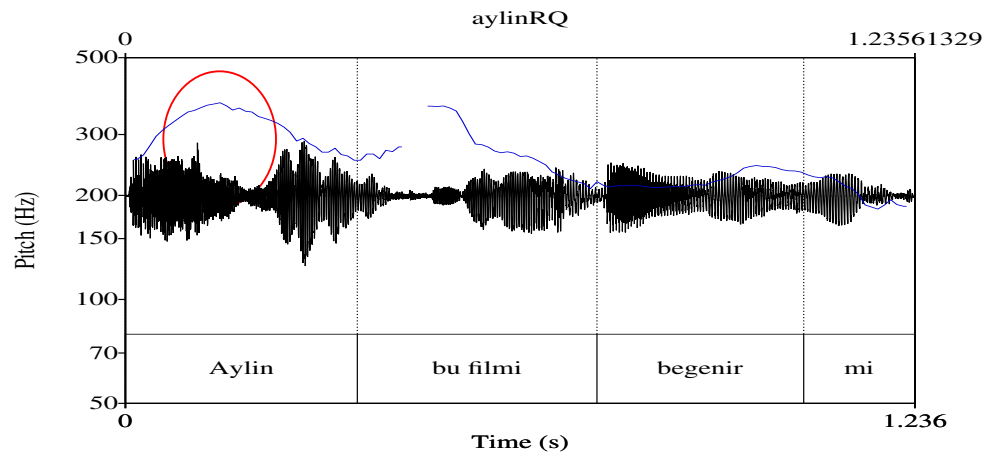
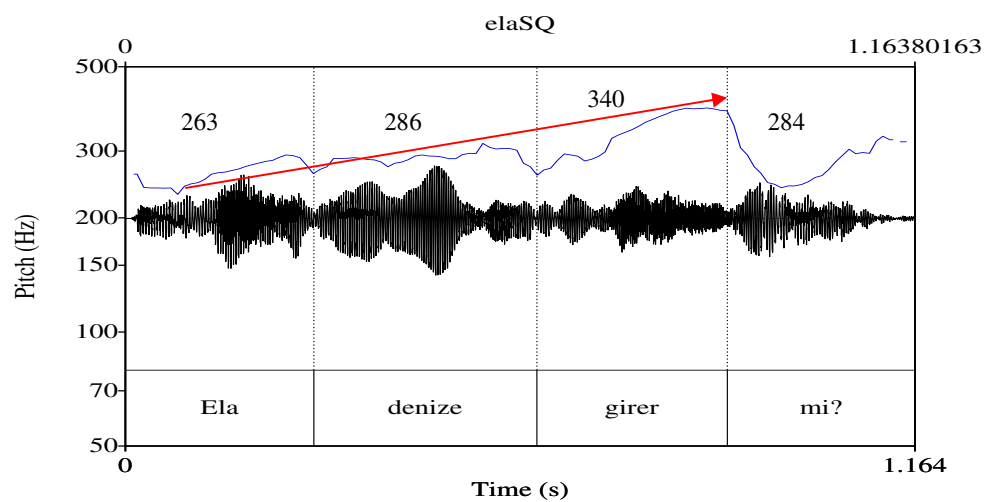


Fig. 2 The pitch charts of the sentence *Aylin bu filmi beğenir mi?* ‘Would Aylin like this film?’/ ‘Aylin would not like this film.’

#### Ascending / descending pattern

The F0 values of each constituent in an utterance were calculated. If the mean pitch of the constituents rises up to the point where the question particle occurs, then it means that it has an ascending pattern. If the mean pitch of the constituents falls, it has a descending pattern. This is illustrated below:

(a) SQ:



(b) RQ:

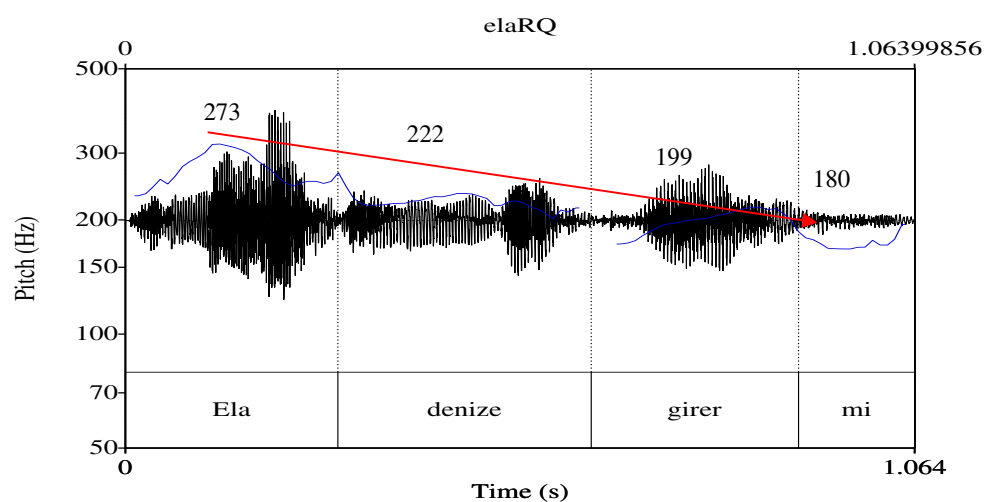


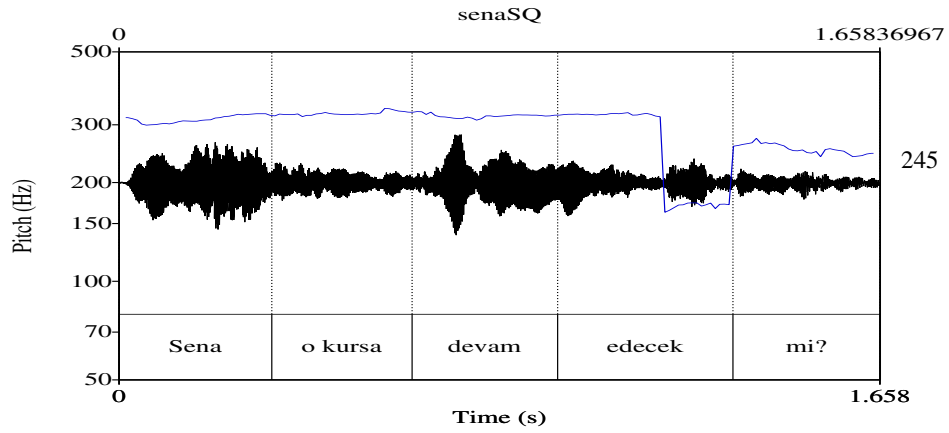
Fig. 3 The pitch charts of the sentence *Ela denize girer mi?* ‘Does Ela swim?’/ ‘Ela does not swim.’ showing the ascending/ descending pattern

In the first chart, the mean pitch of each constituent is higher from that of the previous one (except for the question particle) and this kind of a pattern is referred to as *ascending*. In the second one, the mean pitch of each constituent is higher from that of the following one and this kind of a pattern is referred to as *descending*.

### The terminal pitch value

This is also a relative comparison between SQs and RQs. The pairs of sentences are compared according to the pitch value that ends the sentence. This is illustrated below:

(a) SQ:



(b) RQ:

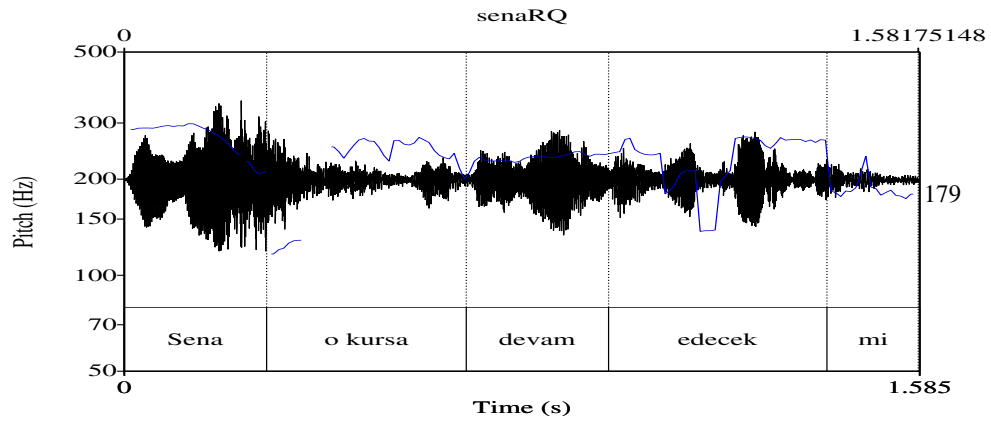


Fig. 4 The pitch charts of the sentence *Sena o kursa devam edecekmi?* ‘Will Sena attend that course?’ / ‘Sena won’t attend that course.’ to illustrate the difference between the terminal pitches

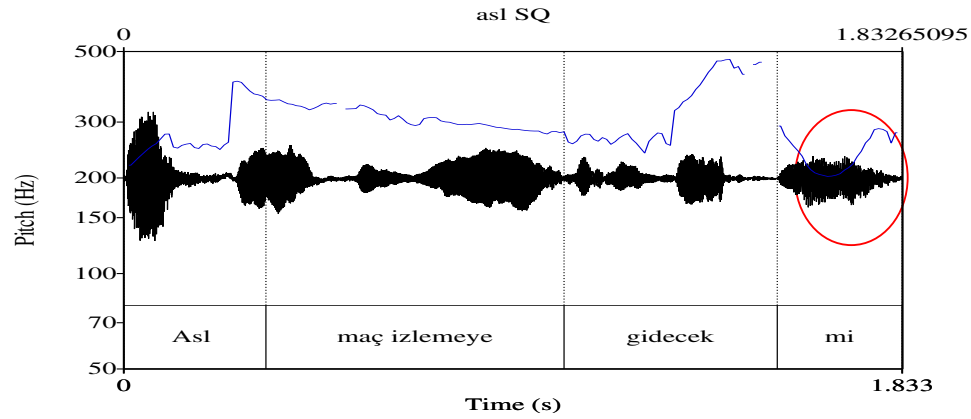
In the first chart, the sentence ends with a pitch of 245 Hz. In the second chart, the sentence ends with a pitch of 179 Hz. The terminal pitch of the first sentence is

higher than that of its pair. It might be lower than the terminal pitch of another sentence; but this is not important for the purpose of this analysis.

### The terminal fall/ rise

The terminal fall stands for the fall at the end of the sentence and the terminal rise stands for the rise after the fall. This is illustrated below:

(a) SQ:



(b) RQ:

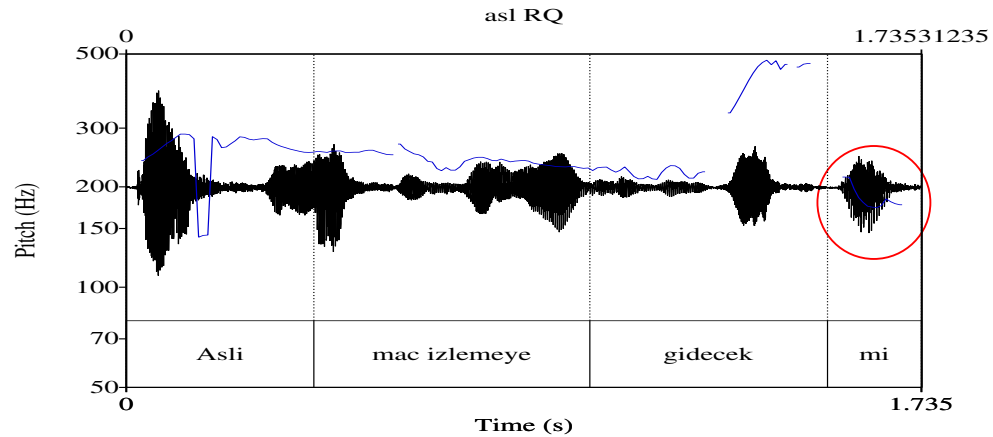


Fig. 5 The pitch charts of the sentence *Aslı maç izlemeye gidecek mi?* ‘Will Aslı go to watch the match?’ / ‘Aslı will not go to that match.’ illustrating the terminal rise/fall at the end

In the first chart, there is a rise at the end and this is what is called a *terminal rise*. In the second one, there is a fall and it is not followed by a rise and this is a *terminal fall*. The next part presents the prosodic analysis of the test items according to the criteria described.

### Intonational Properties of Test Items

The prosodic properties of constructions in which the question particle follows the verb (14 sentence pairs) and the ones in which the question particle follows the subject (9 sentence pairs) will be analyzed separately.

#### “Verb-*mI*” constructions

The results of the intonation patterns with respect to the nature of the TAM markers in “verb-*mI*” constructions will be discussed in terms of the items in Tests I, II, and III. The list of items analyzed is given in the following table<sup>19</sup>. There are 14 such sentences, 8 of which are marked with the *aorist*, 3 with the future and the remaining 3 with the past tense.

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<sup>19</sup> Throughout the analysis, the items will be represented with the numbering in the table. For example, in a diagram in the section that discusses the constructions marked with the aorist, 1 stands for the first sentence in the table, that is, *Elif benimle sinemaya gelir mi?*

Table 3. List of “Verb-*mI*” Constructions Marked with Different TAM Markers

	Aorist	Future	Past
Test I	<p>1. Elif benimle sinemaya gelir mi? ‘Will Elif come to the cinema with me?’ / ‘Elif does not come to cinema with me.’</p> <p>2. Sevinç pırasa yer mi? ‘Does Sevinç eat leeks?’ / ‘Sevinç does not eat leeks.’</p>	<p>1. Sena o kursa devam edecek mi? ‘Will Sena continue with that course?’ / ‘Sena will not continue with that course.’</p> <p>2. Ayşe bu kitabı okuyacak mı? ‘Will Aslı read this book?’ / ‘Ayşe will not read this book.’</p>	<p>1. Ali ders çalıştı mı? ‘Did Ali study?’ / ‘Ali did not study.’</p> <p>2. Ahmet seni aradı mı? ‘Did Ahmet call you?’ / ‘Ahmet did not call you.’</p>
Test II	<p>3. Esmâ bizimle partiye gelir mi? ‘Will Esmâ come to the party with us?’ / ‘Esmâ won’t come to the party with us.’</p>	<p>3. Aslı maç izlemeye gidecek mi? ‘Will Aslı go to the match?’ / ‘Aslı will not go to the match.’</p>	<p>3. Esin sana Londra’dan kart attı mı? ‘Did Esin send you a postcard from London?’ / ‘Esin did not send you a postcard from London.’</p>
Test III	<p>4. Leyla radyo dinler mi? ‘Does Leyla listen to the radio?’ / ‘Leyla does not listen to the radio.’</p> <p>5. Ela denize girer mi? ‘Does Ela go swimming?’ / ‘Ela does not go swimming.’</p> <p>6. Emine bu tezi bitirir mi? ‘Will Emine finish this thesis?’ / ‘Emine does not finish this thesis.’</p> <p>7. Ece bizimle maça gelir mi? ‘Will Ece come to the match with us?’ / ‘Ece does not come to the match with us.’</p> <p>8. Aylin bu filmi beğenir mi? ‘Will Aylin like this film?’ / ‘Aylin does not like this film.’</p>		

“Verb-*mI*” constructions marked with the aorist

The common characteristics of “verb-*mI*” RQs marked with the aorist seem to be as follows: (i) a lower overall mean pitch, (ii) leftward dislocation of the peak, (iii) a descending pattern, (iv) a lower terminal pitch, and (v) a terminal fall at the end.

The SQs, on the other hand, seem to have: (i) a higher overall mean pitch, (ii) no peak dislocation (peak on the constituent that hosts the question particle), (iii) an ascending pattern, (iv) a higher terminal pitch, and (v) a slight terminal rise at the end. In the following paragraphs, each criterion will be discussed in more detail.

(i) Overall mean pitch:

In verb-*mI* constructions where the predicate is marked with the aorist, the overall pitch of the sentence is higher if it is an SQ, compared to an RQ. (Note that these sentences were uttered by the same speaker.) This is observed in seven out of eight sentences. The pitch values are given in the table and illustrated in the figure below:

Table 4. Overall Mean Pitch Values of the “Verb-*mI*” Constructions Marked with the Aorist

	1	2	3	4	5	6	7	8
SQ	224 Hz	252 Hz	295 Hz	286 Hz	293 Hz	290 Hz	289 Hz	293 Hz
RQ	236 Hz	218 Hz	237 Hz	231 Hz	223 Hz	265 Hz	239 Hz	261 Hz



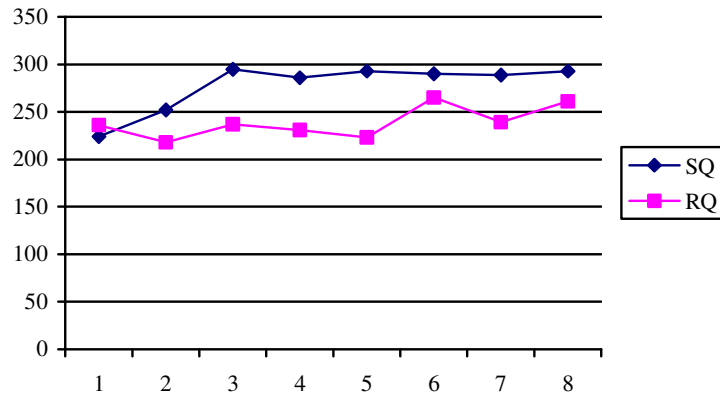
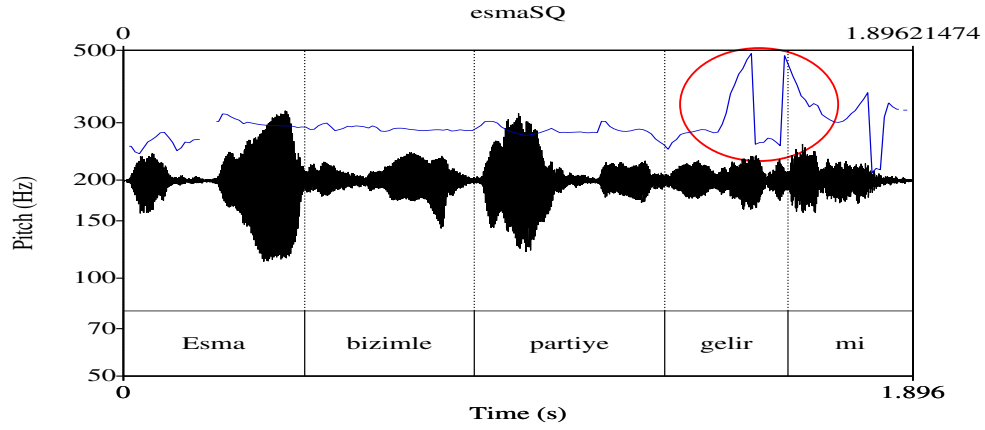


Fig. 6 The comparison of the mean pitch values of “verb-*mP*” SQs and RQs marked with the aorist

(ii) Peak dislocation:

In seven out of eight sentences, there is a leftward peak dislocation if the sentence is an RQ. In the RQ that does not have a peak dislocation there is still a rise in the subject in addition to the peak on the verb. This is illustrated below:

(a) SQ:



(b) RQ:

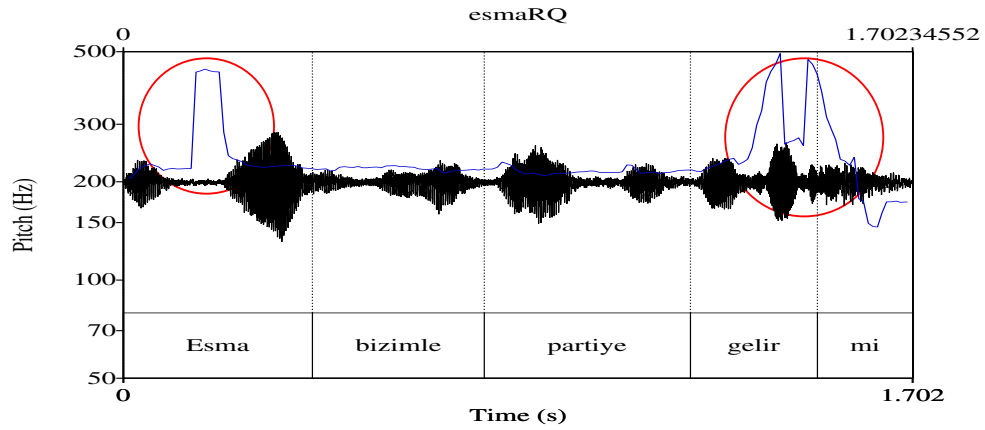


Fig. 7 The pitch contours of the sentence *Esma bizimle partiye gelir mi?* ‘Will Esma come to the party with us?’/ ‘Esma does not come to the party with us.’

