Evidentiality in Turkey Turkish and Cypriot Turkish: A cross-varietal analysis of –DI and –mIş SOSY-18-K-3

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1. Introduction

Evidentiality, in broad terms, refers to the "ways in which information is acquired" (Aikhenvald, 2004, 5). According to some scholars evidentiality is a separate grammatical category by means of which source of the information is indicated by the speakers. For instance, Aikhenvald states that "to be considered as an evidential, a morpheme has to have "source of information" as its core meaning: that is, the unmarked, or default interpretation...an evidential can optionally be "rephrased with a lexical item, or one can add a lexical explanation to an evidential" (Aikhenvald, 2004: 5). However, there seems to be less consensus about the scope of evidentiality and some other scholars take the term to apply to 'propositions', 'claims' or 'assertions' suggesting evidentiality as a subcategory of propositional modality that subsumes epistemic and evidential modalities (Palmer, 2001).

Studies on evidentiality in typologically different languages revealed that speakers use different means to express whether they saw the event (visual evidential), or heard the event (nonvisual evidential), or made an inference based on general or contextual knowledge (assumed evidential and inferential evidential), or was told about it (reported, secondhand or hearsay evidential) (Aikhenvald & Dixon, 2003; Chafe & Nichols, 1986; Johanson & Utas, 2000). While some languages indicate speakers' knowledge obtained through direct versus indirect evidence with lexical elements such as verbs, adverbs, pronouns or nouns, some others express the source of the event with grammatical elements such as conditionals (e.g., in Romance languages, Squartini, 2008), participles (in Lithuanian, Wiemer, 2007) or perfect and past tense markers (in Turkic, Iranian and many Finno-Ugric languages, Johanson, 2003). In the case of the latter, a secondary, evidentiality, meaning attributed to the grammatical element becomes its major meaning as a result of a gradual grammaticalization process. As stated by Johanson (2003) about the Turkic languages, despite system differences, almost all known older and recent stages of Turkic possess the grammatical means of expressing *indirectivity*.

This project is concerned with speakers' expression and perception of direct and indirect evidentiality in two dialects of Turkish, Standard Turkish Dialect spoken in Turkey (TT) and Turkish Cypriot Dialect spoken in North Cyprus (CT). In particular, the project, with a cross-linguistic perspective, aims to investigate whether direct and indirect evidentials are expressed differently in the two dialects of Turkish and if yes, whether language contact can account for the difference. The following research questions were explored:

(1) If and to what extent does the expression of evidentiality in CT and TT differ?

- (2) Does the expression of evidentiality differ in CT spoken by speakers aged between 18-22 (18+ group) and by speakers aged 50 and over (50+ group)?
- (3) Can language contact situations in North Cyprus account for dialectal variation?
- (4) Do the possible variation in the expression of evidentiality by the CT and TT speakers create miscommunication between the two groups?

2. Project team

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3. Progress and results

In this section, in order to establish a background to the study, first, we will provide a literature review. Next, we will describe the methodology used to collect data for the purposes of the project, the participants of the project and the methods of data analysis. Finally, we will present the results of the study and discuss the findings.

3.1. Literature review

3.1.1. Evidentiality in TT

Studies on Turkish evidentials have mostly focused on the descriptive functions of evidentials in Turkish (Aksu-Koç, 1988; Slobin & Aksu, 1982; Aksu-Koç et al, 2009) and in Turkic (Johanson, 2002; 2003), morpho-syntactic analyses of the evidentials (Sezer, 2001), their semantic and pragmatic analyses (Yavaş, 1980) and their acquisition by children acquiring Turkish (Öztürk & Papafragou, 2008; 2015; Aksu-Koç, Ögel-Balaban & Alp, 2009). This project, on the other hand, adopting a corpus-based comparative perspective examines how direct and indirect evidentials are expressed and perceived in two dialects of Turkish, CT and TT.

Evidentiality in TT is grammaticalized in the tense-aspect-mood system of Turkish (Aksu-Koç, 1988). In particular, the two past tense morphemes in Turkish (-DI and -mIş) express an obligatory grammatical distinction between the report of direct versus indirect experience (Slobin & Aksu, 1982). Direct experience is signified with –DI, "which indicates the speaker's direct access to knowledge about all phases of the asserted event through perception." (Aksu-Koç et al, 2009:14) and can be realized as –di/-di/-du/-ti/-ti/-tu/-tu (1). Indirect (hearsay) experience, on the other hand, is marked with –mIş and realized as –miş/-miş/-müş/-muş (2).

