

# CONNECTIVITY IN NARRATIVES OF TURKISH-ENGLISH AND TURKISH-RUSSIAN BILINGUALS

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**Abstract.** The present study draws on the narrative production of the Turkish-English and Turkish-Russian bilingual children in an attempt to examine whether the use of connectivity elements in the oral narratives of the bilingual children diverges from that of monolingual Turkish children. In particular, the study aimed to examine the use of temporal connectivity elements in the oral narratives of the Turkish-English and Turkish-Russian bilingual children in comparison to Turkish monolingual children focusing on the use of tense/aspect markers utilized to anchor narratives, temporal converbs used to link clauses in narratives, and also temporal connectors used to link clauses. The data were collected from two bilingual groups, Turkish-Russian (Group 1) and Turkish-English (Group 2), consisting of five children each and the control group consisting of seven monolingual Turkish children. The analysis of the data revealed that the Turkish-English and Turkish-Russian bilingual children performed differently than their Turkish monolingual counterparts in how consistently they used tense/aspect markers to anchor their narratives and in how they used converbial markers to indicate the sequentiality of the events in their narratives. The results are discussed in relation to prior research and the typological peculiarities of the languages.

**Keywords:** bilingual language acquisition, Russian-Turkish, Turkish-English, connectivity, narratives

## 1. Introduction

The present study draws on the narrative production of two groups of bilingual children (Turkish-English and Turkish-Russian) in an attempt to examine whether the use of connectivity elements in the oral narratives of the bilingual children diverges from that of monolingual Turkish children. Narrative abilities of children have often been studied to assess linguistic, cognitive, and pragmatic skills as they provide rich data regarding children's expressive language, including the knowledge of vocabulary, grammatical constructions, and story structure (Botting 2002; Iluz-Cohen, Walters 2012; Squires *et al.* 2014). As described by Labov (1972), a narrative is “a method of recapitulating past experience by matching a verbal sequence of clauses to the sequence of events which actually occurred”. Thus, in order to effectively narrate a coherent story, children need to link the sequence of events temporally and causally in their minds and verbalize the events by making use of relevant connectivity elements (Berman, Slobin 1994; Öger-Balaban, Aksu-Koç 2020). Temporality markers are basic connectivity elements in narratives as they indicate the flow of the timeline of narratives. Temporal connectivity is established through the appropriate use of linguistic devices, such as verbal temporal elements (tense/aspect markers) used to anchor a tense and to link clauses in narratives, and temporal connectors (time adverbials and other temporal connectives) used to link clauses.

The phenomenon of connectivity in the narrative abilities of mono-/bilingual children has been widely investigated in the context of language acquisition (Aarssen 2001; Berman, Slobin 1994; Bohnacker 2016; Montanari 2004; Uccelli, Páez 2007; Roch, Florit, Levorato 2016) for the following reasons. First, narratives allow researchers to examine multiple linguistic aspects in a single task, ranging from lexical and morpho-syntactic elements to discourse structure (Hickmann 2003). Second, narratives provide a baseline for literacy development (Dickinson, Tabors 2001), and exploring

narrative abilities of children allows scholars to reveal language development problems in children (Bishop, Donlan 2005; Norbury, Bishop 2002). Finally, peculiar to bilingual children, narratives allow eliciting phenomena that are unique to bilingual language use, such as code-switching and cross-linguistic influences (Iluz-Cohen, Walters 2012). Yet, the phenomenon of connectivity in the narrative abilities of bilinguals has received relatively less attention from a typological and comparative perspective.

Given the substantial role of narratives in bilingual children's language development (Chang 2004), this study, adopting a typological and comparative perspective, aims to examine whether the use of temporal connectivity elements in oral narratives of Turkish-English and Turkish-Russian bilingual children diverges from that of the monolingual Turkish control group with a focus on tense/aspect markers used to anchor the narrative and on temporal connectives used to link clauses in narratives, as well as on temporal connectors such as time adverbials used to link clauses. The language combinations of Turkish-English and Turkish-Russian were selected for the following reasons. First, while in Turkish and English narratives, consistent use of a tense/aspect marker is required to anchor a narrative, in Russian, tense shifts within a narrative are common. Second, all the three languages use language-specific means to link clauses due to their typological features, which may, in turn, result in the use of unique bilingual strategies to achieve connectivity in narratives.

The organization of the paper is as follows. First, we briefly describe the temporal connectivity markers in Turkish, Russian, and English. Then, we present previous studies on connectivity elements in Turkish narratives. Following the methodology and results, we discuss the findings.