(iii) Ascending/ descending pattern:

When the other property, ascending/ descending pattern is investigated, seven out of eight SQs have an ascending pattern while RQs have a descending pattern. In these constructions, descending pattern overlaps with the leftward peak dislocation.

(iv) The terminal pitch:

When the terminal pitch values of the constructions are examined, it is observed that in seven out of eight sentences, RQs have a lower terminal pitch in comparison to

their SQ counterparts. The values for the terminal pitch of items are given in the table and illustrated in the figure below:

Table 5. The Terminal Pitch Values of the “Verb-*mI*” Constructions Marked with the Aorist

	1	2	3	4	5	6	7	8
SQ	172 Hz	265 Hz	326 Hz	306 Hz	313 Hz	310 Hz	284 Hz	325 Hz
RQ	201 Hz	147 Hz	174 Hz	190 Hz	205 Hz	105 Hz	203 Hz	201 Hz

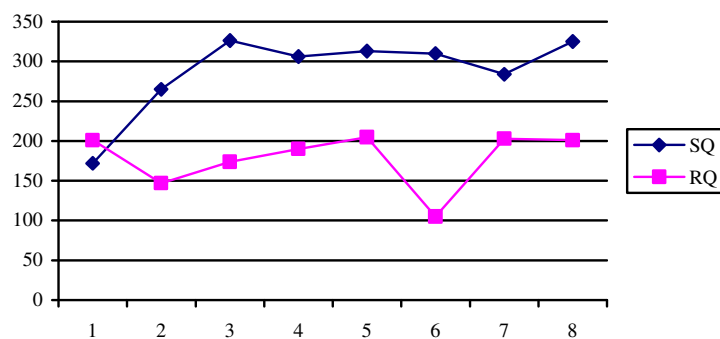


Fig. 8 The comparison of terminal pitch values of “verb-*mI*” SQs and RQs marked with the aorist

The item 1, an exception to the general pattern, in the sense that the overall pitch of the RQ is higher than that of the SQ, also sound unnatural as an SQ question. This might be due to a lapse of concentration of the side of the informant.

(v) The terminal fall/ rise:

In seven out of eight sentences, SQs have a slight rise at the end. Only one SQ has a fall (item 2). On the other hand, in five out of eight sentences RQs have a fall. Three RQs have a rise. However, in the cases where both the SQ and the RQ have a rise,

the rise of the SQ is higher than that of the RQ (i.e., items 4, 5 and 7). The values are listed in the table and illustrated in figure 8 below.

Table 6. Terminal Falls and Rises in “Verb-*mI*” Constructions Marked with the Aorist. The Values with a Minus (-) Represent Falls.

	1	2	3	4	5	6	7	8
SQ	22 Hz	-35 Hz	11 Hz	54 Hz	86 Hz	81 Hz	57 Hz	86 Hz
RQ	-31 Hz	-91 Hz	-58 Hz	5 Hz	27 Hz	-193 Hz	33 Hz	-27 Hz

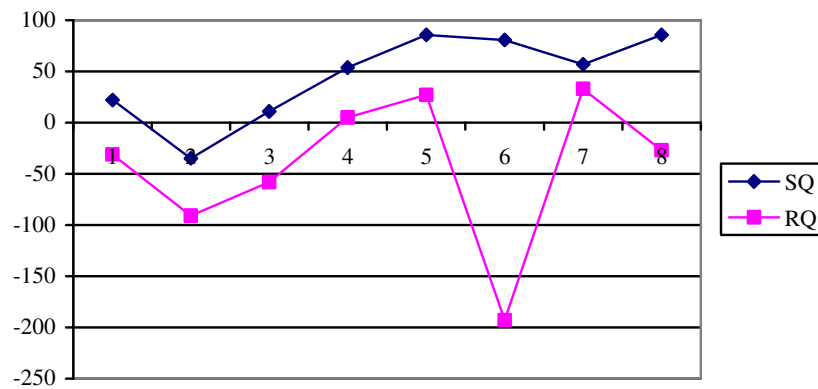


Fig. 9 The terminal falls and rises of “verb-*mI*” SQ and RQs marked with the aorist. The values below 0 represent falls and the values above 0 represent rises.

Note that in those cases where both have a fall, the fall of the RQ is steeper than the fall of the SQ (i.e. item 2).

“Verb-*mI*” constructions marked with future:

There are only three items of “verb-*mI*” constructions marked with future in the data set. The common characteristics of such RQs seem to be: (i) a lower overall mean pitch, (ii) a descending pattern, (iii) a lower terminal pitch, and (iv) a terminal fall.

The SQs, on the other hand, seem to have: (i) a higher overall mean pitch, (ii) a higher terminal pitch, and (iii) a terminal fall. In the following paragraphs, the values for each criterion are given.

(i) Overall mean pitch:

In “verb-*mI*” constructions where the predicate is marked with the future, the mean pitch value is higher if it is an SQ, similar to constructions marked with the aorist. This is observed in all of the three sentences. The values are listed in the table (7) and illustrated in the figure (10) below:

Table 7. The Overall Mean Pitch Values of the “Verb-*mI*” Constructions Marked with the Future

	1	2	3
SQ	293 Hz	289 Hz	296 Hz
RQ	237 Hz	285 Hz	256 Hz

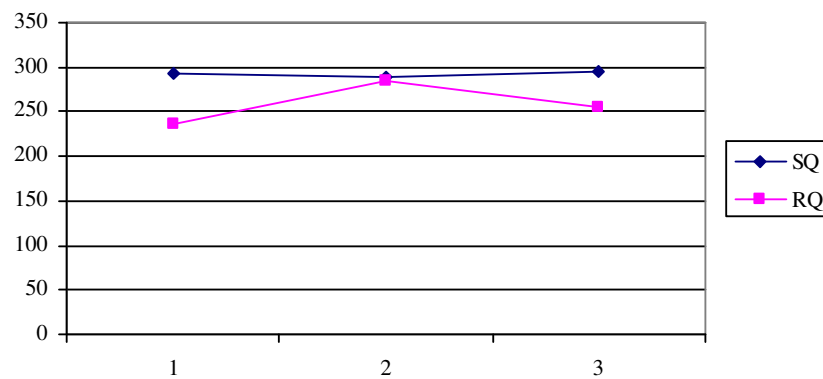


Fig. 10 The overall mean pitch of “verb-*mI*” SQs and RQs that are marked with future

(ii) Peak dislocation:

Leftward peak dislocation is observed in only one out of three sentences (item 1).

(iii) Ascending/ descending pattern:

An ascending pattern is observed in all of the three SQs, whereas in RQs, two out of three have a descending pattern (e.g. items 1 and 3).

(iv) The terminal pitch:

In RQs the terminal pitch value of the question particle is lower than the value it has as an SQ, similar to the constructions marked with aorist. This is observed in all of the three sentences. The pitch values are listed in the table (8) and illustrated in the figure (11) below:

Table 8. The Terminal Pitch Values of the “Verb-*mI*” Constructions Marked with the Future

	1	2	3
SQ	245 Hz	259 Hz	269 Hz
RQ	179 Hz	201 Hz	175 Hz

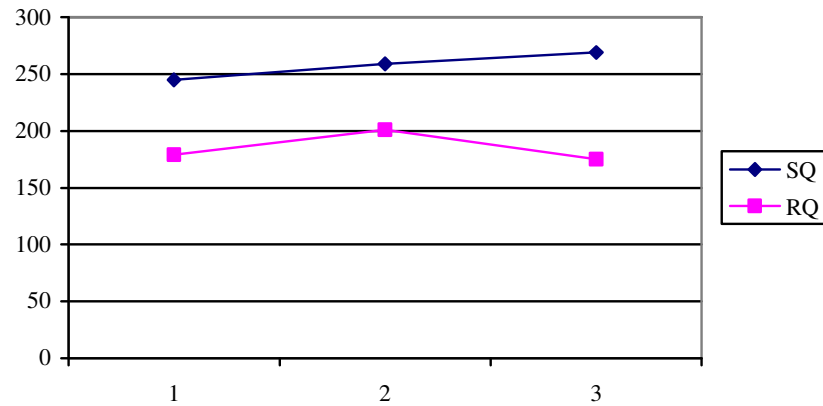


Fig. 11 The terminal pitch values of “verb-*mI*” SQs and RQs in which the verb is marked with future

(v) The terminal fall/ rise:

Both RQs and SQs have a fall at the end except for one SQ which has a rise with a value of 67 Hz. The values are listed in the table (9) and illustrated in the figure (12) below:

Table 9. The Terminal Falls and Rises of the “Verb-*mI*” Constructions Marked with the Future

	1	2	3
SQ	-13 Hz	-112 Hz	67 Hz
RQ	-11 Hz	-40 Hz	-39 Hz

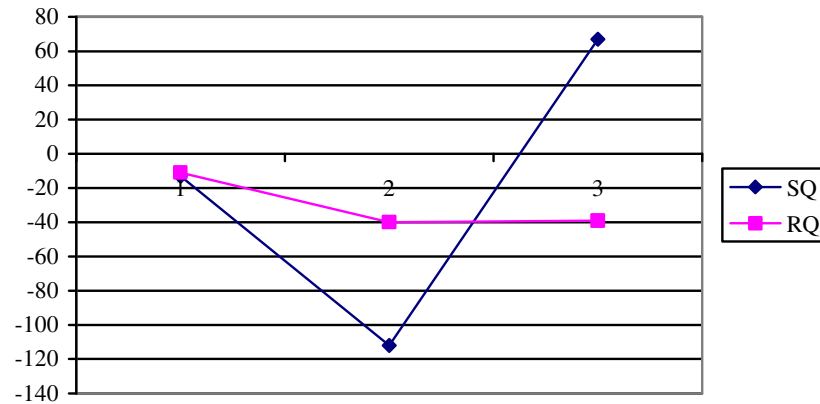


Fig. 12 Comparison of the terminal falls and rises in “verb-*mI*” SQs and RQs marked with the future

“Verb-*mI*” constructions marked with the past tense

The common characteristics of “verb-*mI*” RQs in which the verb is marked with the past tense seem to be: (i) a higher overall mean pitch, (ii) no peak dislocation, (iii) a flat pattern, (iv) a higher terminal pitch, and (v) a terminal fall.

SQs, on the other hand, seem to have: (i) a lower overall mean pitch, (ii) no peak dislocation, (iii) an ascending pattern, (iv) a lower terminal pitch, and (v) a very slight terminal rise. In the following paragraphs, the values are given.

(i) Overall mean pitch:

Where the predicate is marked with the past tense marker, the mean pitch of the sentence is lower if it is an SQ. This is observed in two out of three sentences. This is illustrated in the table (10) and the figure (13) below:



Table 10. The Overall Mean Pitch of “Verb-*mI*” Constructions Marked with the Past Tense

	1	2	3
SQ	223 Hz	260 Hz	302 Hz
RQ	280 Hz	310 Hz	272 Hz

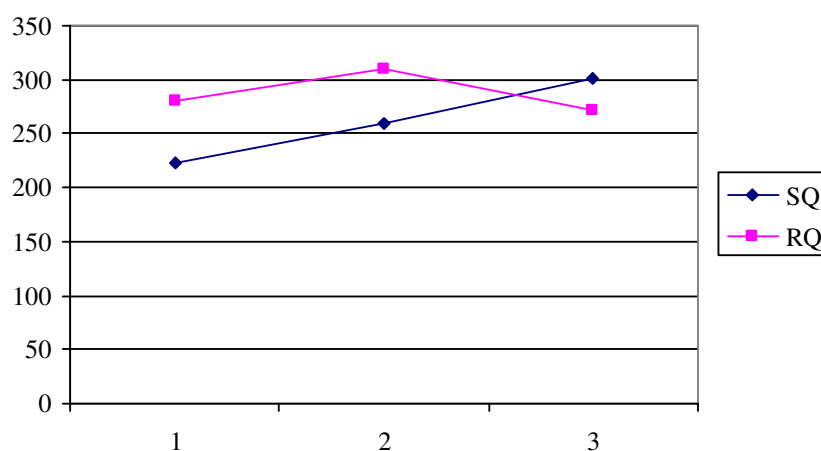


Fig. 13 The mean pitch values of “verb-*mI*” SQs and RQs marked with past tense

(ii) Peak dislocation:

Leftward peak dislocation is not observed in RQs in which the verb is marked with past tense and the question particle follows the verb.

(iii) Ascending/ descending pattern:

It is observed that SQs have an ascending pattern in three out of three sentences.

RQs, on the other hand, have either a flat pattern or an ascending pattern similar to SQs.

(iv) The terminal pitch:

When the terminal pitch values of the pairs are examined, it is observed that SQs have a lower terminal pitch when compared to their RQ counterparts. This is observed in two out of three sentence pairs. The terminal pitch of the test items is listed in the table (11) and illustrated in the figure (14) below:

Table 11. The Terminal Pitch Values of the “Verb-*mI*” Constructions Marked with the Past Tense

	1	2	3
SQ	229 Hz	293 Hz	355 Hz
RQ	346 Hz	313 Hz	193 Hz

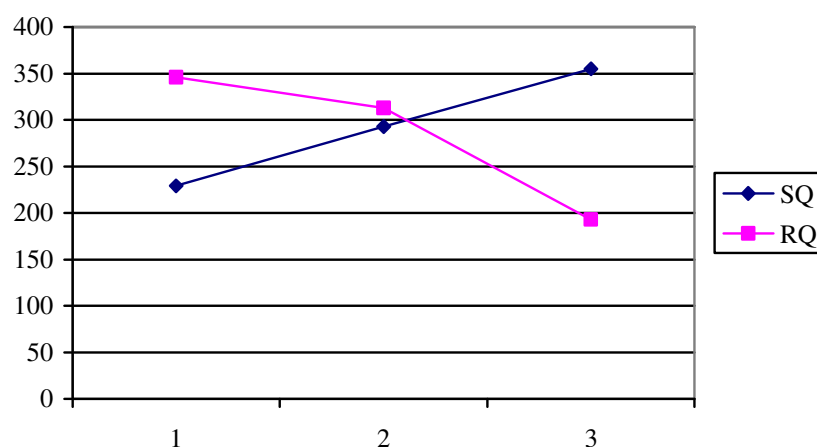


Fig. 14 Comparison of the terminal pitch of the “verb-*mI*” SQs and RQs marked with the past tense

(v) The terminal fall/ rise:

Both RQs and SQs have a terminal fall. However, the falls are considerably steep in RQs. This is observed in two out of three sentences. The values are listed in the table (12) and illustrated the figure (15) below:

Table 12. The Terminal Falls and Rises of the “Verb-*mI*” Constructions Marked with the Past Tense

	1	2	3
SQ	-54 Hz	-44 Hz	-47 Hz
RQ	-113 Hz	-292 Hz	-47 Hz

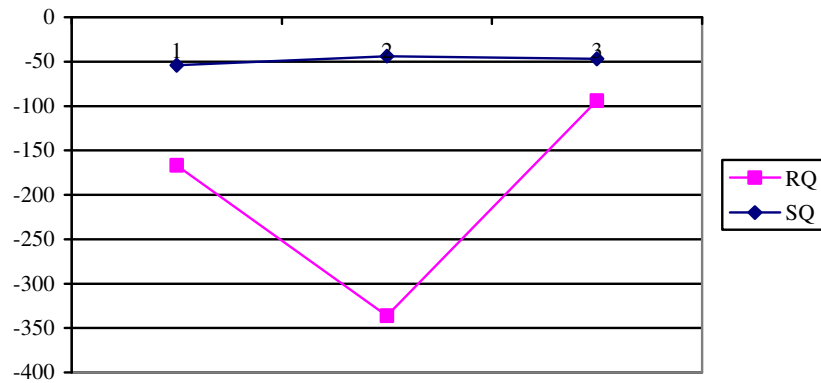


Fig. 15 The comparison of falls in “verb-*mI*”SQs and RQs in which the verb is marked with past tense

*Interim summary:*

So far, it has been shown that RQs with *mI* following the verb (“verb-*mI*” constructions) where the verb is marked with the aorist or the future display the following characteristics, compared to SQs of the same structure:

Verb-*mI* RQs (aor/fut)

- (i) lower overall mean pitch
- (ii) descending pattern
- (iii) terminal fall

Verb-*mI* SQs (aor/fut)

- higher overall mean pitch
- ascending pattern
- relatively shorter fall

In addition, the aorist shows a difference between RQs and SQs in terms of leftward peak dislocation and lower terminal pitch in RQs, compared to SQs which have no peak dislocation and higher terminal pitch.

These two factors (peak dislocation and terminal pitch) do not vary in “verb-*mI*” constructions marked with the future.

The prosodic properties of RQs marked with past tense, however, differ from the ones marked with the aorist and future in that they have a higher overall mean pitch, no peak dislocation, lack of a descending pattern and a higher terminal pitch. The common property is the terminal fall.

We thus have a scale of identifiable prosodic difference between RQs and SQs depending on the tense/aspect marker on the verb. Those that have the aorist mark the difference more than the ones that have the future marker and those constructions where the verb is marked with the past tense show the difference least.

In the next part, constructions in which the question particle follows the subject will be analyzed in the same manner.

#### “Subject-*mI*” Constructions

The results of the intonation patterns with respect to the TAM markers in “subject-*mI*” constructions will be discussed in terms of the items in Tests I and II<sup>20</sup>. The list of items analyzed is given in the following table. There are a total of 9 sentences, 3 of which are marked with the aorist, 3 of which are marked with the future and the remaining 3 are marked with the past tense.

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<sup>20</sup> Test III did not include subject-*mI* constructions and is therefore excluded from this section.

Table 13. The list of “Subject-*mI*” Constructions Marked with different TAM Markers

	Aorist	Future	Past
Test I	<p>1. Güneş mi Dünya’nın trafinda döner? ‘Is it the Sun that turns around the Earth?’ / ‘It is not the Sun that turns around the Earth.’</p> <p>2. Ahmet mi doğruyu konuřur? ‘Is it Ahmet who tells the truth?’ / ‘It is not Ahmet who tells the truth.’</p>	<p>1. O seminere Seda mı gidecek? ‘Is it Seda who will attend that seminar?’ / ‘It is not Seda who will go to that seminar.’</p> <p>2. Efe mi babasının işlerine bakacak? ‘Is it Efe who will be in charge of his father’s job?’ / ‘It is not Efe who will be in charge of his father’s job.’</p>	<p>1. Bu vazoyu Ali mi kırdı? ‘Was it Ali who broke this vase?’ / ‘It was not Ali who broke this vase.’</p> <p>2. Bütün yemekleri Ayşe mi yaptı? ‘Was it Ayşe who cooked all the dishes?’ / ‘It was not Ayşe who cooked all the dishes.’</p>
Test II	<p>3. Bu yarışını Mehmet mi kazanır? ‘Is it Mehmet who will win this race?’ / ‘It is not Mehmet who will win this race.’</p>	<p>3. Hasan’a ödevlerinde Ayşe mi yardım edecek? ‘Is it Ayşe who will help Hasan with his homework?’ / ‘It is not Ayşe who will help Hasan with his homework.’</p>	<p>3. Dün akşamki hesabı Ali mi ödedi? ‘Was it Ali who paid the bill yesterday evening?’ / ‘It was not Ali who paid the bill yesterday evening.’</p>

“Subject-*mI*” constructions marked with the aorist

The common characteristics of subject-*mI* RQs in which the verb is marked with the aorist seem to be:

- (i) a lower overall mean pitch
- (ii) no peak dislocation
- (iii) higher terminal pitch
- (iv) a descending pattern
- (v) lower pitch value for the question particle

(i) Overall mean pitch:

The overall mean pitch is higher in two out of three SQs (following the general pattern as observed in the majority of “verb-*mI*” constructions). The values are listed in the table (14) and illustrated in the figure (16) below:

Table 14. The Overall Mean Pitch of “Subject-*mI*” Constructions Marked with the Aorist

	1	2	3
SQ	194 Hz	272 Hz	297 Hz
RQ	262 Hz	220 Hz	243 Hz

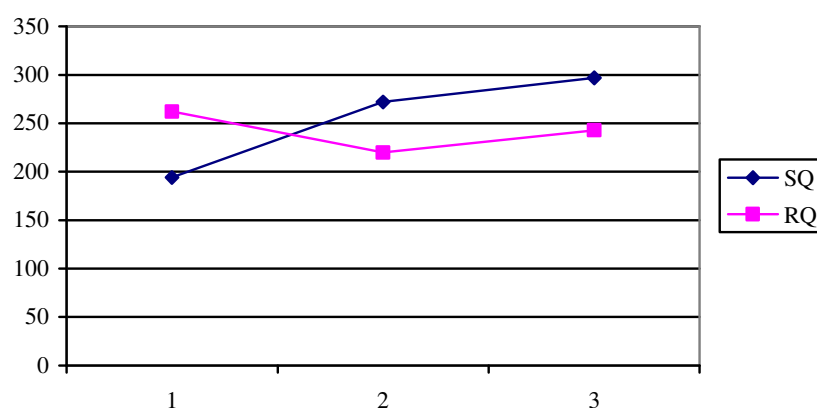


Fig. 16 Comparison of the mean pitch values of “subject-*mI*” SQs and RQs marked with the aorist

(ii) Peak dislocation:

The peak is expected to be on the subject, the constituent that immediately precedes the question particle in these constructions. However the peak is observed on the subject in only one out of three pairs. In others, the peak occurs with the question particle as shown in the table (15) below. This is interesting since s far as I have been

able to search, this distribution of pitch has not been reported in the literature. The question particle is referred to as an unstressable clitic which places the stress on the last syllable of the preceding word. Note that in two out of three cases, the peak is higher if it is an SQ.