- (1) ¹Abla-m -la aynı okul-a *git-tik*. (TT-18+_DT) ² Sister-GEN-1SG with same school-DAT go- PST3PL We went to the same school with my elder sister.
- (2) Mutlu bir çocuklu-ğu *ol-muş.* (TT-50+_RB) Happy a childhood-POSS.2SG. be-PST-3SG She (my mother) had a happy childhood (reportedly).

The particle -mIş encodes indirect experience and is related historically and ontogenetically to the perfect, and, in its participial form, functions to describe resultant states. The use of -mIş indicates that the recipient of information did not witness the event, perceive it, or consciously participate in it. Yet, the recipient might have perceived the event through the senses or conscious inference. In that sense, the particle reports inferred and hearsay information (Slobin & Aksu, 1982). -mIş can be used in verbal predicates, mostly with past time reference as in 'koş-muş' (has evidently run). Turkish also has a copular particle –(I)mIş which is added to nominal predicates. It is temporally indifferent, in other words, it does not denote any present or past time reference but only marks indirectivity. Though beyond the scope of this study, -mIş may have epistemic functions and express cognitive or emotional distance from the event, display pragmatically extended expressions of surprise, irony and compliments (Slobin & Aksu, 1982) and convey mirative connotations. This project focuses on the expression of direct and indirect experience (hearsay) through the use of two basic past tense morphemes, -DI and -mIş and does not examine other epistemic functions and pragmatic extensions of -mIş.

3.1.2. Evidentiality in CT

Cyprus is an island which is geographically isolated from Turkey but which has always been in close contact with Turkish spoken in Anatolia. Cyprus is also a multilingual and a multicultural island, on which Greek Cypriots, Turkish Cypriots and the English have co-existed as the three main speech communities for centuries.

3.1.3. Historical and language background of the Island

In order to have a better understanding of the context where CT is spoken and to be able draw conclusions as to whether language contact can account for the dialectal differences between CT and TT, it is necessary to provide information about the historical background of the Island.

Turkish Cypriot dialect, which is spoken by Turkish Cypriots in North Cyprus is accepted to be an extension of Anatolian dialects (Saraçoğlu, 2004; Gökçeoğlu, 2006). The language contact

¹ All of the examples, excluding 3a and 3b, are selected from the corpus developed for this project. The codes in brackets are the unique pseudo names used as identifiers of the participants.

² Throughout this project report, we provide our own interlinear morpheme-by-morpheme translations of Turkish examples, which are approximate. We used Leipzig glossing rules (http://www.eva.mpg.de/lingua/resources/glossing-rules.php) in glossing.

(Thomason & Kaufmann, 1988) across different Anatolian dialects on the Island as well as English, Greek and dialects of Turkish in Turkey today has shaped CT in a unique way.

The Island was ruled by the Ottoman Empire between 1571 and 1878 for around three centuries and therefore, the Turkish Cypriots are considered to be the descendants of the Ottoman Turks who conquered the Island in 1571 and transferred extensive number of families most of which were yörüks from Anatolia (Dündar, 1998; Halaçoğlu 2001). In 1821, the Island experienced the Greek War of Independence which gave rise to Greek nationalism on the Island. The existence of the English language, on the other hand, started in 1878 when the Britain assumed the administration of the Island and Cyprus was annexed to Britain. The multilingual and multicultural nature of the Island became official in 1959 when a compromise was reached by Turkey, Greece and Britain and the Republic of Cyprus was established in 1960 as a bi-communal state based on partnership between Turkish Cypriots and Greek Cypriots. As a result of this long term language contact situation, lexical and grammatical borrowings including but not limited to prepositions, conjuctions and particles from the Greek to the Turkish language are reported (Konur, Appel and Muysken, 1987; Johanson, 2002), which confirms this language contact situation. Furthermore, the dominance of the Greeks in the economic life during the British Period brought socio-economic advantages to those who had knowledge of Greek among the Turkish population. These facts had probably led the Greek language to become a prestigious language and in turn fostered Turkish-Greek bilingualism.

The linguistic situation, however, changed after 1974. In 1974, the Greek military junta staged a *coup d'état* and Turkish militarily intervened. Followingly, in 1975, the Voluntary Exchange of Populations was agreed, and Turkish Cypriots and Greek Cypriots were respectively transferred to the north and the south of the Island with the assistance of the UN. As a result of the exchange of populations and the intensification of the Turkish population in the north of the Island, the Turkish of the Cypriots started to get closer to TT. Among the factors that led to an increase in the language contact of Turkey and CT strong economical ties between the countries, educational ties such as student and educators exchange and social ties via the Turkish television channels broadcasted in Cyprus can be counted. In 2003, a number of crossing points along the green line were opened and contact between Turkish and Greek languages started again.