## 2. Connectivity in Turkish

Turkish, belonging to the Turkic language family, is an agglutinating language in which verbs and nouns are richly inflected with suffixes. While the canonical order is SOV, Turkish allows flexibility depending on pragmatic constraints. Turkish does not have a formal article system and lacks grammatical marking for gender (Göksel, Kerslake 2005; Kornfilt 1997). Regarding its narrative structure, an important peculiarity of Turkish is described by Aksu-Koç as “one of the criteria for the well-formedness of a narrative is the choice of a consistent favored tense” (1994: 333) throughout the narrative (Akıncı 1999). Johanson (2007a, 2007b) suggests that aspectotemporal elements are realized depending on the discourse type in Turkish narratives. While *-DI*-based past narrative is described as the most differentiated discourse type, *-mİş*-based evidential (indirect) past narrative is used in traditional story-telling. In addition to past narrative markers, it is also possible to use *-(I)yor* and *-(I)r*-based narratives to describe events simultaneous to the speech event.

Expressing simultaneity and sequentiality of events in narratives is based on clause linkage. Turkish clause linkage relies predominantly on non-finite subordination and less on finite subordination, coordination, and use of temporal connectors. While in finite subordination the predicate may be verbal or nominal and marked in the same way as the predicate of a main clause, in non-finite subordination the predicate is verbal and marked by distinctive subordinating morphology (Göksel, Kerslake 2005; Kornfilt 1997; Kerslake 2007). In Turkish narratives, the converbial markers *-(y)IncA* (when, since, as), *-(y)ken* (while, when) and *-(y)Ip* (then) are used to establish temporal connectivity.

Turkish also uses adverbials such as *sonra* (later) and its various forms, *ondan sonra* (after that), *daha sonra* (later) and two-word combinations such as *o zaman* (that time), *o an* (that moment), which is a combination of a demonstrative/determiner and a noun (Karahan 2007; Özsoy 2021), to connect clauses as connectivity elements.

In this study, we will name such connectivity elements as temporal connectors.

### 3. Connectivity in Russian

Russian narratives do not require the consistent use of tenses, and native speakers of Russian commonly use tense shifts in their narratives (Bondarko 2005; Paducheva 2011). Bondarko (2005) and Paducheva (2011) distinguish several reasons for tense shifts in Russian, such as distinguishing between the foreground and background as well as between the topic and the focus, marking the consequence of actions in the narrative, and emotional-expressive actualization. Example 1 illustrates a typical tense shift taken from Rekemchuk (1962):

- (1) *Сплю (PRE) я сегодня ночью и приснилось (PAST) мне...*  
*Sleep (PRE) I today at night and dreamt (PAST) me...*  
*"Today I was sleeping at night and saw in my dream..."*

Russian clause linkage relies predominantly on finite subordination and coordination and less on non-finite subordination. Among non-finite subordination, converbs, which are also known as *deepričastie*, are used to establish temporal connectivity. Russian converbs have two forms, perfective, expressed by the morphemes *-в(ши)*, and imperfective, expressed by the morpheme *-я*. The perfective converbial form indicates the action expressed by the converbs that precedes the one expressed with the finite form in the main clause. While the imperfective form indicates that the two actions are simultaneous, Example 2 and Example 3 illustrate the use of perfective and imperfective converbs in Russian, respectively.

- (2) *Сделав домашнее задание, Ник пошел играть с друзьями.*  
*Having done his homework Nick went to play with his friends.*

(3) *Ребенок шел по улице, **напевая** песню.*

*A child was walking down the street singing a song.*

Russian also uses adverbs such as *потом* (then), *затем* (then), *позже* (later) and two-word combinations such as *после этого* (after that), which is a combination of a preposition and a demonstrative pronoun, to connect clauses as connectivity elements.

#### 4. Connectivity in English

Similar to Turkish, English requires a linear presentation of events and does not allow tense shifts within narratives (Kornfilt 1997). The English language does not have converbial forms but utilizes participles to fulfill a converbial function of marking adverbial subordination as in Example 4. The same forms are also used as participles or verbal nouns in English. As for the connectivity elements, adverbs *then*, *later* and two-word combinations such as *after that* are also used in English.