Table 15. The Constituents with the Highest Pitch Values in “Subject-*mI*”  
Constructions Marked with the Aorist

	1	2	3
SQ	QP (368 Hz)	QP (351 Hz)	Subject (438 Hz)
RQ	QP (426 Hz)	QP (323 Hz)	Subject (389 Hz)

(iii) Ascending/ descending pattern:

There is an ascending pattern up to the point including the question particle that continues descending in both SQs and RQs. This is observed in all of the utterances except for one RQ in which the descending pattern starts with the question particle.

(iv) The terminal pitch:

The terminal pitch is higher if it is an RQ. This is observed in two out of three sentences. The terminal pitch value of each test item is listed in the table (16) and illustrated in the figure (17) below:

Table 16. The Terminal Pitch of the “Subject-*mI*” Constructions Marked with the Aorist

	1	2	3
SQ	134 Hz	141 Hz	262 Hz
RQ	149 Hz	176 Hz	245 Hz

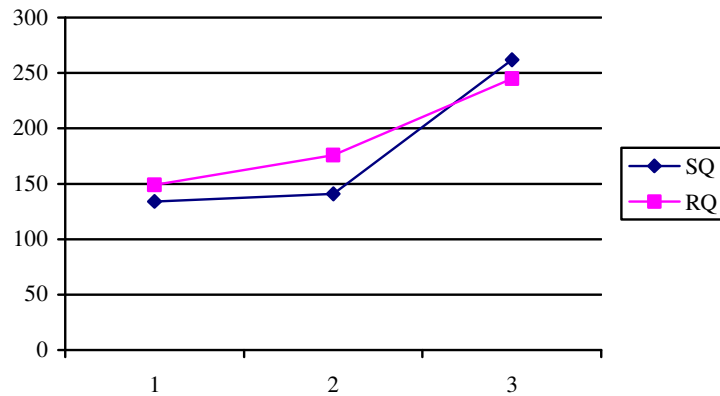


Fig. 17 The comparison of terminal pitch values of “subject-*mI*” SQs and RQs marked with the aorist

In the “verb-*mI*” constructions, the terminal pitch overlaps with the pitch of the question particle which is at the end of the sentence; however in “subject-*mI*” constructions, the pitch of the question particle is separate and is therefore included in the analysis separately.

In two out of three sentences, the pitch value of the question particle is lower in RQ when compared to the pitch value of the question particle in an SQ (in parallel fashion to “verb-*mI*” constructions). The pitch value for each question particle of the test item is listed in the table (17) and illustrated in the figure (18) below.



Table 17. The Pitch of the Question Particle of “Subject-*mI*” Constructions Marked with the Aorist

	1	2	3
SQ	320 Hz	323 Hz	333 Hz
RQ	355 Hz	310 Hz	247 Hz

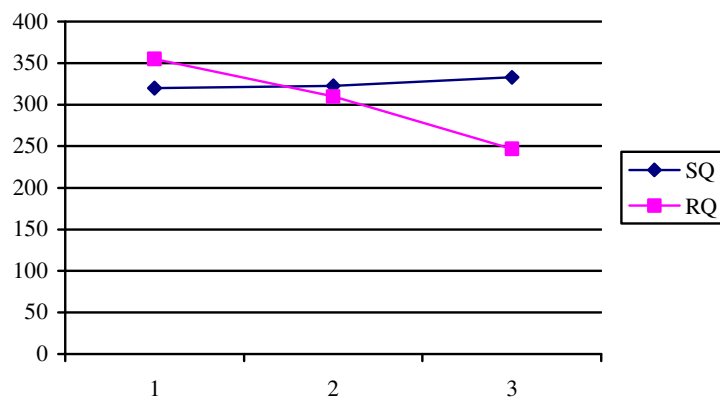


Fig. 18 The comparison of pitch values of the question particle in “subject-*mI*” SQs and RQs marked with the aorist

(v) The terminal fall/ rise:

Both SQs and RQs have a terminal fall except for one RQ in which there is a rise of 2 Hz. It is observed that SQs have steeper falls when compared to their RQ counterparts. The values are listed in the table (18) and illustrated in the figure (19) below:

Table 18. The Terminal Falls and Rises of the “Subject-*mI*” Constructions Marked with the Aorist

	1	2	3
SQ	-12 Hz	-149 Hz	-71 Hz
RQ	-36 Hz	-22 Hz	2 Hz

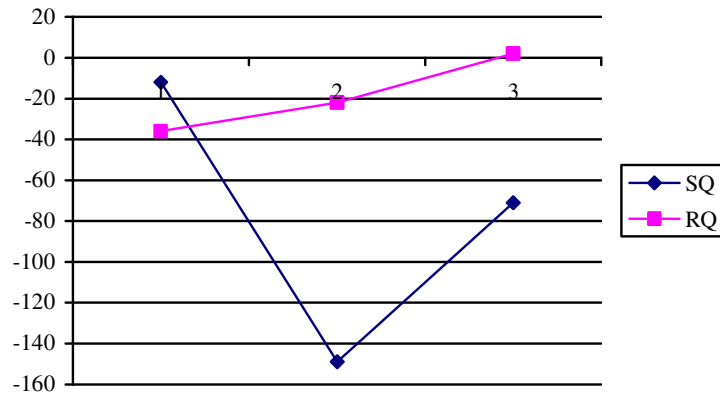


Fig. 19 The comparison of terminal falls and rises in “subject-*mI*” SQs and RQs marked with the aorist

“Subject-*mI*” constructions marked with future

The common properties of “subject-*mI*” RQs marked with future seem to be:

- (i) a lower overall mean pitch
- (ii) a rightward peak dislocation
- (iii) a lower terminal pitch
- (iv) a terminal fall
- (v) higher terminal pitch value for the question particle

(i) Overall mean pitch:

Where the predicate is marked with future, the mean pitch is lower in an SQ in 2 out of 3 sentences, compared to an RQ. The mean pitch value for each test item is listed in the table (19) and illustrated in the figure (20) below.

Table 19. The Overall Mean Pitch of the “Subject-*mI*” Constructions Marked with Future

	1	2	3
SQ	261 Hz	238 Hz	250 Hz
RQ	259 Hz	270 Hz	271 Hz

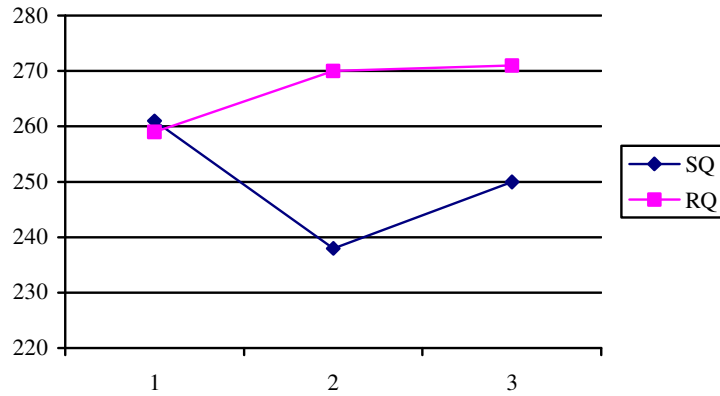


Fig. 20 The comparison of overall mean pitch in “subject-*mI*” SQs and RQs marked with the future

(ii) Peak dislocation:

The peak is not observed on the subject that precedes the question particle (except for one SQ) but either on the particle itself or on the constituent that follows it. The cases in which the peak is on the constituent that follows the question particle can be considered as instances of *right-ward peak dislocation* in RQs. This is illustrated in the table (20) below.

Table 20. The place of peak in the “subject-*mI*” constructions marked with future

	1	2	3
SQ	Subject (494 Hz)	QP (344 Hz)	QP (509 Hz)
RQ	QP (487 Hz)	Object (432 Hz)	Verb (511 Hz)

(iii) Ascending/ descending pattern:

There is a continuous rise up to the question particle (including the particle) which is followed by a fall in “subject-*mI*” SQs marked with the future. In the RQs, on the other hand, the ascending pattern continues up to the constituent that follows the question particle. This is observed in all of the three RQs.

(iv) The terminal pitch:

The terminal pitch of an SQ is higher than that of an RQ even though the difference is not a marked one. This is observed in three out of three sentences and illustrated in the table (21) and the figure (21) below:

Table 21. The Terminal Pitch Values of the “Subject-*mI*” Constructions Marked with the Future

	1	2	3
SQ	178 Hz	188 Hz	223 Hz
RQ	175 Hz	183 Hz	190 Hz

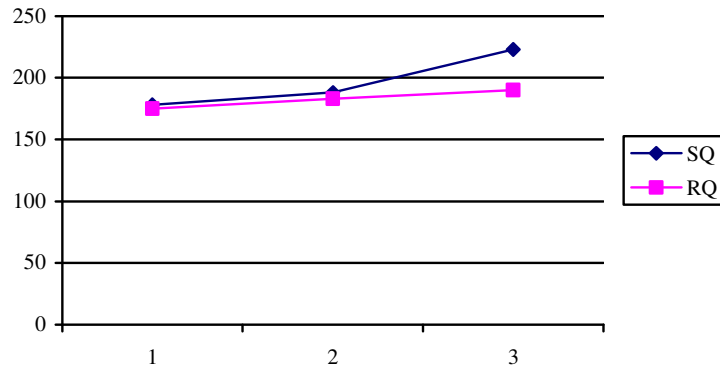


Fig. 21 The comparison of the terminal pitch values of “subject-*mI*” SQs and RQs marked with the future

When the pitch value of the question particle is concerned, it is observed that the pitch value of the question particle is higher in an RQ. This is observed in two out of three sentences and illustrated in the table (22) and the figure (22) below:

Table 22. The Pitch Value of the Question Particle in “Subject-*mI*” Constructions Marked with the Future

	1	2	3
SQ	152 Hz	283 Hz	333 Hz
RQ	409 Hz	330 Hz	261 Hz

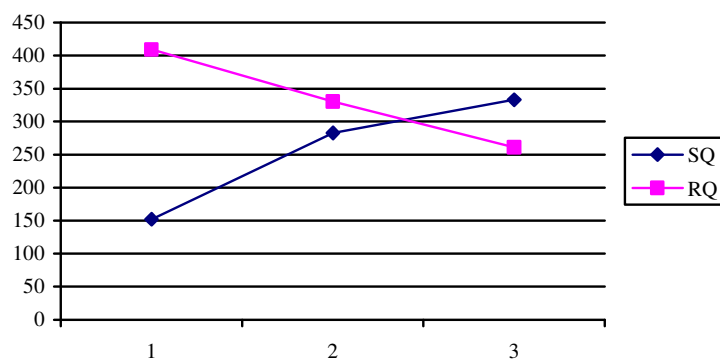


Fig. 22 The comparison of pitch values of the question particle in “subject-*mP*” SQs and RQs marked with the future

(v) Terminal fall/ rise:

There is a terminal rise if it is an SQ. This is observed in two out of three sentences.

There is a steep terminal fall in an RQ, compared to an SQ. This is observed in two out of three sentences and illustrated in the table (23) and the figure (23) below:

Table 23. The Terminal Falls and Rises in the “Subject-*mP*” Constructions Marked with the Future

	1	2	3
SQ	67 Hz	8 Hz	-10 Hz
RQ	-234 Hz	-9 Hz	-304 Hz

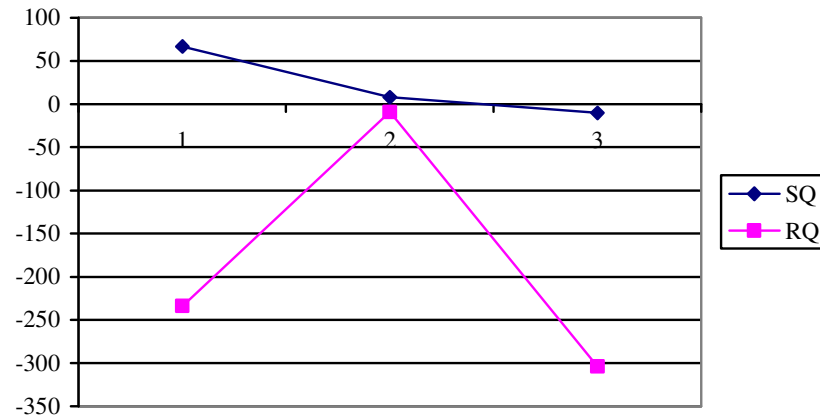


Fig. 23 The rises in SQs and the falls in RQs in which the verb is marked with future and the question particle follows the subject.

“Subject-*mI*” constructions marked with the past tense

The common characteristics of RQs in which the verb is marked with the past tense and the question particle follows the verb are:

- (i) a lower overall mean pitch
- (ii) a lower terminal pitch and a lower pitch of the question particle
- (iii) a lower pitch of peak
- (iv) a terminal fall

(i) The overall mean pitch:

In “subject-*mI*” constructions where the predicate is marked with past tense, the mean pitch is higher in 2 out of 3 SQs, compared to the RQ reading. The overall mean pitch values of the test items are listed in the table (24) and illustrated in the figure (24) below.

Table 24. The Overall Mean Pitch of the “Subject-*mI*” Constructions Marked with the Past Tense

	1	2	3
SQ	254 Hz	229 Hz	277 Hz
RQ	219 Hz	259 Hz	230 Hz

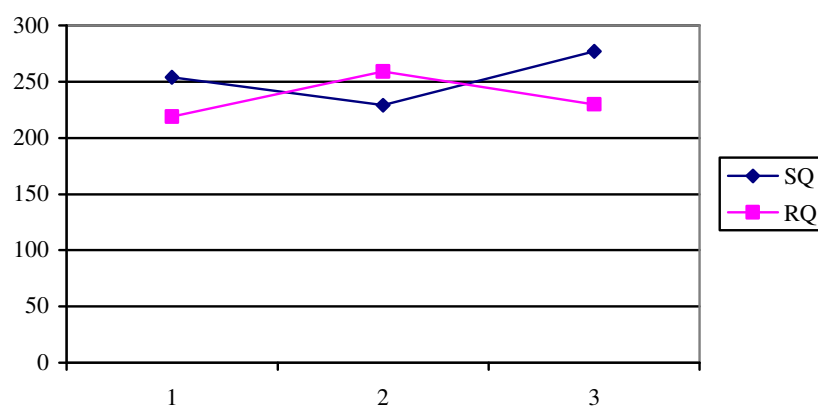


Fig. 24. The mean pitch values of “subject-*mI*” SQs and RQs marked with the past tense

(ii) Peak dislocation:

The highest pitch is not on the subject but either on the question particle or on the object in both “subject-*mI*” SQs and RQs marked with the past tense. In one of the SQs, there are two peaks: one on the subject, the other on the question particle. This is illustrated in the table (25) below:



Table 25. The Constituent hat Hosts the Highest Pitch Value in “Subject-*mI*”  
Constructions Marked with the Past Tense

	1	2	3
SQ	Object (301 Hz)	QP (431 Hz)	QP (511 Hz) _ S (496 Hz)
RQ	Object (306 Hz)	QP (512 Hz)	QP (474 Hz)

(iii) The terminal pitch:

RQs have a lower terminal pitch when compared to their SQ counterparts. This is observed in three out of three sentences. The terminal pitch value of each test item is listed in the table (26) and illustrated in the figure (25) below.

Table 26. The Terminal Pitch Values Belonging to “Subject-*mI*” Constructions  
Marked with the Past Tense

	1	2	3
SQ	272 Hz	182 Hz	198 Hz
RQ	204 Hz	116 Hz	189 Hz

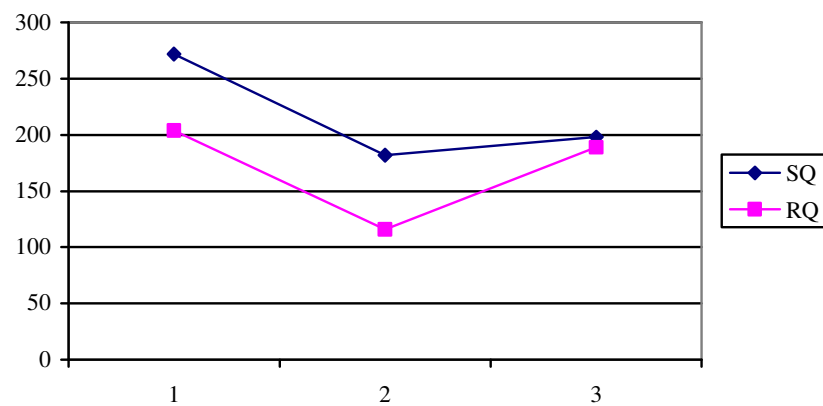


Fig. 25 The terminal pitch values of “subject-*mI*” SQs and RQs marked with the past tense

When the pitch value of the question particle is concerned, it is observed that the pitch of the question particle is lower in an RQ. This is observed in two out of three sentences and illustrated in the table (27) and in the figure (26) below:

Table 27. The pitch values of the question particle in “subject-*mI*” constructions marked with the past tense

	1	2	3
SQ	264 Hz	378 Hz	497 Hz
RQ	117 Hz	420 Hz	470 Hz

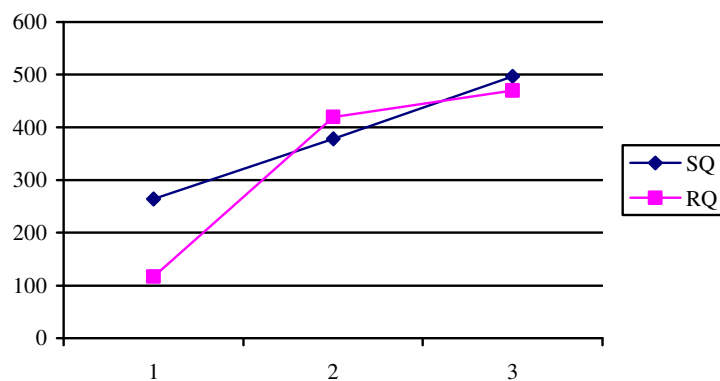


Fig. 26 The comparison of pitch values of the question particle in “subject-*mI*” SQs and RQs marked with the past tense

(iv) The terminal fall/ rise:

There is a terminal rise if it is an SQ, compared to a steep fall in an RQ. This is illustrated in the table (28) and the figure (27) below:

Table 28. The Terminal Falls and Rises in “Subject-*mI*” Constructions Marked with the Past Tense

	1	2	3
SQ	50 Hz	70 Hz	51 Hz
RQ	-141 Hz	-150 Hz	-266 Hz

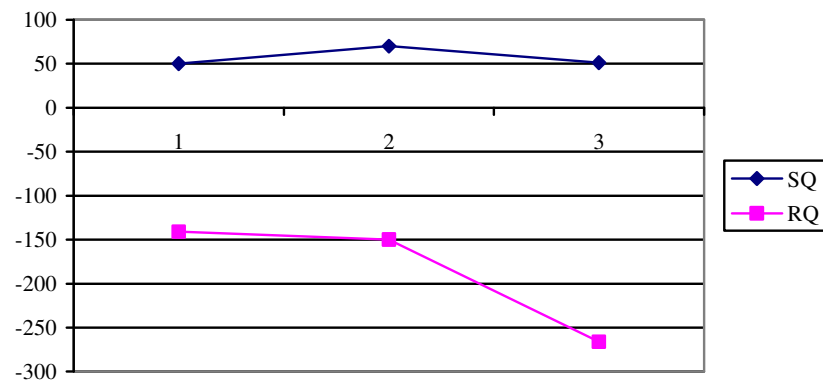


Fig. 27 The rises in SQs and the falls in RQs in constructions in which the verb is marked with the past tense and the question particle follows the subject

### *Interim summary*

So far it has been shown that RQs marked with the aorist and the past tense display the following characteristics, compared to SQs of the same structure:

“Subject-*mI*” RQs (aor/past)

(i) lower overall mean pitch

(ii) no peak dislocation

(iii) lower pitch for the question particle

“Subject-*mI*” SQs (aor/past)

higher overall mean pitch

no peak dislocation

higher pitch for the QP

In addition, the aorist shows a difference between RQs and SQs in terms of higher terminal pitch and a relatively shorter terminal fall in RQs, compared to SQs which have lower terminal pitch and steep fall.