3.1.4. Research on evidentiality in CT

Evidentiality in CT has been one of the topics of interest from a comparative perspective of TT and CT. One of these studies, which examined the differences between evidentials in TT and CT was conducted by Demir (2008) in which the focus was particularly on the pragmatic features of –mIş in CT. The data for the study were collected based on the occurrences of evidentials during the researcher's natural conversations with the CT speakers. The study reported that in CT hearsay, reported or inferred information (indirect experience) is expressed with the morpheme –DI, as – mIş does not possess any indirect or inferential meaning (3a) and is mainly used to describe dubitative function (3b) (Demir, 2002; Abdurrazzak, 2012).

(3a) Çocuk ev-e gel-di.

Child home-DAT come-PAST EVID.

'The child came home' (I did not see the event but either heard it or I inferred it)

(3b) Çocuk ev-e gel-miş.

Child home-DAT come-PAST EVID.

'The child came home' (I am not sure and doubt it)

Evidentiality in TT and CT has not been extensively researched and the few existing studies (Brendemoen, 1996; Demir, 2002; Demir & Johanson, 2006; Abdurrazzak, 2012) are based on the observations of the language use of the CT participants or the linguistic analysis of the early literary works such as epics, tales and fables produced in the CT, and thus are descriptive. In this sense, we believe that this study with its corpus-based, comparative methodology will make significant contribution to the linguistic analysis of evidentials in CT.

4. Corpus and methodology

4.1. The corpus

Clancy introduces a distinction between "Variety" and "variety" (2010, pp. 80-81). He uses "Variety" to mean geographical varieties of language (e.g., Irish English, British English, etc.), while "variety" concerns discourse genres (e.g., academic discourse, workplace language, etc.). Following Clancy's definition, in this project we are concerned with the Variety kind and will use the notation "Spoken Varietygeo Corpus" (Ruhi & Işık-Taş, 2014) to describe our corpus. The Spoken Varietygeo Corpus in this study comprises 35167 words representing approximately 27 hours of orthographically transcribed interviews with 80 speakers. Collecting speech data through interviews has been a preferred corpus compilation method especially in dialectal corpus compilation studies such as The Freiburg English Dialect Corpus–FRED (Anderwald & Wagner, 2007) and International Corpus of English – ICE (Greenbaum & Nelson, 1996). Corpora based on elicited speech allows exploration of inter-speaker variety and controlling of specific lexicogrammatical fetaures (Ruhi & Işık-Taş, 2014).

The corpus represented four sub-corpora each containing 20 interviews held with participants from four different speaker groups. The 18+ group consisted of native speaker CT university students aged between 18 and 22. The students were from an English-medium Turkish University located in North Cyprus, Middle East Technical University Northern Cyprus Campus, which also recruited international students. However, more than 70 percent of the students in this university were Turkish students from Turkey. The CT students in this university comprised less than 10 percent of the total student population. In this respect, we assumed that the participants in this group would be more sensitive to the perception and production of evidentials in TT since they interacted with their TT speaking peers.

The 50+ group were native CT speakers of ages 50 and above, who lived in various villages, towns and cities in North Cyprus, which were, historically inhabited by both Greek and Turkish Cypriot residents. The Island was politically divided into two as the Turkish and Greek sides after 1974. Population exchange between the two sides followed this division. As they were born before 1974, we assumed that the participants in this group had more experience with the Greek language but

less contact with TT compared to the participants of the first group. Accordingly, their production preferences of evidentials would be different than the participants in the first group.

Both generation groups that represented CT speakers were in balance in gender, 20 males and 20 females. In both groups there were participants from 18 different regions of North Cyprus that included villages, towns and big cities. Almost all speakers knew English as a foreign language but the 18+ group reported a higher level of proficiency in English compared to the 50+ group. Seven speakers in the 50+ group were born in South Cyprus (Greek side of the Cyprus Island) but had come to North Cyprus with their families when they were children, during the population exchange. None of these seven speakers spoke Greek. The remaining 33 participants were all born and raised in North Cyprus. The parents of the participants in the younger generation group were also born and raised in North Cyprus.