RQs marked with the future and the past tense display the following characteristics, compared to SQs of the same structure:

“Subject- <i>mI</i> ” RQs (fut/past)	“Subject- <i>mI</i> ” SQs (fut/past)
(i) lower terminal pitch	higher terminal pitch
(ii) terminal fall	terminal rise

In addition, the future shows a difference between RQs and SQs in terms of higher overall mean pitch, rightward peak dislocation and lower terminal pitch in RQs, compared to SQs which have lower overall mean pitch, no peak dislocation and higher terminal pitch, unlike the aorist and the past tense.

## Summary

The tables below summaries the properties of RQs and SQs. Table 29 illustrates the properties of “verb-*mI*” constructions whereas Table 30 illustrates the properties of “subject-*mI*” constructions. Tick is used for cases in which the property is observed more than half of the time, the cross is used for cases in which the property is not observed more than half of the time (i.e. if a property is observed in two out of three sentences, there is a tick; if the property is observed in one out of three sentences, there is a cross).

Table 29. “Verb-*mI*” Constructions

		Lower mean pitch	Peak dislocation	Descending pattern	Lower terminal pitch	Terminal fall
AOR	SQ	X	X	X	X	X
	RQ	√	√	√	√	√
FUT	SQ	X	X	X	X	√
	RQ	√	X	√	√	√
PAST	SQ	√	X	X	√	√
	RQ	X	X	X	X	√

Table 30. “Subject-*mI*” Constructions

		Lower mean pitch	Peak dislocation	Lower peak	Lower terminal pitch	Lower QP	Terminal fall
AOR	SQ	X	X	X	√	X	√
	RQ	√	X	√	X	√	√
FUT	SQ	√	X	X	X	X	√
	RQ	X	√	√	√	X	√
PAST	SQ	X	X	X	X	X	X
	RQ	√	X	√	√	√	√

### The Perception Tests

The previous section presented the prosodic differences between the SQ and RQ interpretation of the same structures. This section discusses whether these prosodic differences are perceived by native speakers when they hear the utterances presented out of context.

## Analyses

The data was entered into the Microsoft Office Excel (2003) and then analyzed by means of the Statistical Package for the Social Sciences (SPSS, version 16) by Kadir Kozan.

### The Results of the Perception Tests

The questions expected to be answered by the data are as follows:

- Can SQs and RQs be identified by their intonation?
- Does the type of the TAM marker have an effect on the interpretation of the utterance?
- Does the nature of the constituent that the question particle *mI* is cliticized to have an effect on the interpretation of the utterance?

This section starts with the presentation of the overall results of the tests in terms of the performance of subjects in identifying pairs of utterances with the same lexical content and order with different interpretations as belonging to an SQ and to an RQ. The table (31) below lists the correct and total number of answers for SQs and RQs elicited from three separate tests and the figure (28) below illustrates the comparison of the results.

Table 31. Total Number and Percentage Average of Answers for SQs and RQs in Each Test

	Test 1	Test 2	Test 3
SQ	218/239 91,21%	107/115 93%	79/115 68,69%
RQ	42/238 17,64%	61/114 53,5%	87/115 75,65%
Total	260/477 54,5%	168/229 73,3%	166/230 72%

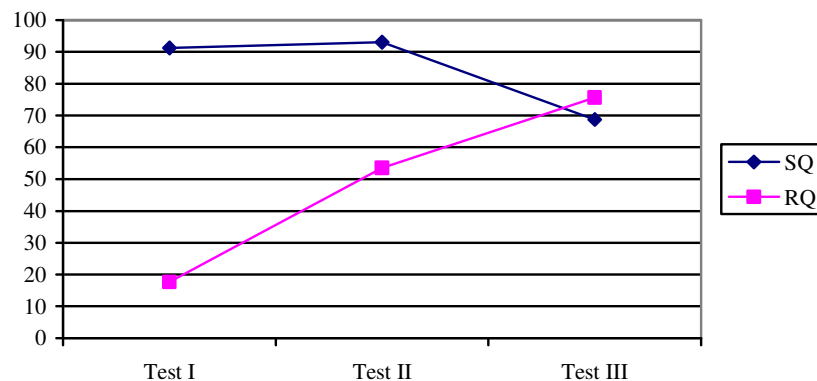


Fig. 28 The percentage scores of correct answers elicited from the tests

According to the results of Test I, subjects were able to identify the type of the utterances correctly at a rate of 54, 5%. The performance of subjects with respect to the type of the utterance (i.e. SQ or RQ), however, reveals a big asymmetry such that the subjects correctly identified SQs at a rate of 91% while they correctly identified RQs at a rate of 17, 64%. This means that they identified 82% of the RQs incorrectly as SQs. A one-way repeated measures ANOVA based on percentages has shown that

this difference (73%) between the performance of subjects in SQs and RQs is significant at the level of ,05.

According to the results of Test II, subjects were able to identify the type of the utterances correctly at a rate of 73, 3%. This is above the performance of subjects in Test 1. One-way repeated measures ANOVA based on percentages shows that this increase (18, 8%) in the performance of subjects in Test 2 compared to the performance of subjects in Test 1 is significant at the level of ,05. When the distribution of the correct answers with respect to the type of the utterances is considered, similar to Test I, there is an asymmetry in the performance of subjects as follows: the subjects performed better in SQs (i.e. at a rate of 93%) when compared to RQs (53, 5%). A one-way repeated measures ANOVA based on percentages shows that this difference (39, 5%) between the performance of subjects in SQs and RQs is also significant at the level of 05.

According to the results of Test III, subjects were able to identify the type of utterances that the fragments belonged to at a rate of 72%. This is above the performance of subjects in Test I but slightly below the performance of subjects in Test II. When the distribution of the correct answers with respect to the type of utterances the fragments belonged to is considered, it is significant to note that the asymmetry observed in Tests I and II disappeared. The subjects identified SQs correctly at a rate of 68, 69% which is below the performance of subjects in previous tests and they identified RQs at a rate of 75, 65% which is highly above the previous tests. A one-way repeated measure ANOVA has shown that the difference between the marginal means of RQs and SQs, which is (,070), is not significant at the level of ,05 (sig. , 268). This means that the subjects identified the RQs as correctly as they identified the SQs contrary to Tests I and II.



These results show that utterances that have the same sequence of words can be identified as RQs or SQs through their intonation only to some extent. In the following parts, whether the nature of the TAM marker or the nature of the constituent that the question particle *mI* is cliticized to has an effect on the identification of utterances as RQs or SQs will be discussed with respect to the results of Test I and Test II. The results of Test III will not be included since it serves another purpose, that is, to investigate whether SQs and RQs can be identified from their initial segments.

#### The Nature of TAM Markers

This section discusses the results of Tests I and II with respect to the performance of subjects in identifying RQs marked with different TAM markers. Table 32 lists the correct and total answers as well as the percentage of correct answers for RQs marked with the aorist, future and past, respectively. The comparison is illustrated in Figure 29.

Table 32. List of Correct and Total Answers for RQs Marked with the Aorist, Future and Past

	Test I	Test II
Aorist	18/79 22, 78%	23/38 60, 52%
Future	20/80 25%	20/37 54, 05%
Past	4/79 5, 06%	18/39 46, 15%

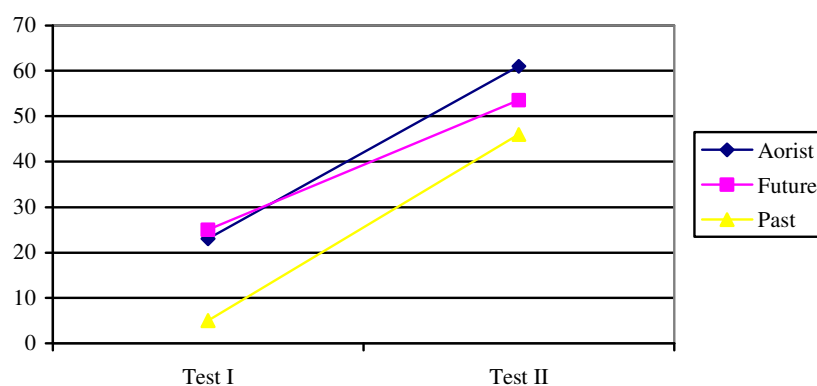


Fig. 29 Comparison of the performance of subjects in identifying RQs marked with different TAM markers

According to the results of Test I, subjects identified RQs marked with the aorist, future and past at rates of 23%, 25% and 5%, respectively. Note that the performance of subjects in identifying RQs marked with the aorist and future is close to each other and above the performance of subjects in RQs marked with past. The statistical analysis shows that the difference between the performance of subjects in identifying RQs marked with the aorist and past as well as the difference between the

performance of subjects in identifying RQs marked with future and past are statistically significant as can be observed in the table (33) below.

Table 33. Pairwise Comparison of TAM Markers Based on Mean Scores of Test I

(I) <i>TAM Markers</i>	(J) <i>TAM Markers</i>	Mean Difference (I-J)	Std. Error	Sig.(a)	95% Confidence Interval for Difference(a)	
					Upper Bound	Lower Bound
Future	Aorist	,100	,230	1,000	-,506	,706
	Past	,700 <sup>*</sup>	,259	,044	,016	1,384
Aorist	Future	-,100	,230	1,000	-,706	,506
	Past	,600 <sup>*</sup>	,224	,046	,010	1,190
Past	Future	-,700 <sup>*</sup>	,259	,044	-1,384	-,016
	Aorist	-,600 <sup>*</sup>	,224	,046	-1,190	-,010

The mean differences between the aorist and future, the aorist and past, and future and past are (,100), (,600) and (,700), respectively as seen in the table above. When the values in the significance column are considered, it is observed that the difference between the aorist and future is not significant at the level of ,05 since 1,000 is a value above ,05. The difference between the aorist and past, on the other hand, is a significant one. Observe that the value on the significance column is ,046 which is lower than ,05. The difference between future and past is also significant at the level of ,05 since the value on the significance column is ,044 which is below ,05.

According to the results of Test II, subjects correctly identified RQs marked with the aorist, future and past at rates of 61%, 54% and 46%, respectively. Note that there is an increase on the overall performance of the subjects for RQs marked with each TAM marker. Moreover, the asymmetry in the performance of subjects for RQs with different TAM markers has disappeared. Thus the difference between TAM

markers is not significant in this test as the table (34) which presents the pairwise comparison of each TAM marker shows.

Table 34. Pairwise Comparison of TAM Markers Based on Mean Scores of Test II

(I) <i>TAM Markers</i>	(J) <i>TAM Markers</i>	Mean Difference (I-J)	Std. Error	Sig.(a)	95% Confidence Interval for Difference(a)	
					Upper Bound	Lower Bound
Future	Aorist	-,150	,269	1,000	-,861	,561
	Past	,100	,147	1,000	-,288	,488
Aorist	Future	,150	,269	1,000	-,561	,861
	Past	,250	,304	1,000	-,553	1,053
Past	Future	-,100	,147	1,000	-,488	,288
	Aorist	-,250	,304	1,000	-1,053	,553

As seen in the table, the mean differences between future and past, the aorist and future and the aorist and past which are (,100), (,150) and (,250) respectively are not statistically significant since the value in the significance column is 1,000 which is above ,050 for each comparison.

So far it has been observed that the type of the TAM marker has an effect on the interpretation of utterances as RQs such that utterances marked with the aorist and future are identified as RQs better than utterances marked with the past tense according to the results of Test I. The results of Test II, however, does not reveal such a correlation; but it must be noted that the performance of subjects in identifying utterances marked with the past tense is the lowest among the TAM markers considered. This needs to be checked with a wider set of examples.

## The Place of the QP

This section discusses the performance of subjects in identifying RQs with respect to the constituent that the question particle *mI* is cliticized to in Tests I and II. The aim is to investigate whether the place of the question particle affects the interpretation of utterances as RQs. The table (35) below lists the correct and total answers as well as the percentage of correct answers with respect to the position of QP in RQs and the figure (30) below illustrates the comparison.

Table 35. List of Correct and Total Answers in RQs with respect to the Position of QP

	Test I	Test II
Verb- <i>mI</i>	19/120 15, 8%	18/57 31, 5%
Subject- <i>mI</i>	23/118 19, 4%	43/57 75, 4%

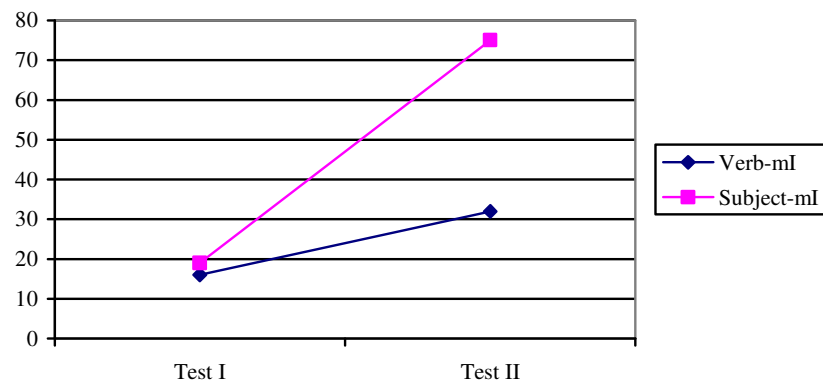


Fig. 30 Comparison of the performance of subjects in identifying RQs with respect to the position of the QP in Tests I and II.

According to the results of Test I, the subjects correctly identified “verb-*ml*” RQs and “subject-*ml*” RQs at rates of 16% and 19%, respectively. The performance of subjects in “subject-*ml*” RQs seems to be better than their performance in “verb-*ml*” RQs; however, this difference is not significant at the level of ,05.

According to the results of Test II, the subjects identified the “verb-*ml*” RQs with a rate of 32% and the “subject-*ml*” RQs with a rate of 75%. Note that there is an increase in the performance of subjects in both RQ types when compared to the performance of subjects in Test I. Another interesting result is the asymmetry observed in the performance of subjects in “verb-*ml*” RQs and in “subject-*ml*” RQs. Two way repeated measures ANOVA revealed that subjects performed significantly better in “subject-*ml*” RQs compared to “verb-*ml*” RQs.

With respect to the question whether the nature of the constituent that the question particle is cliticized to has an effect on the interpretation of utterances as RQs it has been observed that utterances are identified as RQs better when the question particle *ml* follows the subject, and not the verb. This might also have to do with the fact that the verb in all the examples come at the end.

#### The Results of Test Items

The tables (36) and (37) below list the correct and total answers for each test item elicited from Tests I, II and III. The first table (36) includes “verb-*ml*” utterances and the table (37) includes “subject-*ml*” utterances.

Table 36. List of Correct and Total Answers for Test Items in “Verb-*mI*” Form

TAM	Aorist			Future			Past		
Tests	I		II	I		II	I		II
Items	1	2	3	1	2	3	1	2	3
SQ	15/20	20/20	16/18	20/20	20/20	18/20	19/19	20/20	18/19
	75%	100%	89%	100%	100%	90%	100%	100%	95%
RQ	5/20	2/20	9/18	6/20	3/20	4/19	2/20	1/20	5/20
	25%	10%	50 %	30%	15%	21%	10%	5%	25%

Table 37. List of Correct and Total Answers for Test Items in “Subject-*mI*” Form

TAM	Aorist			Future			Past		
Tests	I		II	I		II	I		II
Items	1	2	3	1	2	3	1	2	3
SQ	17/20	16/20	19/20	19/20	15/20	17/19	18/20	18/20	19/19
	85%	80%	95%	95%	75%	89%	90%	90%	100%
RQ	2/20	9/19	14/20	3/20	8/20	16/18	1/20	0/19	13/19
	10%	47%	70%	15%	40%	89%	5%	0%	68%

### Conclusion

This chapter presented the acoustic analysis of the test items, which are pairs of utterances identical with respect to their lexical content and word order but interpreted as an SQ or as an RQ as well as the results of the perception tests designed for understanding the role of intonation in the interpretation of utterances in

the form of a yes/no question as SQs or RQs. According to acoustic analyses, utterances were found to display prosodic differences according to their interpretations. The intonation pattern of an SQ we observed seem to differ from that of an RQ with respect to the properties investigated, namely overall mean pitch, the place of peak, ascending/ descending pattern, the terminal pitch value and the terminal fall/ rise. Furthermore, the intonation pattern of utterances differed with respect to the TAM markers used as well as the nature of the constituent that the question particle *mI* is cliticized to.

When the question of whether utterances in the form of an interrogative can be interpreted as an RQ through intonation is considered, the results of the tests indicate that utterances in the form of an interrogative can only weakly be identified as RQs through their intonation. However when the question particle is not in the structure (as in Test III), that is, when there is no syntactic cue that marks an utterance as an interrogative, the subjects can identify the type of an utterance as an RQ at a higher rate. With respect to the questions about the role of the place of question particle and the type of TAM marker in the interpretation of utterances as RQs, the results of the tests show that utterances are identified as RQs more often when the verb has the aorist and future markers when compared to the past tense and the utterances in the “subject-*mI*” form are identified better when compared to “verb-*mI*” utterances.

Next section discusses the implication of the results of the tests and concludes the thesis.



## CHAPTER V

### DISCUSSION

#### Implications of Experiment Results

One of the questions that were aimed to be investigated in this thesis was whether the interpretational difference between an SQ and RQ was marked through intonation. The results of the acoustic analysis of the test items have revealed that the intonation pattern of an RQ differs from that of an SQ in Turkish. This is not unique to Turkish since such a difference was also noted in other languages, such as English, Japanese, Vietnamese and Romanian. (Dascalu 1998; Dung et al. 1998; Banuazizi & Creswell 1999; Han 2002 among others). However, in contrast to the studies which relate the difference between an SQ and an RQ to a rising or falling intonation at the end of the utterance (Han 2002; Görgülü 2006; Matsuya & Kamiya 2008), the acoustic analysis in this thesis showed that there are also differences in the overall mean pitch, the ascending/ descending pattern, the pitch value of the terminal constituent and the presence of a terminal fall/ rise. Thus, while analyzing the difference between the intonation pattern of an SQ and an RQ, the whole utterance should be examined (in line with Dascalu 1998; Dung et al. 1998).

According to the results of the acoustic analysis, in the majority of RQs analyzed in this thesis, it has been observed that they are characterized by lower overall mean pitch, a descending pattern (for “verb-*mI*” RQs), lower terminal pitch

value or/and lower pitch value for the question particle when compared to their SQ counterparts. Some of the test items, however, deviated from this pattern. For example, “verb-*mI*” constructions marked with the past tense do not carry those properties and so were perceived as RQs in fewer instances. Among these utterances, however, item 3 which was identified at a rate of 25% -higher than other items marked with the past tense- has lower overall mean pitch and lower terminal pitch value. The deviation from the pattern may be due to a number of factors. For example, the test sentences were elicited from dialogues that were read by native speakers, rather than taken from spontaneous speech. The reason for this was mentioned in Chapter 3. As a result, some of the informants might not have been able to express the meaning of the utterance as clearly as they would have done so in spontaneous speech. Furthermore, in natural conversations, speakers use not just intonation but also other factors such as gestures, facial expressions, etc. So the interpretation of an utterance might have been signalled by factors other than intonation during the recording of Test I and thus an item which was perceived as an SQ or as an RQ within its context may not have been perceived as such when taken out of context. Moreover, the voice quality of some of the test items that were extracted from dialogues was unfortunately not always good in the sense that they were sometimes too fast or there were other voices overlapping (i.e. the informants talked at the same time).