The third and the fourth groups comprised native TT speakers of comparable ages to the first and the second groups of speakers respectively. The speakers in these two groups were from 24 different regions of Turkey but were living in the capital city of Turkey, Ankara, at the time of the study. The TT 18+ group were native speakers of TT and they were also students at Middle East Technical University. However, their campus was located in Ankara. The productions of the CT participants were compared against these two TT sub-corpora, which functioned as reference corpora in this study.

4.2. Data collection instruments

In the project proposal, we expressed our intention to collect data using two data collection instruments: a production task and a perception task. The proposed production task was designed to ask participants to watch video clips on the screen of a laptop computer and state what happened on the screen after watching the video clips. The proposed perception task, on the other hand, was designed to examine whether the participants can attribute a sentence with an evidential morpheme to an experience of a character in the video clips. However, due to two reasons we had to make changes in the data collection tools. First of all, the duration of the project was set as 6 months which was not enough to develop controlled tasks and secondly, and more importantly, we realized that using naturally occurring spontaneous data would allow us to obtain reliable results. Therefore, we collected language production data via interviews conducted with the participants. Then, using the natural data obtained via interviews, we designed a language perception task.

4.2.1. The interviews

Each participant was asked 10 questions during the interview. There were two types of questions. The first category included questions that required the participants to report a past event that they did not witness (quotative, hearsay experience). These questions were how their mother and father met, how their name was given and where and how their mother spent her childhood.

The second category concerned events that the participants themselves experienced (memory evidence). For the 18+ group, these were their last birthday, the day they started school, their last summer holiday and the last book they read. Considering that birthday celebration, summer holiday and reading a book might not be as common among the 50+ compared to the younger generation in this study, these questions were replaced with culturally more relevant topics: their

last religious holiday, meeting with their spouse for the first time and one of their children's/relative's wedding party.

The questions in Turkish were worded in such a way that they did not include any evidential morphemes. In this way, it was ensured that the participants did not model the question structure. For instance, the first question was approximately "please tell us the story of your mother and father meeting for the first time" in Turkish.

The interviews were recorded and transcribed by native speakers of TT and CT, in Turkey and in North Cyprus respectively.

4.2.2. The perception task

The perception task required the participants to indicate whether the utterances provided are experienced by the speakers or whether they are heard from another person (hearsay) and reported.

Example. Lütfen aşağıda sunulan kısa hikayeleri okuyunuz. Hikayeleri anlatan kişiler ile ilgili sunulan seçeneklerden birini işaretleyiniz ve neden bu seçeneği seçmiş olduğunuzu açıklayınız. (Please read the short stories below. Mark one of the options presented about the narrator of the stories and explain why you have chosen this option) 1) Babamla dayımın dükkanı karşılıklıydı. Annem dayımı ziyarete gittiğinde, işte sürekli birbirlerini gördüler. İste, böyle bir tanısma hikayeleri oldu. (My father's and my uncle's shops were across each other. When my mother went to visit my uncle, they saw each other. This was the story of how they met.) a. Anlatan kişi olayları bizzat kendisi yaşamıştır. (The narrator has personally experienced the event.) b. Anlatan kişi olayları başka bir kişiden öğrenmiştir/duymuştur. The narrator has learnt/heard about the event from someone else. 2) Annem saatini tamir ettirmeye gitmiş oraya. İşte orada babamın öğretmen olduğunu öğrenmiş. Atanmak üzere olduğunu öğrenmiş. Yani dükkanda tanışmışlar. My mother went there to have her watch repaired. There she learnt that my father was a teacher. She learnt that he was about to be appointed to a teaching position. In short, they met in the shop. c. Anlatan kişi olayları bizzat kendisi yasamıştır. (The narrator has personally experienced the event.) d. Anlatan kişi olayları başka bir kişiden öğrenmiştir/duymuştur. The narrator has learnt/heard about the event from someone else.

4.3. Data analysis

We employed a combination of both quantitative and qualitative methods to analyze the data. First, each individual transcript was examined and all morphemes that expressed evidentiality were extracted. Before the analysis, it was ensured that texts only included the answers to the questions and the redundancies were excluded. Then the transcripts were analyzed both electronically using, the Corpus Query Language feature of Sketch Engine (Kilgarriff, Baisa, Bušta, Jakubíček, Kovář, Michelfeit, Rychlý & Suchomel, 2014) and also manually to ensure that all morphemes indicating evidentiality and lexical items that rephrase or further explain these expressions were identified.

The interview questions were grouped into two categories as explained in the previous section. For each transcript, the number of morphemes that indicated evidentials in each category were counted and converted into percentages to facilitate statistical comparison across the three groups. For instance, if the total number of evidential morphemes was 50 in one category and 25 of these were –DI, then we indicated that this speaker preferred to use –DI in 50% of his or her evidential expressions in that category.

To determine if there was a significant difference in the use of evidential expressions among the sub-corpora, we used a one-way ANOVA. We conducted a Tukey post hoc analysis to compare the pair mean ranks.

5. Results

5.1. Findings of the production task (Interview)

Analysis of the production data presented in Table 1 shows the findings obtained for the first category (hearsay) questions. The frequency data highlight extensive variation between CT and TT speakers in reporting indirect events. While both 18+ and 50+ TT speakers used -mIş to express hearsay information, CT speakers preferred to employ -DI to express indirectly obtained information.

Table 1: Category 1 (Hearsay)

	CT			TT				
	18+		50+		18+		50+	
Evidentials	F	%	F	%	F	%	F	%
-DI	107	76.9	127	85.2	4	0.8	2	1.3
-mIş	18	12,9	22	14.7	202	76.87	136	91,2
other	14	10	0	0	60	16.75	11	7,3
Total	1	139	14	19	20	56	14	19
Lexical elements	19	13,6	4	2,6	27	10,1	9	6
used with								
evidential markers								

The first research question set at the beginning of this study was if and to what extent the expression of evidentiality in CT and TT dialects differs. The findings reported so far clearly indicate that TT and CT dialects differ extensively in reporting "hearsay" events. While TT speakers strictly use –mIş to report indirect, hearsay events (Example 4), CT speakers tend to replace –mIş with –DI in the same situations (Example 5).

Analysis of the data revealed that there was a statistically significant difference in the frequency of –DI used to report hearsay events by the four groups as determined by one-way ANOVA (F(3) = 87,50, p = .000, η^2 =.77). A Tukey post hoc test showed that 50+ CT speakers used –DI significantly more frequently than both 50+ TT speakers (p= .000, η^2 = .70) and 18+ TT speakers (p= .000, η^2 = .82). However, there was no statistically significant difference between 18+ and 50+ CT speakers in terms of the frequency of –DI in the expression of hearsay events (p = .803, η^2 = .01). Similarly, there was no significant difference between 18+ and 50+ TT speakers in their use of –DI in reporting hearsay events (p = .878, η^2 = .02).

There was a statistically significant difference in the frequency of -mIş used to report hearsay events by the four groups as determined by one-way ANOVA (F(44) = 3, p = .000, η^2 =.63). According to Tukey post hoc test, in expressing hearsay events, 50+ TT speakers utilized -mIş significantly more commonly than both 18+ CT speakers (p = .803, η^2 = .72) and 50+ CT speakers (p = .803, η^2 = .65). Nevertheless, no statistically significant difference was found between 18+ and 50+ TT speakers in their use of -mIş in reporting hearsay events (p = .809, η^2 = .01). There was also no significant difference in the use of -mIş by 18+ and 50+ CT speakers (p = 1.00, η^2 = .00).

In Examples 4 and 5, both speakers are responding to the question of where and how their mother spent her childhood. In Example 4, the TT speaker uses the past tense morpheme -mIş to indicate that he or she has indirectly obtained the information about where her mother was during her childhood. However, the CT speaker in Example 5, uses the past tense -DI, to describe where her mother spent her childhood. This finding confirms the observations reported in previous studies (Demir, 2002; Abdurrazzak, 2012) that –mIş does not express any indirect or inferential meaning in CT.

- (4) Anne-miz-in çocuklu-ğu da Trabzon-da **geç-miş**.

 (TT, 18+_MN)

 mother-GEN.1PL-GEN.3SG childhood-GEN.3S also Trabzon-LOC pass-PST.3SG

 "Our mother's childhood was also spent in Trabzon."
- (5) Anne-m-in çocuklu- ğu Lefkoşa-da **geç-ti**.
 (CT, 18+_TG)
 mother-GEN.1SG-3SG.POSS childhood-GEN.3SG. Nicosia-LOC pass-PST.3SG
 "My mother's childhood was spent in Nicosia."