As a result of these shortcomings of Test I, informants were asked to read out isolated sentences in accordance with the contexts given in Test II. The problem with this is that “subjects when asked to produce an interrogative pattern out of context are liable to produce patterns which may be far less common in spontaneous speech” (Hirst 1998). Furthermore, it was realized during the recordings that there was a gap

between what the informants perceived as what they were producing and what they actually produced. That is, informants read out the test items with an intended intonation according to the context given; however, when they listened to the recorded item, they wanted to re-record it claiming that it did not express the intention of the utterance. In those cases I let the informants read out the item until they felt comfortable with the recording. Thus, if natural data with a wider set of sample had been used, the acoustic analysis of the test items would have been more reliable.

As for the perception tests, the question was whether these items in the interrogative form can be identified as an SQ or as an RQ by native speakers through their intonation when presented out of their contexts. In some cases the utterances were identifiable as belonging to an SQ or an RQ. About 90% of the SQs and only about 40% of the RQs were identified correctly by the subjects. Obviously the results of Test I reduced the average performance of subjects in identifying utterances as RQs. The subjects identified RQs at a rate of 18% in Test I, at a rate of 54% in Test II and at a rate of 76% in Test III. This low percentage in the performance of subjects in identifying RQs especially in Test I might have stemmed from a variety of factors (i.e. processing difficulties). For example, in Test I, subjects were asked to find the choice that completed the dialogue in the most appropriate way. However, this was a challenging task on the part of the subjects because they were asked to listen to the utterance, imagine an appropriate context for it and then find the choice that continued the utterance within that imaginary context. So it would not be surprising if they missed the prosodic information of the utterance through these steps. Moreover, some subjects preferred to write their own answers. Thus, since the responses of the subjects were written but not oral, some answers that might have

different interpretation when uttered with a different intonation could not have been evaluated appropriately. Furthermore, subjects might have approached the task with a certain bias as to how they should make the decision concerning the type of the clause (RQ vs. SQ). For example, when asked to continue with the dialogue, they might have thought that the only cue must lie in the lexical content of the sentence given, a bias which might have distracted them from the phonological cues in the utterance. Concentrating on the lexical content of such yes/no question structures, might have led them make the decision that the utterances are SQs. The fact that subjects repeated the sentences they heard, most of the time changing their intonation to that of an SQ unconsciously without apparently realizing it supports this possibility. In addition to this, after the task, many of the subjects reported that there were pairs of utterances and they tried to remember their answer to in the first round in order to give the exact answer the second time, thinking that their consistency was being tested. Some subjects, on the other hand, reported that they thought that the aim of the task was to see how polite they were in a conversation since it was a dialogue-completion task. These methodological weaknesses of Test I may have affected the results. The increased performance of subjects in identifying the type of an utterance as an RQ in Test II which differs from Test I both in recording process and the task administered provides evidence for that Test I had these shortcomings.

It is noteworthy that the performance of subjects in identifying an utterance as an RQ has increased significantly in Test III. This might be related to the characteristics of the test items which were quite different than the previous ones in that they did not include the whole utterance but the initial fragment of it (namely only the S-O) which does not include the verb and the particle *mI*, so subjects, as a result of the lack of lexico/syntactic cue (i.e. particle *mI* to mark yes/no structure)

might have relied on the prosody of the fragments while identifying the type of the utterance that the fragments belonged to. The fact that they identified it correctly at a high rate shows that there are prosodic cues that mark the function of an utterance from the initial fragments as a question or as a declarative. When the acoustic properties of the items are considered, the presence of early peaks was one of the characteristics of RQs so it might be the case that similar to Swedish and Neapolitan Italian (House 2004), an early peak might be perceived as the cue for a non-question in Turkish.

### The Role of Other Variables

With respect to the perception of the type of the utterances, the thesis aimed to answer another question which was whether the type of the TAM marker has an effect on the interpretation of utterances as an SQ or as an RQ. As already discussed in the previous chapter, there were contradictory results elicited from Test I and Test II. While the results of Test I suggest that utterances marked with the aorist and future are identified more than utterances marked with the past tense, the results of Test II show that there is not a significant gap in the performance of subjects with respect to the type of the TAM markers (61%, 54% and 46%) even though subjects identified utterances marked with the aorist better than they did the ones marked with the future which was again more than the identification of utterances marked with the past tense. This difference in the performance of subjects in identifying utterances marked with different TAM markers, on the condition that it is supported with a wider set of examples in a future experiment, can be associated with the account of Görgülü (2006) as discussed in the second chapter according to which RQ

interpretation is possible in the presence of a generic operator which is the aorist according to him. However, if the result of Test II that the type of TAM does not have a role in the identification of utterances as SQs or RQs is supported with a carefully designed experiment which includes wider set of examples, then it would suggest that intonation *alone* is responsible for clause-typing (in line with Göksel et al. 2008b, 2009 for main clause wh- and polar questions, and Özsoy 2009 for embedded questions). In that case, the low performance of subjects in identifying RQs marked with the past tense can be explained as such: in Turkish utterances marked with the aorist and future generally convey unrealized actions while utterances marked with the past convey factual events. So it might be relatively difficult to assert the opposite of the utterance marked with the past which already expresses a factual event. Even if this might be the case, it should be noted that in “subject-*mI*” constructions marked with the past tense, item 2 was not perceived as an RQ at all while item 3 was perceived as an RQ at a rate of 68%. So explaining the low performance of subjects in identifying utterances marked with the past tense as RQs through the nature of the TAM marker can not explain this gap between items 2 and 3.

Another question that was aimed to be answered in this thesis was whether the nature of the constituent that the question particle *mI* is cliticized to has an effect on the interpretation of the utterances as an SQ or as an RQ. The results, as discussed in the previous chapter, revealed that the utterances in which the question particle *mI* follows the subject (“subject-*mI*” RQs) are identified correctly as RQs more often than the utterances in which the question particle *mI* follows the verb (“verb-*mI*” RQs). This might be related to the base generation of the particle *mI* following Besler (2001) who claims that the question particle *mI* enters the derivation either as a suffix

on the verb or a lexical item that merges with the phrase it is cliticized to. According to that account, when the question particle occurs with the verb, it moves to the C head at LF with the verb complex. However when it occurs with other constituents, it does not move to C head position. I leave the implications of the findings of this thesis to the analysis proposed in Besler (2001) to future work.

It is also worth looking at whether the difference between the perception of “subject-*mI*” and “verb-*mI*” constructions can be explained through the information structure of the utterances since in “verb-*mI*” constructions, the sentences are in the SOV order while in most of the “subject-*mI*” constructions, the sentences are in the OSV order. Moreover, the increase in the performance of subjects in Test II in which the utterances are all in OSV order seems to support this at first sight. However, a deeper investigation shows that some of the utterances even if they were in the OSV order were identified less (i.e. items 1 & 2 in “subject-*mI*” constructions marked with the past tense).

#### Some Observations on the Opposite Polarity Reading in RQs

In this thesis, I did not attempt to account for the opposite polarity reading in RQs but rather investigated the prosodic properties of utterances that have an RQ interpretation in comparison to their SQ counterparts. However, I would like to point out some observations that might be insightful for the studies that try to account for the opposite polarity reading in RQs.

One of the characteristics of RQs is the opposite polarity reading they have (Sadock 1971, 1974; Han 2002 and others). This means that if a sentence has an

affirmative structure, it has a negative interpretation and if it has a negative structure, it has a positive interpretation. This is exemplified in (1a) and (1b) below:

RQ:

(1) a. Ali ders çalış-tı mı?

Ali.NOM lesson study-PAST.3sg QP

‘Ali didn’t study.’

b. Ali ders çalış-ma-dı mı?

Ali.NOM lesson study-NEG-PAST.3sg QP

‘Ali studied.’

The construction (1a) has the question particle *mI*, which means that it is in the form of a yes/no question. However, it is interpreted as an RQ with the appropriate intonation, as explained in Chapter 4. The striking point, as has been highlighted throughout the thesis, is that the interpretation is negative even though the structure does not include an overt negation marker. Similarly, (1b) is in the form of a yes/no question which is interpreted as an RQ with the appropriate intonation. (1b) differently from (1a) has the negative marker *-mE* which suggests that the sentence is structurally negative. When the interpretation of the sentence is concerned, however, it is positive.

Then, how can the opposite polarity reading be accounted for? I will focus my discussion on positively structured RQs which have negative interpretations, but an analysis that accounts for positively structured RQs applies equally to constructions including overt negation with positive interpretations.



Is the source of RQ reading the question particle *mI*?

The opposite polarity reading observed in RQs is regarded to be a result of the extended function of the question particle *mI* in Turkish by some linguists (Acarlar 1970; İlhan 2005; Özkan 2006; and others). This would mean that the particle *mI* is stored in the lexicon as two separate lexical items, one as a question particle, the other a polarity shifter.

(2) a. Ali ders çalış-tı mı?

Ali lesson study-PAST QP

‘Did Ali study?’

b. Ali ders çalış-tı mı?

Ali lesson study-PAST PS

‘Ali didn’t study.’

According to these accounts, the difference in the interpretations of the utterance (2a) and (2b) can be accounted for with the presence of different particles. In (2a) *mI* is a question particle that yields an SQ reading whereas *mI* in (2b) is a polarity shifter that yields opposite polarity reading.

Such an account is sufficient for explaining the phenomenon above. But there are constructions where there is no *mI* particle but where the interpretation is negative despite the positive structure. This is exemplified in (3a) and (3b) below:

- (3) a. Ben-i kim karşıla-yacak?  
 I-ACC who welcome-FUT.3sg  
 ‘Who will welcome me?’
- b. Ben-i kim karşıla-yacak?  
 I-ACC who welcome-FUT.3sg  
 ‘Nobody would welcome me.’

Both in (3a) and (3b) there is the *wh*-word *kim* ‘who’. (3a) is interpreted as a question if it has the appropriate intonation. (3b) which has the same lexical content and word order is interpreted as an RQ with the appropriate intonation and the interpretation is of the opposite polarity. If (2b) is explained through the presence of the particle which changes the polarity of the sentence, how can we account for (3b) which does not include *mI*? Then the opposite polarity reading cannot be related to the particle *mI* but to something else since an account which connects the opposite polarity reading with the particle *mI* can not explain the opposite polarity reading in constructions which do not include that particle.

#### Is the source of the RQ reading the generic operator?

As already mentioned in Chapter 2, the non-interrogative reading in *wh*-constructions has been accounted for the interaction of operators (i.e. Gen-operator, Neg-operator) with *wh*-words (Görgülü 2006). One of the contexts that yield the non-interrogative reading is the presence of the aorist, which is regarded as the generic operator. So according to that analysis, constructions marked with the aorist can have a non-

interrogative reading while constructions marked with other TAM markers (i.e. past, future) can not.

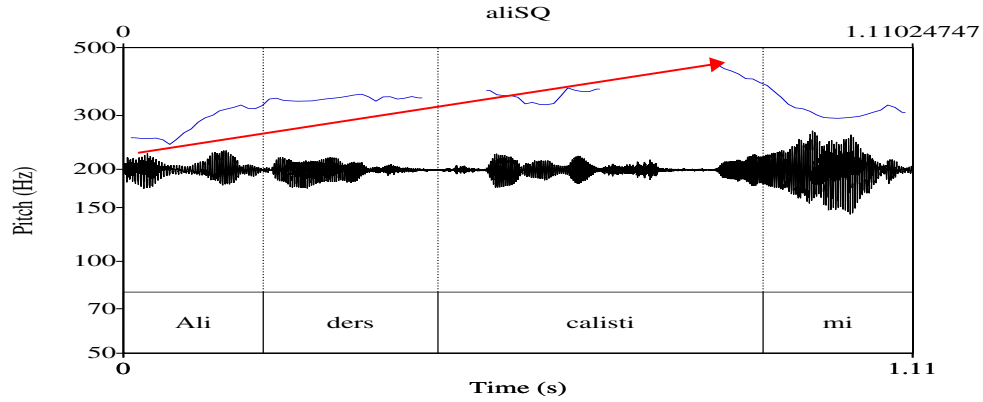
Following this, it can be argued that the same holds for yes/no constructions which are interpreted as assertions of the opposite polarity. In that case, it is expected that constructions marked with the aorist have RQ reading while the ones marked with other TAM markers do not. However, the results of the tests in this thesis have revealed that this is not the case since constructions marked with the future are identified as RQs as correctly as constructions marked with the aorist. The ones marked with the past are identified correctly in fewest instances.

So if it were the generic operator that is the source of opposite polarity reading in RQs, then we would expect the same to hold for yes/no constructions, too. However, it is clear that this is not the case.

#### Is the source of the RQ reading intonation?

It has been shown in chapters 3 and 4 that for the vast majority of sentences analyzed in this thesis, the intonation of a sentence such as (2a) is different from that of (2b). This is illustrated with the pitch charts given in figure 1 below:

SQ:



RQ:

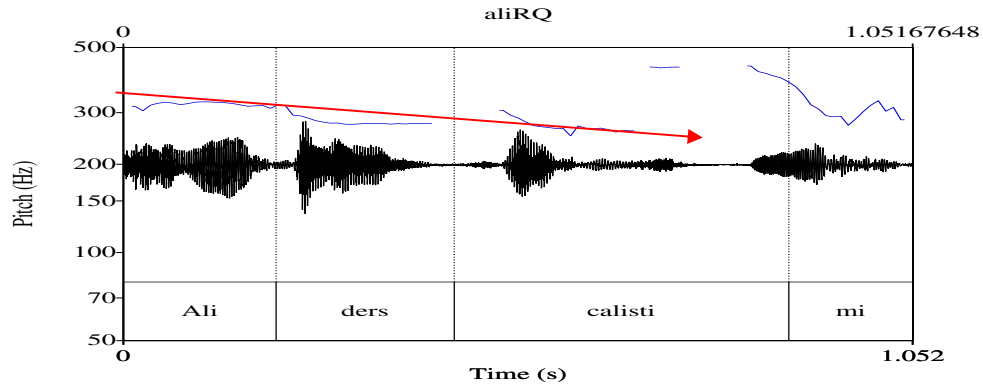


Fig. 31 The pitch charts of the sentence *Ali ders çalıştı mı?* ‘Did Ali study?’/ ‘Ali did not study.’

The intonation of (2b) which is interpreted as an RQ differs from that of (2a) which is interpreted as an SQ in terms of the five separate factors looked at (lower overall mean pitch, a descending pattern, etc.). The fact that these two sentences which are identical in terms of their lexical content and word order differ with respect to their intonation raises the question whether intonation can type these sentences as an SQ and as an RQ. According to the clause-typing hypothesis of Cheng (1991), rising intonation functions in wh-constructions as an overt Q-particle typing the matrix clause as an interrogative clause. In Turkish, according to Göksel, et al. (2008 a,b;

2009) questions have a specific intonation that types them as such from the beginning of the utterance<sup>21</sup>.

Following from these works, it can be argued that intonation is the clause typer of SQs and RQs. In SQs the sentence is typed as an interrogative by its specific intonational properties (i.e. higher overall mean pitch, no peak dislocation, an ascending pattern, etc.) and RQs have their own intonation (i.e. lower overall mean pitch, peak dislocation, lower terminal pitch value, a terminal fall, etc.) which is similar to a declarative. Then what might be the relation of opposite polarity reading with intonation?

One assumption can be that falling intonation licenses for a projection that has an operator which has an adversative head, a head that functions as a polarity shifter. In that case, constructions which have the structure of an interrogative but do not have the intonation of an interrogative are typed as non-SQs or RQs and this intonation licenses an XP with an adversative head/ operator that shifts the polarity of the sentence. This kind of an account can also explain the RQ reading in *wh*-constructions. It then becomes a valid question whether such a proposed head can be overt. Below, we give an account of one such case which illustrates the presences of an overt adversative head. This is the adverb *sanki* ‘as if’.

#### *Sanki*: an overt adversative head

The particle *sanki* ‘as if’ commonly appears in the sentence-final and sentence-initial positions<sup>22</sup> and its presence makes the SQ reading unavailable. This is illustrated by the structures in (4):

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<sup>21</sup> It is not clear, however, whether it is the initial compressed pitch that marks an utterance as an SQ, as suggested in Göksel et al. 2008b, 2009, as only some of the SQs in our sample seem to have compressed pitch.

- (4) a. (Sanki) kim pırasa yi-yecek! / Kim pırasa yi-yecek (sanki)!
- PRT    who leek eat-FUT / who leek eat-FUT PRT
- ‘Nobody will eat leeks.’
- b. (Sanki) Sevinç pırasa yi-yecek mi! / Sevinç pırasa yi-yecek mi (sanki)!
- PRT    Sevinç leek eat-FUT QP / Sevinç leek eat-FUT PRT
- ‘Sevinç won’t eat leeks.’

Note that in the examples given in the previous section, the structures could be interpreted as SQs or RQs in different contexts. However, the structures containing *sanki* can only be interpreted as RQs and can only be uttered with an RQ intonation. And, crucially, a structure which includes *sanki* ‘as if’ is not acceptable when uttered with the intonation of an SQ.

The particle *sanki* can only appear in non-interrogative environments with the interpretation of an RQ. Examine the example (5) below. It is a declarative and the assertion of the utterance is of the opposite polarity.

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<sup>22</sup> The particle *sanki* can also appear in other positions both in wh-questions and yes/no questions. It seems as if it needs to be above the VP domain. I leave this point for further study.

- (i) a. Kim pırasa yi-yecek sanki!  
       who leek eat-FUT as if  
       ‘As if someone is going to eat leeks.’  
     b. Sanki kim pırasa yiyecek!  
     c. ? Kim sanki pırasa yiyecek!  
     d. \*Kim pırasa sanki yiyecek!
- (ii) a. Sevinç pırasa yiyecek mi sanki!  
       b. Sanki Sevinç pırasa yiyecek mi!  
       c. Sevinç sanki pırasa yiyecek mi!  
       d. \* Sevinç pırasa sanki yiyecek mi!

- (5) Ali ders çalış-tı sanki!  
 Ali lesson study-PAST PRT  
 ‘Ali didn’t study.’ (As if, he studied.)

Moreover, interestingly enough the constructions that include *sanki* license negative polarity items (NPIs) since NPIs e.g. *hiç* ‘ever’ are reported to be licensed only in the immediate scope of negation or in interrogative constructions (Kelepir 2000). They are not expected to occur in affirmative constructions. However, examine the sentence (6) below:

- (6) a. Sen hiç biz-e gel-di-n sanki.  
 you ever we-DAT come-PAST-2sg as if  
 ‘As if, you ever came to us.’
- b. \*Sen hiç biz-e gel-di-n.  
 you ever we-DAT come-PAST-2sg  
 Int: You ever came to us.
- c. Sen hiç biz-e gel-me-di-n.  
 you ever we-DAT come-NEG-PAST-2sg  
 ‘You have never come to us.’
- d. Sen hiç biz-e gel-di-n mi?  
 you ever we-DAT come-PAST-2sg QP  
 ‘Have you ever come to us?’

The sentences above all include the negative polarity item *hiç*. NPIs are licensed in the presence of negation or in interrogative constructions as seen in (6c) and (6d). NPIs are not licensed in affirmative constructions as seen in (6b). (6a) which is affirmative, on the other hand, is grammatical even if there is the negative polarity item. Then how can the grammaticality of (6a) be accounted for? The only lexical difference between (6a) and (6b) is the item *sanki*. So in (6a) the presence of *sanki* seems to license the NPI *hiç* ‘ever’.

So, it seems that to be able account for the opposite polarity reading in RQs, an account which relates intonation with overt or null adversative particles is necessary.

In this chapter, I highlighted the results of the acoustic analysis and the perception tests and discussed whether these support the claims in the related literature. The anomalies in the intonation pattern of test items and the low performance of subjects in some of the tests have been discussed with the factors that might have an effect on them. The role of intonation in identifying pairs of utterances with the same structure but with different interpretations has been highlighted and intonation as a clause-typer claim has been supported. And lastly, which contexts can be analyzed to account for the opposite polarity reading in RQs has been discussed.



## CHAPTER VI

### CONCLUSION

This study has investigated the intonation patterns of utterances that are in the interrogative form with the same string of words but which can be interpreted as an SQ or as an RQ in different contexts. It has been shown that these pairs of utterances display different prosodic properties with respect to their overall mean pitch, the ascending/ descending pattern, the terminal pitch value and/or the pitch value of the question particle, the presence of peak dislocation, the presence of a terminal fall or rise.

With respect to the question whether native speakers can identify these pairs of utterances as SQs or RQs through their intonation, the results of the perception tests have shown that intonation is an important cue in the identification of the types of the utterances. Moreover, the results of Test III revealed that there are early cues (i.e. an early peak) that help listeners identify the type of an utterance as an SQ or as an RQ. However, some of the shortcomings of the tests have also been discussed.

With respect to the question whether the type of the TAM marker has an effect on the interpretation of utterances as SQs or RQs, the tests gave contradictory results. According to the Test I, utterances marked with the aorist and future are identified as RQs significantly more than utterances marked with the past tense. However, the results of Test II show that even though utterances marked with the past tense are identified less than the others, that difference is not significant.

With regards to the effect of the nature of the constituent that the question particle is cliticized to on the identification of utterances as RQs, it has been shown that utterances in which the question particle is cliticized to subject are identified significantly better than utterances in which the question particle is cliticized to the verb.

### Implications for Future Work

For the acoustic analysis, a production test can be designed and administered for each RQ structure in which a set of sentences in the same form (i.e. ‘verb-*mI*’) is read out by several informants. So such an analysis would give more reliable results.

Another method could be providing the subjects with contexts and asking them to utter the target sentence within that context. This would provide the researcher with whether native speakers when presented with different contexts utter a sentence in an interrogative form with different intonations as belonging to an SQ and to an RQ.

With respect to the perception tests, a task in which subjects are presented with the contexts, asked to listen to pairs of sentences with an SQ reading and an RQ reading and choose the utterance that fits that context might give better results when compared to a dialogue-completion task. Such a task would give whether the pairs of utterances are really ambiguous or not.

The methodology of Test II could be developed as such: to investigate the role of TAM markers on the interpretation of RQs, separate tests that consist of pairs of utterances marked with each TAM marker can be designed (i.e. Test 1 includes 10 pairs of utterances marked with the aorist. Test II includes 10 pairs of utterances

marked with future, etc.). Or similarly, to investigate the role of the position of the question particle, separate tests that consist of pairs of utterances in the “subject-*mI*” or “verb-*mI*” structures can be designed and administered.

For the tests in this thesis, the same set of test items could have been used, rather than changing the test items in each test.

In addition to the above, some of the questions which call for further research are as follows:

What’s the nature of the opposite polarity reading in RQs? Is there a NegP in the structure? Does it have anything to do with operators such as Gen-operator?

What is the role of word order (information structure) in RQ interpretation?

This study investigated whether interpretational differences are marked through intonation in pairs utterances with the same lexical content. I hope that the results of this study will be an insight for a deeper investigation of the role of intonation in marking the function of an utterance.

## APPENDIX A

### I: The Sheet Distributed to the Subjects in Test I

Katılımcının Cinsiyeti (Sex): .....

Katılımcının Yaşı (Age): .....

Şimdi iki kişinin konuşmasından alınmış tek cümleler duyacaksınız. Elinizdeki kâğıtta bu cümlelerin nasıl devam etmiş olabileceğini gösteren seçenekler var. Bunlardan sizce en uygun olan seçenek/ seçenekleri işaretleyiniz. ‘Now you are going to hear isolated sentences that are extracted from a dialogue. In the paper you hold there are choices that show how these utterances might have continued in the dialogue. Circle the choice/choices that you think is/are the most appropriate among these.’

- Ses kayıtlarını bir kere dinleyeceksiniz. ‘You will listen to the recordings only once.’
- Her 10 cümleden sonra kısa bir ara verilecek. ‘There will be a short break after each 10 sentence.’

Bir örnek cümleyle testimize başlayacağız. ‘We are going to start our test with a sample sentence.’

<p>Örnek Kayıt 1:</p> <p>‘Sample Recording’</p>	<p>a. Tabi, ödevlerinde yardım ediyorum ya. ‘Of course, I’m already helping with your homework.’</p> <p>b. Ederdim ama çok işim var. ‘I would but I have lots of things to do.’</p> <p>c. Diğer ‘Other’: .....</p>
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<p>Kayıt 1:</p> <p>‘Recording 1’</p>	<p>a. Neden uzatayım ki? ‘Why should I pass it?’</p> <p>b. Tabi, buyur. ‘Of course, here you are.’</p> <p>c. Diğer ‘Other’:.....</p>
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<p>Kayıt 2:</p> <p>‘Recording 2’</p>	<p>a. Bence gelir, sıkılıyordu zaten. ‘I think she would, she was already bored.’</p> <p>b. Doğru ya, siz konuşmuyordunuz. ‘You’re right; you were not talking to each other.’</p> <p>c. Diğer ‘Other’:.....</p>
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Kayıt 3: 'Recording 3'	<p>a. Haklısın, girmesen daha iyi olur. 'You are right, it would be better if you don't.'</p> <p>b. Bence gir. 'I think you should.'</p> <p>c. Diğer 'Other':.....</p>
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Kayıt 4: 'Recording 4'	<p>a. Çalıştı çalıştı, merak etme. 'He studied. Don't worry.'</p> <p>b. Doğru diyorsun hiç çalışmadı. 'You're right, he did not study.'</p> <p>c. Diğer 'Other: .....</p>
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Kayıt 5: 'Recording 5'	<p>a. O kırmadı mı diyorsun? 'are you implying that he didn't break?'</p> <p>b. Bilmiyorum ki, ben evde yoktum. 'I don't know. I wasn't at home.'</p> <p>c. Diğer 'Other': .....</p>
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<p>Kayıt 6:</p> <p>‘Recording 6’</p>	<p>a. Bence de devam etmeyecek, boşuna masraf.</p> <p>‘I don’t think she she would attend,either. It’s a waste of money’</p> <p>b. Devam edecekmiş, annesi öyle diyordu. ‘She will attend. Her mother said so.’</p> <p>c. Diğer ‘Other’: .....</p>
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<p>Kayıt 7:</p> <p>‘Recording 7’</p>	<p>a. Evet, o gidecekmiş. Çok istiyordu zaten.</p> <p>‘Yes, she will go. After all she wants it very much.’</p> <p>b. Dimi ya? Gitmemenin bir yolunu bulur o.</p> <p>‘You’re right. She will find a way not to go.’</p> <p>c. Diğer ‘Other’: .....</p>
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<p>Kayıt 8:</p> <p>‘Recording 8’</p>	<p>a. Haklısın, o yapmadı ama gel de anlat. ‘You’re right, he didn’t. But to try to explain that to them.’</p> <p>b. Evet, o yaptı. Kim yapacak başka? ‘Yes, he did. Who else could have done it?’</p> <p>c. Diğer ‘Other’: .....</p>
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<p>Kayıt 9:</p> <p>‘Recording 9’</p>	<p>a. Hayır, Dünya Güneş’in etrafında döner. ‘No, the Earth revolves around the Sun.’</p> <p>b. Doğru ya, Dünya Güneş’in etrafında dönüyordu. ‘You’re right, It is the Earth that revolves around the Sun.’</p> <p>c. Diğer ‘Other’: .....</p>
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<p>Kayıt 10:</p> <p>‘Recording 10’</p>	<p>a. Hayır, gelmeyeceğim. ‘No, I won’t come.’</p> <p>b. Haklısın, gelmeyeceğim. ‘You’re right, I won’t come.’</p> <p>c. Diğer ‘Other’: .....</p>
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<p>Kayıt 11:</p> <p>‘Recording 11’</p>	<p>a. Öyle deme, ummadık taş baş yarar. ‘Don’t talk that way. You might be surprised.’</p> <p>b. Evet, o bakacakmış. ‘Yes, he will be in charge, they say.’</p> <p>c. Diğer ‘Other’: .....</p>
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<p>Kayıt 12:</p> <p>‘Recording 12’</p>	<p>a. Doğru diyorsun, ben de aramamalıyım.</p> <p>‘You’re right. I shouldn’t call, either.’</p> <p>b. Yok, aramadı. Ben de merak ettim bak şimdi.</p> <p>‘No, he didn’t call. Now I’m worried too.’</p> <p>c. Diğer ‘Other’: .....</p>
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<p>Kayıt 13:</p> <p>‘Recording 13’</p>	<p>a. İyi fikir, gidelim. ‘Good idea. Let’s go.’</p> <p>b. Bence de gitmeyelim. ‘I also think that we shouldn’t go.’</p> <p>c. Diğer ‘Other’: .....</p>
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<p>Kayıt 14:</p> <p>‘Recording 14’</p>	<p>a. Tabi ki, bütün gün odasından çıkmadı. ‘Of course. He was in his room all day long.’</p> <p>b. Onun tembel olduğu zaten başından belliydi. ‘It was obvious that he was lazy.’</p> <p>c. Diğer ‘Other’: .....</p>
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<p>Kayıt 15:</p> <p>‘Recording 15’</p>	<p>a. Yemek de ne kelime, bayılır. ‘She would die for it.’</p> <p>b. Doğru ya, yemiyordu pırasa. ‘You’re right. She doesn’t eat leeks.’</p> <p>c. Diğer ‘Other’: .....</p>
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<p>Kayıt 16:</p> <p>‘Recording 16’</p>	<p>a. Bekle şimdi işim var. ‘Wait a litte, I have other things.’</p> <p>b. Tamam bakıyorum. ‘OK. I’m opening it.’</p> <p>c. Diğer ‘Other’: .....</p>
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<p>Kayıt 17:</p> <p>‘Recording 17’</p>	<p>a. Niye öyle diyorsun? Ne yalanını yakaladın? ‘Why are you talking that way? Did you catch him lying?’</p> <p>b. Evet, onun sözüne inanırım. ‘Yes, I believe him.’</p> <p>c. Diğer ‘Other’: .....</p>
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Kayıt 18: 'Recording 18'	<p>a. Yok, aramadı. 'No, he didn't call.'</p> <p>b. Doğru diyorsun, aramadı. 'You're right. He didn't call me.'</p> <p>c. Diğer 'Other': .....</p>
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Kayıt 19: 'Recording 19'	<p>a. Edecekmiş, annesi öyle diyordu. 'She would , her mother said.'</p> <p>b. Bence de etmeyecek. 'I don't think she will either.'</p> <p>c. Diğer 'Other': .....</p>
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Kayıt 20: 'Recording 20'	<p>a. Bence de, gitmemenin bir yolunu bulur o. 'I think so too. She will find a way for not going.'</p> <p>b. Evet o gidecekmiş. Hazırlıklara başlamış bile. 'Yes, she will go. She has started the preparations.'</p> <p>c. Diğer 'Other': .....</p>
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<p>Kayıt 21: 'Recording 21'</p>	<p>a. Çok beceriklidir o. 'She is very capable.'</p> <p>b. Haklısın, o yapmadı ama gel de anlat. 'You are right. She didn't but try explaining that to them.'</p> <p>c. Diğer 'Other': .....</p>
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<p>Kayıt 22: 'Recording 22'</p>	<p>a. Bilmiyorum ki, ben evde yoktum. 'I don't know. I wasn't at home.'</p> <p>b. Peki, o zaman kim kırdı? 'Then, who broke it?'</p> <p>c. Diğer 'Other': .....</p>
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<p>Kayıt 23: 'Recording 23'</p>	<p>a. Hayır, ne münasebet? Tam tersi. 'Of course not. On the contrary.'</p> <p>b. Biliyordum ama, nasıl da karıştırdım? 'I knew it but somehow I got confused?'</p> <p>c. Diğer 'Other': .....</p>
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<p>Kayıt 24:</p> <p>‘Recording 24’</p>	<p>a. Doğru diyorsun ya zaten sevmiyor okumayı. ‘You’re right. She doesn’t like reading anyway.’</p> <p>b. Evet evet, okuyacak. ‘Yes, she will.’</p> <p>c. Diğer ‘Other’: .....</p>
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<p>Kayıt 25:</p> <p>‘Recording 25’</p>	<p>a. Evet, onun sözüne inanırım. ‘Yes, I trust him.’</p> <p>b. Haklısın, doğruyu konuşmaz o. ‘You’re right. He doesn’t tell the truth.’</p> <p>c. Diğer ‘Other’: .....</p>
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<p>Kayıt 26:</p> <p>‘Recording 26’</p>	<p>a. Öyle deme, ummadık taş baş yararmış. ‘Don’t talk that way, you might be surprised.’</p> <p>b. Evet, o bakacakmış. En büyük çocuk o. ‘Yes, he will. He is the eldest son.’</p> <p>c. Diğer ‘Other’: .....</p>
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<p>Kayıt 27:</p> <p>‘Recording 27’</p>	<p>a. Üşüdün mü ki? ‘Are you cold?’</p> <p>b. Ne münasebet, niye ben kapatıyorum? ‘Not at all’, Why should I close it?’</p> <p>c. Diğer ‘Other’: .....</p>
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<p>Kayıt 28:</p> <p>‘Recording 28’</p>	<p>a. Bence gelir. ‘I think she will come.’</p> <p>b. Bence de gelmez. ‘I don’t think she’ll come’</p> <p>c. Diğer ‘Other’: .....</p>
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<p>Kayıt 29:</p> <p>‘Recording 29’</p>	<p>a. Doğru ya yemiyordu pırasa. ‘You’re right, she doesn’t eat leeks.’</p> <p>b. Yemek de ne kelime, bayılır. ‘Are you kidding? She would die for it.’</p> <p>c. Diğer ‘Other’: .....</p>
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<p>Kayıt 30:</p> <p>‘Recording 30’</p>	<p>a. Evet evet, okuyacak. ‘Yes, she will.’</p> <p>b. Doğru diyorsun ya zaten sevmiyor okumayı. ‘You’re right, she doesn’t like reading.’</p> <p>c. Diğer ‘Other’: .....</p>
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## APPENDIX A

### II: The Sheet for the Subjects in Test II

Katılımcının Cinsiyeti (Sex): .....

Katılımcının Yaşı (Age): .....

Şimdi bir cümle dinleyeceksiniz. Elinizdeki kâğıtta bu cümlenin hangi anlama geldiğini/ hangi amaçla söylenmiş olabileceğini gösteren seçenekler var. Bunlardan size doğru gelen seçeneği işaretleyiniz. ‘Now, you are going to listen to a sentence. In the paper you hold, there are choices that show the interpretation of this sentence or the motivation for uttering it. Circle the choice that is correct for you.’

- Birden fazla seçenek işaretleyebilirsiniz. ‘You can circle more than one choice.’
- Ses kayıtları bir kere dinletilecektir. ‘You will listen to the recordings only once.’

Kayıt 1: ‘Recording 1’	<p>a. Normalde çöpü kapıya bırakıp bırakmadığını soruyor. ‘She is asking whether s/he usually puts the rubbish out.’</p> <p>b. Çöpü kapıya bırakmasını istiyor. ‘She wants him/her to put the rubbish out.’</p>
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<p>Kayıt 2: 'Recording 2'</p>	<p>a. Esma'nın partiye gelip gelmeyeceğini soruyor. 'She is asking whether Esma will come to the party or not.'</p> <p>b. Esma'nın partiye gelmeyeceğini ima ediyor. 'She is implying that Esma won't come to the party.'</p>
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<p>Kayıt 3: 'Recording 3'</p>	<p>a. Aslı'nın maç izlemeye gidip gitmeyeceğini merak ediyor. 'She is curious about whether Aslı will go to watch the match or not.'</p> <p>b. Aslı'nın maç izlemeye gitmeyeceğini söylemek istiyor. 'She wants to say that Aslı won't go the match.'</p>
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<p>Kayıt 4: 'Recording 4'</p>	<p>a. Esin'in ona Londra'dan kart atıp atmadığını soruyor. 'She is asking whether Esin sent a postcard from London or not.'</p> <p>b. Esin'in ona Londra'dan kart atmadığını ima ediyor. 'She is implying that Esin did not send a postcard to him/her.'</p>
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<p>Kayıt 5: 'Recording 5'</p>	<p>c. Ayşe'nin bu bilgiye nereden ulaştığını merak ediyor. 'She is curious about how Ayşe obtained this information.'</p> <p>d. Ayşe'nin bu konuda bilgisinin olmadığını söylemek istiyor. 'She is implying that Ayşe does not know about it.'</p>
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<p>Kayıt 6: 'Recording 6'</p>	<p>a. Akşamki hesabı Ali'nin ödeyip ödemediğini soruyor. 'She is asking whether it was Ali who paid the bill last night'</p> <p>b. Akşamki hesabı ödeyenin Ali olmadığını ima ediyor. 'She is implying that Ali did not pay the bill.'</p>
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<p>Kayıt 7: 'Recording 7'</p>	<p>a. Hasan'a ödevlerinde yardım edecek kişinin Ayşe olup olmadığını soruyor. 'She is asking whether it is Ayşe who will help Hasan with his homework.'</p> <p>b. Hasan'a ödevlerinde Ayşe'nin yardım etmeyeceğini söylemek istiyor. 'She is implying that Ayşe won't help Hasan with his homework.'</p>
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<p>Kayıt 8:</p> <p>‘Recording 8’</p>	<p>a. Bu yarışı Mehmet’in kazanıp kazanamayacağını soruyor. ‘She is asking whether Mehmet could win the race or not.’</p> <p>b. Bu yarışı Mehmet’in kazanamayacağını ima ediyor. ‘She is implying that Mehmet can’t win this race.’</p>
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<p>Kayıt 9:</p> <p>‘Recording 9’</p>	<p>a. Esma’nın partiye gelip gelmeyeceğini soruyor. ‘She is asking whether Esma will come to the party.’</p> <p>b. Esma’nın partiye gelmeyeceğini ima ediyor. ‘She is implying that Esma won’t come to the party.’</p>
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<p>Kayıt 10:</p> <p>‘Recording 10’</p>	<p>a. Neşe’nin sinemaya gelip gelmeyeceğini soruyor. ‘She is asking whether Neşe will come to the cinema or not.’</p> <p>b. Neşe’nin sinemaya gelmeyeceğini ima ediyor. ‘She is implying that Neşe won’t come to the cinema.’</p>
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<p>Kayıt 11:</p> <p>‘Recording 11’</p>	<p>a. Aslı’nın maç izlemeye gidip gitmeyeceğini merak ediyor. ‘She is curious about whether Aslı will go to the match or not.’</p> <p>b. Aslı’nın maç izlemeye gitmeyeceğini söylemek istiyor. ‘She wants to say that Aslı won’t go to the match.’</p>
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<p>Kayıt 12:</p> <p>‘Recording 12’</p>	<p>a. Akşamki hesabı Ali’nin ödeyip ödemediğini soruyor. ‘She is asking whether it was Ali who paid the bill last night.’</p> <p>b. Akşamki hesabı ödeyenin Ali olmadığını ima ediyor. ‘She is implying that Ali did not pay the bill last night.’</p>
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<p>Kayıt 13:</p> <p>‘Recording 13’</p>	<p>a. Esin’in ona Londra’dan kart atıp atmadığını soruyor. ‘She is asking whether Esin sent her a postcard from London or not.’</p> <p>b. Esin’in ona Londra’dan kart atmadığını ima ediyor. ‘She is implying that Esin did not send a postcard to him/her from London.’</p>
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<p>Kayıt 14:</p> <p>‘Recording 14’</p>	<p>a. Bu yarışı Mehmet’in kazanıp kazanamayacağını soruyor. ‘She is asking whether Mehmet can win the race or not.’</p> <p>b. Bu yarışı Mehmet’in kazanamayacağını ima ediyor. ‘She is implying that Mehmet can’t win this race.’</p>
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<p>Kayıt 15:</p> <p>‘Recording 15’</p>	<p>a. Hasan’a ödevlerinde yardım edecek kişinin Ayşe olup olmadığını soruyor. ‘She is asking whether it is Ayşe who will help Hasan with his homework.’</p> <p>b. Hasan’a ödevlerinde Ayşe’nin yardım etmeyeceğini söylemek istiyor. ‘She is implying that Ayşe won’t help Hasan with his homework.’</p>
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## APPENDIX A

### III: Sheet used by the Experiencer in Test III

The numbers in the vertical line (from 1 to 12) represent the test items and the numbers in the horizontal line (from 1 to 23) represent the subjects.