As in –DI and –mIş, there was significant variation in the frequency of other evidential markers (-(I)yor, (e/i)r/z) across the four groups as determined by one-way ANOVA (F(4) = 3, p = .010,

 η^2 =.13). A Tukey post hoc test showed that 18+ TT speakers employed other markers more frequently than both younger (p = .02, η^2 = .10) and 50+ CT speakers (p = .02, η^2 = .67). However, there was no significant difference in the frequency of other markers utilized by 18+ and 50+ TT speakers in expressing hearsay experience (p = .06, η^2 = .07). Similarly, no significant difference was found between 18+ and 50+ CT speakers in the use of other markers in expressing hearsay experience (p = 1, η^2 = .02).

The imperfective aspect marker -(I)yor, in Turkish, expresses present tense and expresses an ongoing or habitual event or state of affairs. Similarly the aorist suffix (e/i)r/z is also used to refer to present time to express a principle or general truth (Göksel and Kerslake, 2011). However, in this study we see that principally the 18+ TT speakers tended to frequently adopt these markers to report hearsay events.

- (6) Yedi sene sonra annem-le babam **evlen-(i)yor-lar**. (TT, 18+_KL) Seven year after mother-and father marry-PROG.3PL "My mother and father get married seven years later."
- (7) Annem hep ev-de **kal-ır** küçük diye. (TT, 18+_ON) Mother-GEN.1SG always home-LOC stay- PRS.3SG young because "My mother always stays home as she is young."

As for the analysis of the production data obtained for the second category (experienced) questions, the raw data presented in Table 2, do not reveal any difference between CT and TT speakers. Both 18+ and 50+ TT speakers and CT speakers preferred using -DI to express experienced information. One way ANOVA revealed that there was not significant difference among the four groups of participants in the frequency of (1) -DI (F(1.3) = 3, p = .25, η^2 =.05), (2) -mIş (F(2.7) = 3, p = .50, η^2 =.09) and other evidential markers (F(1.1) = 3, p = .32, η^2 =.04) in their expression of experienced events.

In reporting directly witnessed events, both dialects utilize –DI and tend to avoid –mIş. These results allow us to conclude that the two groups do not differ from each other in expressing direct evidentiality. These results are in line with the explanations suggesting –DI as a grammaticalized marker of direct evidentiality. In Examples 8 and 9, both the TT speaker and the CT speaker respond to the question of how they spent their last Eid-al-Fitr by using the morpheme -DI.

- (8) Geçan bayram Antalya-da **yazlık -ta(y)-dık**. (TT, 50+) Last Eid-al-Fitr Antalya-LOC summerhouse-LOC-PST.1PL "Last bayram (Religious holiday) we were in our summerhouse in Antalya."
- (9) Geçen Ramazan Bayramı-nı ev içi(n)-de **geçir-dik**. (CT, 50+) Last Eid-al-Fitr -ACC house inside-LOC pass- PST.1PL "We spent the last Eid al-Fitr at home."

Table 2: Category 2 (Experienced)

	CT				TT				
	18+		50+		18+		50+		
Evidentials	F	%	F	%	F	%	F	%	
-DI	295	98,9	155	100	248	97.3	233	95.4	
-mIş	1	0.3	0	0	5	2	0	0	
Other	2	0.6	0	0	2	0.7	11	4.5	
Total	2	298	15	55	25	55	24	14	
Lexical elements	2	0,6	6	3,8	2	0,7	7	2,8	
used with evidential									
markers									

The second question that this study explored was if and to what extent the expression of evidentiality differs in CT spoken by 18+ and 50+ speakers. We did not find a statistically significant difference in the use of –DI, -mIş, other evidential markers and lexical elements between these two age groups.

As far as the lexical elements used with evidential markers are concerned, one way ANOVA did not reveal any variations across groups both in the expression of experienced events (F(1.1) = 3, p = .32, η^2 =.04) and hearsay events (F(1.8) = 3, p = .154, η^2 =.06). However, we observed remarkable variation in the number of speakers in the 18+ and 50+ speaker groups who preferred to adopt lexical elements in expressing evidentiality (Table 3).

Table 3: Participants' preferences regarding the use of lexical elements

	C	T	TT		
	18+	50+	18+	50+	
	N	N	N	N	
avoided	8	14	7	14	
used discourse	12				
initially or with –					
DI					
used discourse		6			
initially					
used with -mIş			7	3	
used with other			6	3	
tense markers					

When we examined the data to see whether CT speakers utilized other strategies to express their indirect experience, we noticed that CT 50+ and CT 18+ groups used different strategies to indicate indirect evidence. The majority of the 50+ group (15 participants) did not prefer to use the grammatical indirect evidential marker –mIş, but adopted the direct evidential marker –DI. Six

speakers in this participant group used a lexical element discourse initially or finally to indicate that what they report using –DI is not witnessed or experienced by the participants.