Subjects	1	2	3	4	5	6	7	8	9	10	11	12
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## APPENDIX B

### I: Contexts and the Dialogues for Test I

The sentences underlined are the intended readings.

CASE 1: Sofradasınız. Çorbanıza tuz atacaksınız. Tuzluđu istiyorsunuz.

‘You are at the table. You are going to add some salt to your soup. You ask for the salt.’

Dialogue 1:

A: Tuzluđu uzatır mısın?

‘Could you pass the salt?’

B: Tabi ki. Buyur.

‘Of course, here you are.’

CASE 2: Uzun süredir beklediđiniz Mustafa filmi sonunda gösterime girdi. Siz bu filme kesin gideceksiniz. Arkadaşlarınızla kimlerin gelebileceđi hakkında konuşuyorsunuz.

‘The film *Mustafa* that you have been looking forward to is finally in cinemas. You will certainly go and see this film. You’re talking to your friends about who might come with you.’

Dialogue 2:

B: Bu filmi uzun süredir bekliyorum biliyorsun. En kısa zamanda gideceđim.

‘You know that I’ve been waiting to see this film for a long time. I’m going to watch it soon.’

A: Ben de gelmek istiyorum. Bu Cuma gidelim mi?

‘I would like to see it, too. Shall we go this Friday?’

B: Cuma olmaz ya benim işim var. Sen Elif’e sor istersen.

‘No, I can’t do it this Friday. I have things to do. You can ask Elif to join you if you like.’

A: Ya bırak Allah aşkına, Elif benimle sinemaya gelir mi? Gördüğü yerde bile konuşmayıp kafasını çeviriyor, bir de sinemaya mı gelecek?

‘Forget about Elif. When did she show any interest in going to the cinema with me? (Lit. Will Elif come to cinema with me?) She turns her head when she sees me and doesn’t talk to me, why should I expect her to go to cinema with me?’

CASE 3: ALES sınavı için başvuruların başladığını öğrendiniz. Girip girmemekte kararsız kaldınız. Arkadaşınıza danışıyorsunuz.

‘You heard that applications for the ALES examination started. You are hesitant in entering it. You ask your friend for advice.’

Dialogue 3:

A: Bu sefer ALES’e gireyim mi sence? Biliyorsun geçen sefer girmedim ve bir sürü fırsat kaçırdım.

‘Do you think that I should enter ALES this time? You know, last time I didn’t and missed lots of opportunities.’

B: Bence girmelisin.

‘I think you should.’



CASE 4: Bugün karneler alındı. Siz de eşinizle oğlunuz Ali'nin karnesine bakıyorsunuz.

'Today school reports are given. You are looking at your son Ali's report with your husband.'

Dialogue 4:

B: Şu hale bak, matematik, fen, Türkçe zayıf. Neden böyle oldu anlamadım.

'Look at this! Turkish, Maths, Science are F. I do not understand why.'

A: Bunda anlamayacak ne var? Başarmak için çalışmak gerekir. Ali ders çalıştı mı?

'The reason is obvious. One needs to study to succeed but Ali didn't study (Lit. Did Ali study?)'

B: Doğru diyorsun çalışmadı.

'You are right, he did not study.'

CASE 5: Çok sevdiğiniz vazonuzun kırıldığını görüyorsunuz ve kimin kırmış olabileceğini bulmaya çalışıyorsunuz.

'You see that your favorite vase is broken and you try to find out who might have broken it.'

Dialogue 5:

A: Aman Allah'ım. En sevdiğim vazom kırılmış. Kim yaptı çabuk söyleyin bana.

Ayşe sen bilirsin, bütün gün evdeydin. Bu vazoyu Ali mi kırdı?

'Oh my God! My favorite vase is broken. Tell me who broke it immediately.'

Ayşe, you must know because you were at home all day long. Was it Ali who broke this vase?'

B: Evet.

'Yes.'

CASE 6: Komşunuzun kızını İngilizce kursuna yazdığını duydunuz. Çocuğun hiç dersle alakası olmadığını biliyorsunuz. Ve kendi aranızda konuşuyorsunuz.

‘You heard that your neighbour has enrolled her daughter to an English course. You know that the girl is not interested in academic subjects. So you are talking about this with your friend.’

Dialogue 6:

A: Yazık Nebahat uğraşiyor çocuk bir şeyler öğrensini diye ama Sena’nın hiç o taraflarda gözü yok.

‘It is a pity that Nebahat is struggling so that the girl would learn something but Sena is not ever interested in it.’

B: Sorma. Şimdi bir de İngilizce kursuna yazdırmış.

‘That’s so true.. She has enrolled her to an English course this time.’

A: Aman yazdırsın dursun. Sena o kursa devam edecek mi? Bir gün gider iki gün gider sonra ben sıkıldım gitmiyorum demeye başlar.

‘That will change nothing. As you also know, Sena won’t attend that course (Lit. Will Sena go attend to that course?) She will go once or twice, then she will start complaining.’

CASE 7: Yalova’da kimsenin katılmak istemediği bir seminer var. Bu seminere kimi göndereceğinizi düşünüyorsunuz.

‘There is a seminar in Yalova that no one would like to participate. You are the one who will decide on the participant so you are thinking about it.’

Dialogue 7:

A: Ee seminer için aklında kim var söyle bakalım?

‘Who do you have in mind for the seminar, tell me.’

B: Ben Seda gitsin diyorum. Zaten burada bir işe yaradığı yok.

‘I think Seda should go. She does not work here.’

A: O seminere Seda mı gidecek? Ne yapar eder gitmemenin yolunu bulur o. Sanki bilmiyorsun.

‘Seda won’t go to that seminar (Lit. Will Seda go to that seminar?) Don’t you know that she will find a way not to go there?’

CASE 8: Yemeğe davet edildiniz. Yemek masasında yemekler hakkında konuşuyorsunuz.

‘You are invited to a dinner party. You are talking about the dishes at the table.’

Dialogue 8:

A: Himm, yemekler enfes olmuş. Bütün yemekleri Ayşe mi yaptı?

‘These dishes are delicious. Did Ayşe cook all the dishes?’

B: Evet. Beceriklidir benim kızım.

‘Yes, she did. My daughter is skillful.’

A: Valla oğlum olsa alırdım.

‘I wish I had a son.’

CASE 9: Öğretmen öğrencisine coğrafya dersinde soru sormaktadır.

‘A teacher asks his/her student at the geography lesson.’

Dialogue 9:

A: Kızım bir gün nasıl oluşur anlat bakalım.

‘Explain how a day is formed.’

B: Güneş dünyanın etrafında döner ve bir gün oluşur, öğretmenim.

‘The Sun turns around the Earth and a day is formed, sir.’

A: Yapmayın lütfen çocuklar, Güneş mi dünyanın etrafında döner?

‘Children, please pay attention. Don’t you remember that the Earth turns around the Sun (Lit. Does the Sun turn around the Earth?)’

CASE 10: Arkadaşlarınız sizi bir partiye davet ettiler. Başka bir arkadaşınızı gördünüz ve onun da partiye gelip gelmeyeceğini soruyorsunuz.

‘You are invited to a party. Upon seeing another friend of yours, you ask whether s/he will join the party or not.’

Dialogue 10:

A: Bu akşam parti varmış. Arkadaşların evinde. Haberin var mı?

‘There’s a party tonight, at a friend’s house. Have you been informed?’

B: Evet, söylemişlerdi.

‘Yes, someone told me about it’

A: Partiye sen de gelecek misin peki?

‘Will you go to the party, then?’

B: Henüz karar vermedim.

‘I haven’t decided yet.’

CASE 11: Arkadaşlarınızla Efe hakkında konuşuyorsunuz.

‘You are talking to your friends about Efe.’

Dialogue 11:

A: Bizim Efe nerelerde? Görünmüyor bu aralar.

‘Where is Efe? I haven’t seen him around.’

B: Babası onu şirketin başına koymuş diyorlardı. Hani kendinden sonra o geçecek ya işlerin başına şimdiden alışsın istiyor galiba.

‘They say that his father put him in charge of the works of the firm. You know that he will undertake the responsibility after his father so his father wants him to get accustomed to the job.’

A: O, oğlunu hiç tanımamış. Efe mi babasının işlerine bakacak?

‘He doesn’t know his own son. Efe will not take the responsibility of his father’s job. (Lit. Will Efe take the responsibility of his father’s job?)’

B: Bana da öyle geliyor; ama belli de olmaz. Ummadık taş baş yarar derler.

‘I think so too, but it might turn out differently.’

CASE 12: Arkadaşınız kaç gündür ortalıklarda yok. Artık iyice merak etmeye başladınız ve başka bir arkadaşınızı aramış olabileceğini düşünerek aradınız.

‘Your friend has not been around for a while. You are getting anxious about him/her and calling a common friend thinking that s/he might have called him/her.’

Dialogue 12:

A: Ahmet ne zamandır ortalıklarda yok. Arayıp haber de vermedi. Belki sen nerede olduğunu biliyorsundur diye aradım. Ahmet seni aradı mı?

‘Ahmet hasn’t been around for a while. He didn’t even call. I thought that you might know where he is. Did Ahmet call you?’

B: Hayır aramadı. Ben de merak ettim bak şimdi.

‘No, he didn’t. I am anxious about him too now’

CASE 13: Hava durumunda yarın havanın çok sıcak olacağını duydunuz. Bu fırsatı değerlendirmek istiyorsunuz.

‘You heard that tomorrow it will be very hot. You don’t want to miss this opportunity.’

Dialogue 13:

A: Yarın Adalar'a gidelim mi? Hava çok güzel olacaktı.

'Shall we go to Adalar tomorrow? The weather will be very nice.'

B: İyi olurdu ama benim başka işlerim var. Başka bir zaman gideriz.

'It would have been nice but I have other things to do. Why don't we go another time?'

CASE 14: Bugün oğlunuz Ali'nin çok önemli bir sınavı var. Eşinizle konuşuyorsunuz.

'Today your son Ali has a very important exam. You are talking to your wife about it.'

Dialogue 14:

A: Biliyorsun Ali'nin ilk yazılısı düşüktü. Bundan iyi bir not almalı ki karnesine matematiği iyi gelsin.

'You know that Ali's first exam was low. He must get a good grade from this so that his maths will be satisfactory in his school report.'

B: Evet.

'Yes.'

A: Ben dün evde yoktum. Sen kontrol ettin mi? Ali ders çalıştı mı?

'I was not at home yesterday. Did you check him? Did he study?'

B: Evet, bütün gün başındaydım. Sürekli ders çalıştı. Merak etme iyi geçecek sınavı.

'Yes, I was with him all day long and he studied consistently. Don't be anxious, he will succeed.'

CASE 15: Akşam yemeğine arkadaşınız Sevinç'i davet ettiniz. Mutfakta ne yapacağınızı konuşuyorsunuz.

'You have invited your friend Sevinç for dinner. You are talking about what to cook in the kitchen.'

Dialogue 15:

B: Akşam yemeğe Sevinç geliyor. Marketten pırasa aldım. Pırasa pişirelim mi, ne dersin?

'Sevinç is coming for the dinner. I bought some leeks from the market. Shall we cook leeks?'

A: Saçmalama Allah aşkına. Sevinç pırasa yer mi? Kız ağzına sebze koymuyor senin de sorduğun soruya bak.

'Please! Sevinç doesn't eat leeks (Lit. Does Sevinç eat leeks?) She doesn't touch vegetables. And look what you are suggesting!'

B: Doğru ya aklımdan çıkıvermiş yemediği.

'You are right. I have totally forgotten it.'

CASE 16: Mutfakta bulaşık yıkıyorsunuz. Kapının çaldığını duydunuz. Eşinize sesleniyorsunuz.

'You are washing the dishes in the kitchen. You hear a knock on the door. You are calling your husband.'

Dialogue 16:

A: Kapıya bakar mısın?

'Can you answer the door?'

B: Tamam, şimdi açıyorum.

'OK. I am opening it now.'

CASE 17: Bir dedikodu duyduunuz ve bunun aslını öğrenmek istiyorsunuz. Kimden öğrenebileceğinizi konuşuyorsunuz.

‘You heard a rumour and want to find out about the truth. You are discussing where to get the correct information from.’

Dialogue 17:

A: İşin aslını kime sorsak acaba?

‘Who shall we ask, do you think??’

B: Bence Ahmet’e soralım. O her zaman doğruyu konuşur.

‘I think we should ask Ahmet. He always tells the truth.’

A: Hadi canım, Ahmet mi doğruyu konuşur? Sen hiç tanımamışsın onu. Üç kağıtçının önde gidenidir o.

‘Don’t be a fool. Ahmet doesn’t tell the truth (Lit. Does Ahmet tell the truth?)

Obviously you don’t know him. He is the main liar.’

CASE 18: Bir kız arkadaşınızla konuşuyorsunuz. Arkadaşınız kısa bir süre önce erkek arkadaşından ayrılmıştı ve size onu tekrar aramak istediğini söylüyor.

‘You are talking to one of your girl friends. Your friend has just broken up with her boy friend and now she says that she wants to call him back.’

Dialogue 18:

B: Bak kaç ay oldu ne aradı ne sordu beni. Dayanamıyorum artık ben arayacağım.

‘Look! He hasn’t called me for months. I can’t stand this, I will call him.’

A: Kızım saçmalama arayacağım diyorsun bir de. Ahmet seni aradı mı? Görüşmek istese o arar sorardı.

‘Don’t be a fool. Ahmet didn’t call you (Lit. Did Ahmet call you?) If he had wanted to see you, he would have called.’



CASE 19: Sınıf arkadaşınız Sena'nın annesiyle karşılaştınız. İngilizce kursuna gitmek istiyorsunuz ve Sena'nın devam edip etmediğini soruyorsunuz.

'You come across your classmate Sena's mother. You want to go to the English course that Sena attends so you are asking whether she will continue attending.'

Dialogue 19:

A: Merhaba. Ben sizi görmüşken bir şey soracaktım. Ben Sena'nın sınıf arkadaşayım da bugün okulda İngilizce kursuna gittiğini söylemişti.

'Hello! I would like to ask you something. I am Sena's classmate. She said in the classroom that she attended an English course.'

B: Evet.

'Yes.'

A: Sena o kursa devam edecek mi? Edecekse ben de yazılmayı düşünüyorum da.

'Will Sena continue attending that course? If so I will enrol too.'

CASE 20: Mersin'de dilbilim semineri olduğunu duydunuz. Seda'nın da bu aralar biraz telaşlı ve hazırlık içinde olması seminere onun katılacağı ihtimalini getirdi aklınıza. Arkadaşınızın bildiğini düşündüğünüz için ona soruyorsunuz.

'You heard that there is a linguistics seminar in Mersin. The fact that Seda is excited and in a preparation made you think that she might attend that seminar. You are asking your friend thinking that s/he might know about it.'

Dialogue 20:

A: Mersin'de bir seminer var ya, o seminere Seda mı gidecek? Bir hazırlık içinde şu aralar.

'You know the seminar in Mersin, Will Seda go to that seminar? She seems to be preparing for something.'

B: Evet, o gidecek.

‘Yes, she will.’

CASE 21: Yemektesiniz. Yemekleri birlikte hazırladığınız halde hepsini Ayşe yapmış gibi herkes ona teşekkür ediyor. Siz de mutfakta arkadaşınıza dert yaniyorsunuz.

‘You are at dinner. Even though you prepared the meals altogether, everyone is thanking Ayşe as if she did everything alone. You are complaining with your friends about this situation in the kitchen.’

Dialogue 21:

A: Ya içerdekilere baksana, herkes Ayşe’ye teşekkür ediyor. O da bir havalara girdi şimdi. Ya bizim yaptıklarımız ne olacak? Bütün yemekleri Ayşe mi yaptı?

‘Look at the guys in the dining room. Everyone is thanking Ayşe. What about the things that we did? Ayşe didn’t do the whole meal. (Lit. Did Ayşe do all the meal?)’

B: Haklısın. O da hiç kızlar da yardım etti, yalnız yapmadım demiyor.

‘You are right. She didn’t even say that the girls also helped and I didn’t do it alone.’

CASE 22: Çok sevdiğiniz vazonuzun kırıldığını gördünüz. Bu işin altından kesin Ali çıkacak diye düşünüyorsunuz.

‘You see that your favorite vase is broken. You are certain that Ali is the one who is responsible for it.’

Dialogue 22:

B: İnanmıyorum ya. Yaramazlığın da bir sınırı var değil mi? Buradaki vazoya nasıl eriştin de kırdın?

'I can't believe this. Even naughtiness should have limits. How did you reach this vase and break it?'<sup>23</sup>

A: Sen kimden bahsediyorsun?

'Who are you talking about?'

B: Ali'den.

'About Ali.'

A: Niye çocuğu suçluyorsun ki durduk yere. Bu vazoyu Ali mi kırdı?

'Why are you accusing the child in vain? He didn't break this vase (Lit. Did he break this vase?)'

B: O kırmadı mı?

'Didn't he?'

A: Tabi ki o kırmadı. Üstteki komşu uğramıştı kızıyla. Çocuk örtüyle oynarken düştü kırıldı vazo.

'Of course not. The upstairs neighbor stopped by with her daughter. The girl broke the vase while playing with the table cloth.'

CASE 23: Öğretmen coğrafya dersinde öğrencilerine sorar.

'The teacher asks the following in the geography lesson.'

Dialogue 23:

A: Ali, söyle bakalım bir gün nasıl oluşur?

'Ali, tell me, how is a day formed?'

B: Bir gün Güneş'in Dünya'nın etrafında dönmesiyle oluşur.

'A day is formed through the rotation of the Sun around the Earth.'

A: Ayşe sen söyle kızım: Güneş mi Dünya'nın etrafında döner?

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<sup>23</sup> Türkçe'de sen in kullanımı

Ayşe, you tell me: Does the Sun revolve around the Earth?

B: Hayır öğretmenim. Dünya Güneş'in etrafında döner.

No, sir. The Earth revolves around the Sun.

CASE 24: Yılbaşı çekilişi yaptınız. Arkadaşınıza hediye olarak kitap almayı düşünüyorsunuz. Kitapçıdasınız.

'You joined the new year prize draw. You are thinking of buying a book for your friend as a present. You are at the bookstore.'

Dialogue 24:

B: Bak bu kitap nasıl?

'Look! How is this book?'

A: Kitap güzel ama çok kalın, üstelik de pahalı. Ayşe bu kitabı okuyacak mı? Boşuna o kadar para verme derim.

'The book is good but very thick, also expensive. Ayşe won't read this book (Lit. Will Ayşe read this book?) I don't think you shouldt pay that much in vain.'

CASE 25: Bir dedikodu duydunuz ve bunun aslını öğrenmek istiyorsunuz. Kimden öğrenebileceğinizi konuşuyorsunuz.

'You heard a rumor and want to learn the truth. You are talking about from whom you can learn it.'

Dialogue 25:

A: İşin aslını kimden öğrenebiliriz acaba?

'Who can tell us the true story?'

B: O sırada Ali ve Ahmet varmış.

'Ali and Ahmet were there at that moment.'

A: Sen kaç yıldır tanıyorsun bu çocukları. Daha iyi bilirsin. Bunlardan, Ahmet mi doğruyu konuşur?

‘You know these guys for years. Does Ahmet tell the truth?’

B: Evet. Ali’ye pek güvenmem ama Ahmet’e kefil olurum.

‘Yes. I don’t trust Ali but I can put my money on Ahmet.’

CASE 26: Arkadaşlarınızla çok zengin olan komşunuzun ölümünün üzerine işlerinin başına kimin geçeceği hakkında konuşuyorsunuz.

‘You are talking to your friend about who will be in charge of the business upon the death of your rich neighbour.’

Dialogue 26:

A: O kadar şirketi vardı adamın. Şimdi ne olacak acaba? O kadar işi kim yüklenir dersin?

‘He had lots of companies. What will happen now? Who will be in charge of those jobs?’

B: En büyükleri Efe. Diğer ikisi zaten okuyor.

‘Efe is the eldest. The other two are already studying.’

A: Bu durumda, Efe mi babasının işlerine bakacak?

‘If that’s the case, then will Efe take the charge of his father’s job?’