As for 18+ group, 8 of the participants avoided –mIş but used –DI only to express their indirect experience. What was interesting in the 18+ data was the frequent use of lexical elements to express indirect evidentiality. Twelve of the participants preferred to use a lexical expression to indicate what they reported was not witnessed or experienced by the participants. In example 10, for instance, the 18+ CT speaker uses -DI to report an event that has taken place before his or her birth, when and how his or her mother spent her childhood. However, by using "as far as I know" discourse initially, he or she feels the need to indicate that he or she received this information indirectly. In example 11, the 18+ TT speaker uses -mIş in his or her response to the same question. Although -mIş already indicates that the information presented is indirectly obtained, the speaker adds the comment "my mother used to tell that" to emphasize that this information came from his or her mother.

- (10) Orda bil-di-ğim gadarıyla lise -yi **bitir-diydi** (CT, 18+_HG)
 There know-1SG as far as high school-ACC
 "As far as I know, she finished high school there."
- (11) Makina **operatörü-müş** büyükbaba-m. Anne-m anlatırdı böyle. (TT, 18+_GD)

Machine operator- PST-3S grandfather-POSS.1SG. Mother-POSS.1SG tell-PST-3SG that My grandfather was a machine operator (reportedly). That's what my mother used to tell.

The third question that was addressed in this study was "whether language contact situations in North Cyprus could account for dialectal variation." Based on 50+ CT data, it is possible to state that indirect evidentiality is expressed differently by CT and TT speakers under the influence of Greek and Turkish lost its grammatical indicator of evidentiality in CT. Instead the past tense marker is used to express both direct and indirect experience of the speakers. This grammatical feature loss was presumably due to the contact and thus the influence of Greek language, which does not have a grammatical system of evidentiality (Joseph, 2003) but tendencies of grammaticalization of evidential markers in the verbal domain. For instance, the verb "léi" ((one) says) means 'reportedly' in 3SG in Greek (Aikhenvald, 2004: 150-151, 272).

This explanation is in line with the reports of Johanson (2003: 288) who, referring to the Turkish-Greek contact in different regions, commented that "Evidentiality systems are lacking in a few Turkic languages and dialects which have been strongly influenced by Indo-European languages, e.g. Karaim in Lithuania, under Slavic and Lithuanian impact (Csato, 2000) and the Turkish dialects of the Trabzon province on the east Black Sea coast, under the impact of Greek (Brendemoen 1997)"

These results can be explained referring to contact-induced change. As we initially presented, the historical background of the Island which allowed us to presume the languages that might have an

influence on CT. This conclusion is also consistent with the findings in previous studies (e.g., Çeltek, 2014, Turkish-Greek contact in Rhodes Turkish spoken in Rhodes Island; Karakoç, 2007, Turkish-German contact in Germany)

Although contact-induced language change is evident in the CT data, based on 18+ CT data, it is not possible to state that indirect evidentiality is expressed differently by the two generations of CT. However, interesting findings can be reported concerning the use of lexical expressions by these two groups. The 18+ age group, which represents the younger generation in this study seems to feel the need to disambiguate their direct and indirect evidence by using a discourse initial expression, probably due to their relatively more intense and continuous contact with Turkish in their educational environment. Though there is no significant increase in the use of grammaticalized indirect evidential marker (-mIş) by the 18+ CT speakers, it seems that the function of -mIş is fulfilled by the lexical elements used in isolation or with -DI by this group.

5.2. Findings of the perception task

The perception task aimed to examine how the participants interpret utterances including –DI and –mIş morphemes. The task included 16 excerpts taken from the interviews conducted with the participants as part of the production task. The excerpts included 8 utterances formed with –DI and 8 utterances formed with –mIş but were all stated based on the indirect experiences of the participants as in the examples presented below.

The analysis of the data presented in Table 4 shows that both participant groups interpreted the excerpts as instances of indirect experience disregarding whether they are formed with –DI or – mIş. We expected the TT speakers to interpret the excepts including –DI as expressions of directly experienced events. However, as presented in Table 4, only 16.4% of the TT participants identified the excerpts as expressions of directly experienced events.