B: Bence öyle olur.

‘I think so.’

CASE 27: İçerisi çok soğuk oldu. Arkadaşınızdan pencereyi kapatmasını istiyorsunuz.

‘It is cold inside. You ask your friend to close the window.’

Dialogue 27:

A: Pencereyi kapatır mısın? İçerisi çok soğudu.

‘Can you close the window? It’s getting cold.’

B: Tamam. Bu kadar havalandığı yeter zaten.

‘OK. This much fresh air is sufficient.’

CASE 28: Uzun süredir beklediğiniz Mustafa filmi sonunda gösterime girdi. Siz bu filme kesin gideceksiniz. Arkadaşlarınızla kimlerin gelebileceği hakkında konuşuyorsunuz.

‘The film *Mustafa* that you have been looking forward to is finally in cinemas. You will certainly go and see this film. You’re talking to your friends about who might come with you.’

Dialogue 28:

A: Mustafa’yı izleyeceğim bu akşam. Sen de gelsene?

‘I’m going to watch *Mustafa* tonight. Would you like to come?’

B: Gelmek isterdim ama önemli bir işim var.

‘I would like to; but I have an important thing to do.’

A: Tüh ya yalnız gitmek de istemiyordum. Elif’i mi arasam ki? İş var mıdır bu akşam ne dersin? Elif benimle sinemaya gelir mi?

‘I don’t want to go alone. Should I call and invite Elif? Do you think she’s busy tonight? Will she come to cinema with me?’

B: İyi aklına geldi. Bence gelir. Sıkılıyorum diyordu zaten.

‘That’s an idea. I think she would. She was complaining about being bored.’

CASE 29: Akşam yemeğine arkadaşınız Sevinç'i davet ettiniz. Mutfakta ne yapacağınızı konuşuyorsunuz.

'You have invited your friend Sevinç for dinner. You are talking about what to cook.'

Dialogue 29:

A: Akşam yemeğe Sevinç'i davet ettim.

'I invited Sevinç to dinner.'

B: İyi yapmışsın. Peki, ne pişireceğiz?

'Good. So, then what shall we cook?'

A: Ben pırasa pişiririz diye düşünmüştüm ama sen daha iyi bilirsin, Sevinç pırasa yer mi?

'I thought that we could cook leeks but you know her better, does Sevinç eat leeks?'

B: Oo yemez mi. Bayılır pırasaya. Zeytinyağlı olacak ama.

'Of course she does. She loves it. It'll be a cold dish, though..'

CASE 30: Arkadaşlarınızla okuduğunuz kitapları sürekli değişiyorsunuz.

'You are always exchanging the books that you have read with your friends.'

Dialogue 30:

A: Kitabı bitirdim. Ayşe bu kitabı okuyacak mı? Yoksa kütüphaneye geri vereceğim.

'I've finished the book. Will Ayşe read this book? If not, I will return it to the library.'

B: Sen hemen verme kitabı. Ayşe okumak istiyordu onu.

'Don't return the book yet. Ayşe wanted to read it.'

## APPENDIX B

### II: Contexts for Test II

The sentences in the boldface are test items that are extracted.

Aşağıda bazı senaryolar verilmiştir. Bunları okuyup verilen cümleyi duruma uygun şekilde seslendiriniz.

‘Some scenarios are given below. After reading them, read out the given sentence in an appropriate way.’

1. *Arkadaşınız Esin İngiltere’ye gezmeye gitmişti. Arkadaşlarınızdan kimisine oradan kart atmış. Size yollamadığı için biraz üzüldünüz. Kimlere kart atmış olabileceğini merak ediyorsunuz. Yolda samimi bir arkadaşınızı görüyorsunuz ve ona Esin’in Londra’dan kendisine kart atıp atmadığını soruyorsunuz:*

‘Your friend Esin has gone to London. She has sent postcards to some of your friends from there. You are a bit upset and you wonder who she might have sent cards. You come across one of your close friends and you ask her whether Esin sent her a postcard from London or not.’

Esin sana Londra’dan kart attı mı?

‘Did Esin send you a postcard from London?’



2. *Dün akşam arkadaşlarınızla yemeğe gittiniz. Hesabı öderken karışıklık oldu ve kimin hesabı ödediğini anlayamadınız. Yemekteki arkadaşlarınızdan biriyle bugün hesabı kimin ödemiş olabileceğini konuşuyorsunuz. Sizin kafanızda Ali'nin ödemiş olabileceği var. Bunu arkadaşınıza soruyorsunuz:*

You went to dinner with your friends last night. There was a confusion while paying the bills so you could not understand who paid it. Today you are talking to one of your friends who was also at the dinner about who might have paid the bill. You think that Ali might have paid the bills. You are asking your friend about this:'

Dün akşamki hesabı Ali mi ödedi?

'Was it Ali who paid the bill last night?'

3. *Arkadaşlarınızın çoğu hafta sonu maç izlemeye gidecek. Siz bunun yerine farklı bir şey yapmak istiyorsunuz. Yanınıza arkadaş arıyorsunuz haliyle. Bir arkadaşınızla karşılaşıyorsunuz ve onun Aslı'nın hafta sonu planından haberdar olduğunu düşünerek soruyorsunuz:*

'Most of your friends will go watch the match at the weekend. You want to do something else instead. So you are looking for a friend to accompany you. You meet one of your friends and thinking that s/he might be informed about the weekend plans of Aslı, you ask:'

Aslı maç izlemeye gidecek mi?

'Will Aslı go to watch the match?'

4. *Hasan’a ödevlerinde Ayşe’nin yardım edeceğini duydunuz. Bunun gerçek olup olmadığını merak ediyorsunuz ve soruyorsunuz:*

‘You heard that Ayşe would help Hasan with his homework. You wonder whether this is true or not, so you ask:’

Hasan’a ödevlerinde Ayşe mi yardım edecek?

Is it Ayşe who will help Hasan with his homework?

5. *Bir arkadaşınız parti veriyor. Siz, bu partiye Esma’yı da davet etmeyi düşünüyorsunuz; ama önce Esma’nın bir arkadaşına danışıyorsunuz:*

‘One of your friends is giving a party. You are thinking of inviting Esma to this party but you first ask one of Esma’s friends for advice:’

Esma bizimle partiye gelir mi?

Will Esma come to party with us?

6. *Bir koşu yarışması düzenleniyor. Bu yarış kimin kazanacağını merak ediyorsunuz. Size Mehmet iyi koşarmış gibi geliyor; ama diğer çocukların yeteneklerini bilmediğiniz için emin de olamıyorsunuz. Çocukları daha iyi tanıyan bir arkadaşınıza onun fikrini soruyorsunuz:*

‘There is a footrace. You wonder who will win this race. It seems to you that Mehmet runs well but you can not be sure since you do not know the capabilities of the other contestants. So you ask the idea of your friend who knows the contestants well:’

Bu yarışı Mehmet mi kazanır?

Is it Mehmet who will win this race?

*7. Neşe'nin sinemaya gelip gelmeyeceğini merak ediyorsunuz ve arkadaşınıza soruyorsunuz:*

'You wonder whether Neşe will come to cinema, so you ask your friend.'

Sence Neşe sinemaya gelir mi?

'Do you think that Neşe comes to cinema?'

*8. Eşinizden çöpü çıkarmasını istiyorsunuz:*

'You want your partner to take the rubbish out.'

Çöpü kapıya bırakır mısın?

'Could you take the rubbish out?'

*9. Arkadaşınız Ayşe'ye Ali'nin evde olup olmadığını soruyor. Siz Ayşe'nin bu sorunun muhatabının Ayşe olmadığını bildiğiniz için itiraz ediyorsunuz ve böyle bir soru sorduğu için sinirleniyorsunuz:*

'Your friend is asking Ayşe whether Ali is at home or not. Since you know that the Ayşe should not be asked about this, you object and get angry with him/her since s/he asks such a question.'

Ali'nin evde olup olmadığını Ayşe nereden bilsin?

'How can Ayşe know whether Ali is at home or not?'

10. *Paris’te geziyorsunuz. Arkadaşınız Esin’e kart atacağım diye tutturdu. Yapacak bir sürü güzel şey varken posta ile uğraşmak istemiyorsunuz. Bu yüzden arkadaşınızı vazgeçirmeye çalışıyorsunuz. Bunun için geçerli bir de sebebiniz var: Esin Londra’dayken ona kart atmamıştı. Bunu ona hatırlatıyorsunuz ve yapmak istediği şeyin ne kadar gereksiz olduğunu ima ediyorsunuz:*

‘You are walking around in Paris. Your friend insists on sending a postcard to Esin. You do not want to deal with sending cards when you can do other enjoyable things. So you try to change your friend’s mind and you have a good reason. Esin had not sent her a postcard when she was in London. You remind this to her and imply that what she wants to do is unnecessary: ’

Esin sana Londra’dan kart attı mı?

‘Esin did not send you a postcard from London?’ (Lit.Did Esin send you a postcard from London?)

11. *Dün akşam hep birlikte yemeğe gittiniz. Hesapta bir karışıklık oldu. Hesabı kimin ödediği tam anlaşılmadı; ama siz Mehmet’in yanında olduğunuz için hesabı onun ödediğini biliyorsunuz. Diğer taraftan bugün konuşma sırasında Ayşe, hesabı Ali ödemiş gibi Ali hakkında övgü dolu sözler söylüyor. Bu duruma daha fazla dayanamayıp, Ayşe’ye kızıyor ve Ali’nin hesabı ödemediğini ima ediyorsunuz:*

‘You went to dinner all together last night. There was confusion during the payment of the bill. Others did not understand who paid it but since you were with Mehmet, you know that he paid it. However, today Ayşe is praising Ali as if he paid the bill. You can’t stand this situation any more, you get angry with Ayşe and imply that Ali did not pay the bill:’

Dün akşamki hesabı Ali mi ödedi?

‘It was not Ali who paid the bill of yesterday evening.’ (Lit. Was it Ali who paid the bill yesterday?)

12. *Akşam oturmaya Aslı’lara gitmeye karar verdiniz. Müsait olup olmadığı öğrenmek için aradığınızda Aslı maça gideceğini, o yüzden evde olmayacağını söyledi. Aslı’nın maç izlemeyi sevmediği için bunun bir bahane olduğunu düşünüyorsunuz ve kendi aranızda Aslı’yı çekiştiriyorsunuz. Onun maç izlemeye gitmeyeceğini kastederek şunu diyorsunuz:*

‘You decided to visit Aslı this evening. When you called to find out whether she was available, Aslı said that she would go to match so she would not be at home. You and your friends think that this is a poor excuse since you know that she does not like watching matches and you start criticizing her. You say the following, implying that she will not go to the match:’

Aslı maç izlemeye gidecek mi?

‘Aslı will not go to the match.’ (Lit. Will Aslı go to watch the match?)

13. *Hasan’a ödevlerinde Ayşe’nin yardım edeceğini duydunuz. Bu size pek inandırıcı gelmedi; çünkü Ayşe verilen hiçbir görevi yerine getirmez ve bütün sorumluluklardan kaçır. Ayşe’nin Hasan’a da yardım etmeyeceğini düşünerek şunu diyorsunuz:*

‘You heard that Ayşe was going to help Hasan with his homework. This does not sound plausible to you because you know that Ayşe never fulfills her responsibilities

and runs away from her responsibilities. You say the following thinking that Ayşe would not help Hasan:’

Hasan’a ödevlerinde Ayşe mi yardım edecek?

‘It is not Ayşe who will help Hasan with his homework.’ (Lit. Will Ayşe help Hasan with his homework?)

14. *Arkadaşınız Esma’yı partiye davet etmeyi teklif ediyor. Siz Esma’nın sizin grubunuzdan hoşlanmadığını ve böyle bir teklifi geri çevireceğin biliyorsunuz. Ve arkadaşınızın bu fikrin saçmalığını anlamasını istediğiniz için şöyle diyorsunuz:*

‘Your friend is offering to invite Esma to the party. You know that Esma does not like the people in your group and would turn down such an offer. You say the following so that your friends can understand the irrationality of this idea:’

Esma bizimle partiye gelir mi?

‘Esma won’t come to the party with us.’ (Lit. Will Esma come to cinema with us?)

15. *Okul çapında bir koşu yarışması düzenleniyor. Arkadaşınız, Mehmet’in bu yarışı kazanacağını düşünüyor. Siz böyle bir fikre ancak gülersiniz; çünkü Mehmet’in ne kadar uyuşuk olduğunu ve yavaş koştuğunu sizden iyi bilen birisi yoktur. Arkadaşınıza tahmininin ne kadar yanlış olduğunu aşağıdaki cümleyi söyleyerek belirtiyorsunuz:*

‘A footrace is being organized in your school. Your friend thinks that Mehmet will be the winner. You can only laugh at such an idea because there is no one who could

know better than you that how lazy Mehmet is and how slowly he runs. You indicate how wrong your friend is in his predication by saying the sentence below:’

Bu yarışı Mehmet mi kazanır?

‘It is not Mehmet who will win this race.’ (Lit. Will Mehmet win this race?)

## APPENDIX B

### III: Sentences for Test III

1. Tiyatroya kimler gidecek? ‘Who will go to the theatre?’<sup>24</sup>, Filler
2. Leyla radyo dinler mi? ‘Does Leyla listen to the radio?’ SQ
3. Ela denize girer mi? ‘Ela does not go swimming?’ RQ
4. Emine bu tezi bitirir mi? ‘Emine does not finish this thesis?’ RQ
5. Ece bizimle maça gelir mi? ‘Will Ece come to the match with us?’ SQ
6. Aylin bu filmi beğenir mi? ‘Aylin does not like this film?’ RQ
7. Gezmeye giderken beni de götürür müsün? ‘Will you take me with you when you go out?’ Filler
8. Leyla radyo dinler mi? ‘Leyla does not listen to the radio?’ RQ
9. Ela denize girer mi? ‘Does Ela go swimming?’ SQ
10. Emine bu tezi bitirir mi? ‘Will Emine finish this thesis?’ SQ
11. Ece bizimle maça gelir mi? ‘Will Ece come to the match with us?’ RQ
12. Aylin bu filmi beğenir mi? ‘Will Aylin like this film?’ SQ

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<sup>24</sup> The sentences marked with the aorist in English are translated into Turkish either with the aorist or the future.



## APPENDIX C

### I: The List of Items in Test I

Item no	Type	Sentence
1	Filler	Tuzluđu uzatır mısın? ‘Could you pass the salt?’
2	RQ	Elif benimle sinemaya gelir mi? ‘Will Elif come to cinema with me?’
3	Filler	Bu sefer ALES’e gireyim mi sence? ‘Do you think that I should enter the ALES examination this year?’
4	RQ	Ali ders çalıştı mı? ‘Ali did not study.’ (Lit. Did Ali (ever) study?)
5	SQ	Bu vazoyu Ali mi kırdı? ‘Was it Ali who broke this vase?’
6	RQ	Sena o kursa devam edecek mi? ‘Sena will not continue with that course.’ (Lit. Will Sena follow that course?)
7	RQ	O seminere Seda mı gidecek? ‘It is not Seda who will attend that seminar.’ (Lit. Is it Seda who will attend that seminar?)
8	SQ	Bütün yemekleri Ayşe mi yaptı? ‘Was it Ayşe who cooked all the dishes?’
9	RQ	Güneş mi dünyanın etrafında döner? ‘It is not the Sun that revolves around the Earth.’ (Lit. Is it the Sun that revolve around the Earth?)
10	Filler	Partiye sen de gelecek misin peki? ‘Will you come to the party, too, then?’
11	RQ	Efe mi babasının işlerine bakacak? ‘It is not Efe who will be in

		charge of his father's job.' (Lit. Is it Efe who will be in charge of his father's job?)
12	SQ	Ahmet seni aradı mı? 'Did Ahmet call you?'
13	Filler	Yarın Adalar'a gidelim mi? 'Shall we go to the Adalar tomorrow?'
14	SQ	Ali ders çalıştı mı? 'Did Ali study?'
15	RQ	Sevinç pırasa yer mi? 'Sevinç does not eat leeks.' (Lit. Does Sevinç eat leeks?)
16	Filler	Kapıya bakar mısın? 'Could you open the door?'
17	RQ	Ahmet mi doğruyu konuşur? 'It is not Ahmet who tells the truth.' (Lit. Is it Ahmet who tells the truth?)
18	RQ	Ahmet seni aradı mı? 'Ahmet did not call you.' (Lit. Did Ahmet call you?)
19	SQ	Sena o kursa devam edecek mi? 'Will Sena continue with that course?'
20	SQ	O seminere Seda mı gidecek? 'Is it Seda who will attend that seminar?'
21	RQ	Bütün yemekleri Ayşe mi yaptı? 'It was not Ayşe who cooked all the dishes.' (Lit. Was it Ayşe who cooked all the dishes?)
22	RQ	Bu vazoyu Ali mi kırdı? 'It was not Ali who broke this vase.' (Lit. Was it Ali who broke this vase?)
23	SQ	Güneş mi dünyanın etrafında döner? 'Is it the Sun that turns around the Earth?'
24	RQ	Ayşe bu kitabı okuyacak mı? 'Ayşe will not read this book.' (Lit. Will Ayşe read this book?)
25	SQ	Ahmet mi doğruyu konuşur? 'Is it Ahmet who tells the truth?'

26	SQ	Efe mi babasının işlerine bakacak? ‘Is it Efe who will be in charge of his father’s job?’
27	Filler	Pencereyi kapatır mısın? ‘Can you close the window?’
28	SQ	Elif benimle sinemaya gelir mi? ‘Would Elif come to cinema with me?’
29	SQ	Sevinç pırasa yer mi? ‘Would Sevinç eat leeks?’
30	SQ	Ayşe bu kitabı okuyacak mı? ‘Will Ayşe read this book?’

## APPENDIX C

### II: The List of Items in Test II

Item no	Type	Sentence
2	SQ	Esma bizimle partiye gelir mi? ‘Will Esma come to the party with us?’
3	RQ	Aslı maç izlemeye gidecek mi? ‘Aslı will not go to the match.’ (Lit. Will Aslı go to the match?)
4	SQ	Esin sana Londra’dan kart attı mı? ‘Did Esin send you a postcard from London?’
6	RQ	Dün akşamki hesabı Ali mi ödedi? ‘It was not Ali who paid the bill yesterday evening.’ (Lit Was it Ali who paid the bill yesterday evening?)
7	RQ	Hasan’a ödevlerinde Ayşe mi yardım edecek? ‘It is not Ayşe who will help Hasan with his homework.’ (Lit. Is it Ayşe who will help Hasan with his homework?)
8	SQ	Bu yarışı Mehmet mi kazanacak? ‘Is it Mehmet who will win this race?’
9	RQ	Esma bizimle partiye gelir mi? ‘Esma won’t come to the party with us.’ (Lit. Will Esma come to the party with us?)
11	SQ	Aslı maç izlemeye gidecek mi? ‘Will Aslı go to watch the match?’

12	SQ	Dün akşamki hesabı Ali mi ödedi? ‘Was it Ali who paid the bill yesterday?’
13	RQ	Esin sana Londra’dan kart attı mı? ‘Esin did not send you a postcard from London.’ (Lit. Did Esin send you a postcard from London?)
14	RQ	Bu yarışı Mehmet mi kazanır? ‘It is not Mehmet who will win this race.’ (Lit. Is it Mehmet who will win this race?)
15	SQ	Hasan’a ödevlerinde Ayşe mi yardım edecek? ‘Is it Ayşe who will help Hasan with his homework?’

## APPENDIX C

### III: The List of Items in Test III

Item no	Type	Sentence
2	SQ	Leyla radyo      ‘Leyla radio’
3	RQ	Ela deniz-e      ‘Ela sea-DAT’
4	RQ	Emine bu tez-i      ‘Emine this thesis-ACC’
5	SQ	Ece biz-im-le ma-a      ‘Ece we-1.SG.POSS-INST match-DAT’
6	RQ	Aylin bu film-i      ‘Aylin this film-ACC’
8	RQ	Leyla radyo      ‘Leyla radio’
9	SQ	Ela deniz-e      ‘Ela sea-DAT’
10	SQ	Emine bu tez-i      ‘Emine this thesis-ACC’
11	RQ	Ece biz-im-le ma-a      ‘Ece we-POSS-INST match-DAT’
12	SQ	Aylin bu film-i      ‘Aylin this film-ACC’

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