Table 4: Interpretation of the evidentiality by the participants

	Ankara Data				Cyprus data				
-DI	Experie	nced	Hearsay		Experienced		Hearsay		
	F	%	F	%	F	%	F	%	
	29	16,4	144	81,8	10	8,3	110	91,6	
-mIş	Ankara Data				Cyprus Data				
	Experie	xperienced Hearsay		Experienced		Hearsay			
	F	%	F	%	F	%	F	%	
	0	0	176	100	8	6,6	112	93,3	

Nevertheless, the explanations provided by the TT participants demonstrated that their judgements were not based only on the morphemes used in the excerpts but also their logical computations of the events. The extracts below illustrate how the participants judged the excepts.

- -This person must have heard this story because when his or her parents met, he or she was not yet born.
- -His or her mother's childhood took place long before his birth.
- -Even though the time expressions used in the sentences are confusing, considering the time the events were experienced, it is not possible for him or her to be present there.
- -He or she must have heard this from someone since he or she could not have lived it.

The fourth research question addressed in this study was whether the possible variation in the expression of evidentiality by the CT and TT speakers could create miscommunication between the two groups. As far as the findings in the perception task are concerned, it seems that as the participants used the strategy of drawing logical conclusions for the cases provided, they did not have much difficulty in understanding the intended message in the productions. However, in future research, the participants could be given a task which includes items with less context to minimize participants' use of logical reasoning in processing the statements.

6. Project budget and expenditures

Table 5: Project budget and expenditures

SOSY-18-K-3 Budget Items	Approved Budget	Spending	Remainder
FC-1-6-1	1000	0	1000
Machinery-			
Equipment			
FB-13-2	1920	0	1920
Service			
FB-13-4	21920	8289	13631
Travel			
Total	24840	8289	16551

The approved budget items in this the project were (1) Machinery-Equipment, (2) Service and, (3) Travel, corresponding to a total amount of 24840 TL (See Table 5). Of these items, no purchase or payment was deemed necessary under the categories of Machinery-Equipment (headphones) and Service (graduate assistants). During the data collection process, recording of the interviews could be possible without headphones and three undergraduate students volunteered to hold the interviews. These students did not participate in the transcription and data analysis processes. The travel budget was partially used by Elvan Eda Işık Taş in two data collection and one conference attendance trips to Ankara, Turkey and in a conference attendance trip to London, UK.

7. Project output

The data obtained in this project were presented in three international conferences listed below. The project reports are written in the form of an article and will be submitted to the journal *Lingua*.

- International Conference on Evidentiality and Modality, 19-22 September 2018, Madrid, Spain.
- 11th International Conference of Turkish Language Teaching, 2-4 October 2018, Ankara, Turkey.
- 17th Corpus Linguistics in the South Conference, 23 November 2018, London, UK.

8. Project equipment

No machinery or equipment was purchased for the project.

9. Graduate thesis

No graduate thesis was conducted in relation to this study.

10. Conclusion

Evidentiality in TT and CT is an underexplored topic in Linguistics. The few existing studies (Brendemoen, 1996; Demir, 2002; Demir & Johanson, 2006; Abdurrazzak, 2012) are based on the observations of the language use of the CT participants or the linguistic analysis of the early literary and folkloric texts in this dialect, and thus are descriptive. This study, then, with its corpus-based, comparative methodology extend on previous research by providing a contrastive linguistic analysis of evidentials in CT and TT.

This project explored the speakers' expression and perception of direct and indirect evidentiality in TT and CT. In particular, the project, with a cross-linguistic perspective, aimed to investigate whether direct and indirect evidentials are expressed differently in the two dialects of Turkish and if yes, whether language contact can account for the difference.

The data were collected through the interviews, which were held with 80 CT and TT speakers and though the perception task given to these speakers. We used both quantitative and qualitative methods used to analyze the data.

In this study we found that the TT and CT dialects differ extensively in reporting "hearsay" events. While TT speakers use –mIş to report indirect, hearsay events CT speakers prefer to use –DI in the same situations. However, we found no statistically significant difference in the way the two generations of speakers in both dialects, 18+ and 50+ expressed evidentiality.

Based on 50+ CT data, we can comment that indirect evidentiality is expressed differently by CT and TT speakers under the influence of Greek and that Turkish lost its grammatical indicator of evidentiality in CT. The past tense marker is used to express both direct and indirect experience of the speakers in CT.

These results can be interpreted in the framework of contact-induced change. The historical background of the Island seems to have a unique impact on CT. This conclusion is also compatible with the findings in previous studies.

9. Recommendations

As commented in the conclusion section, future research could utilize a perception task that provides less context for the given examples. We believe that this type of task could minimize participants' use of logical reasoning in processing the statements and lead them to focus on the linguistic features in isolation.

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