(4) *The child walked down the streets eating an apple.*

#### 5. Research on the development of connectivity in Turkish

The development of connectivity in Turkish narratives has been examined in the monolingual and bilingual acquisition contexts. Research on acquisition of the converbials in Turkish shows that the converbial markers appear early in monolingual Turkish (Aksu-Koç 1994; Topbaş *et al.* 2012). In a recent and extensive study, Ögel-Balaban and Aksu-Koç (2020) examined the development of clause chains formed with converbial clauses. The study used narratives of 40 Turkish-speaking four- to eleven-year-olds and six adults elicited by a wordless picture book. The study demonstrated that there is a gradual increase by age in the variety of clauses combined, the length of the complex sentences, and their frequency of use.

Converbial clauses emerge as the earliest and most frequent type of clauses. Regarding the development of narrative organization, the study reported that children first establish aspectual-temporal continuity and then temporal-causal continuity in Turkish.

On the other hand, research on acquisition and use of temporal connectivity elements in Turkish as a heritage language demonstrates that in bilingual contexts, such as in German, Swedish, French, and Dutch contexts, temporal connectivity elements are used differently (Aarsen 2001; Bohnacker, Karakoç 2020; Boetschoten and Verhoeven 1986, Rehbein and Herkenrath 2015).

Rehbein and Karakoç (2004) reported that Turkish-German bilingual children in the German context use aspectotemporal elements in their narratives differently from their monolingual counterparts. The study concluded that the bilinguals shifted between aspectotemporal elements *-DI*, *-mİş* and *-(I)yor*, which was not observed in the Turkish monolingual data. Similarly, Karakoç (2007) studied connectivity by means of finite elements in Turkish-German bilingual children in Germany. The researcher reported that while all forms were used by Turkish monolingual children, the bilingual children used *-(I)yor* (present imperfective) and *-DI* (past perfective) forms in their narratives to maintain connectivity and refrained from using *-mİş* (perfective aspect/evidential modality) forms. In addition to aspectotemporal elements of connectivity the study highlighted a highly frequent use of temporal-deictic expressions, such as *o zaman* (at that time), *sonra* (than), *ondan sonra* (after that) by the bilingual children.

Based on the data obtained from Turkish-French children in France, Akıncı (1998) reported that children between the ages of 5 and 10, born to immigrant parents in France, revealed no clear and consistent “anchor tense”. The researcher, however, reported that the children at the age of 9–10 began anchoring either the present or past tense as the favoured one. In another study, based on the data gathered from first- and second-generation Turkish immigrants in France, Akıncı (2003: 296) reported that the majority of

the first-generation immigrants shifted tenses while the second-generation bilingual participants “used tense just as the monolingual high-educated participants do” after the age of 14 . The researcher presented social class attitude and the level of literacy as two important factors that had an impact on the development of tense usage of the bilinguals.

In another study, Schroeder (2016) examined the clause-combining strategies of Turkish-German bilinguals in a German context to interpret the dynamics of language shift. The study reported that the shift to using more finite clauses, clause initials, and semantic connectors in Turkish in Germany could be explained by two factors: first, the limited access to the structures of the formal register of Turkish that results in “generalization of structural elements of spoken Turkish”, and, second, to the “generalization of structures with a structural and functional correspondence in the contact language German” (2016: 97).

Akkuş (2019) investigated the converbial constructions in heritage Turkish in the Netherlands from a language contact perspective. Based on the data obtained from the first and second generations of Dutch-Turkish speakers, the study reported a gradual decrease in the frequency of converb use and unconventional usages of converbs in non-finite constructions of the second-generation speakers. The study suggested that the participants’ perception and production of the converbial constructions indicated a linguistic change regarding the frequency and pattern of use.

Turan *et al.* (2020) examined the perception and use of the converbs *-Ip* and *-IncA* in heritage Turkish in Germany. Based on the analysis of the data obtained through a grammaticality judgment task and a picture-story description task, the study revealed that the bilinguals’ perception of the grammatical constructions with *-IncA* and of the ungrammatical constructions with *-Ip* and *-IncA* differed significantly from that of the monolinguals, while the perception of the grammatical constructions with *-Ip* was reported to be similar. As for the production of the converbs, the bilingual participants

tended to use the converbs significantly less than the monolingual control group, which was reported as unconventional.

The studies above commonly suggest that converbs as connectivity elements emerge late in heritage Turkish and are used less frequently than in monolingual Turkish. Yet, based on the data obtained from 102 children between the ages of four and seven years old, Bohnacker and Karakoç (2020) reported that the case was a bit different in the Swedish context. The researchers stated that while temporal converbs were not very common at the ages of 4, 5 and 6, their frequency of use increased at age seven. The study concluded that extensive exposure to Turkish in the home environment might have promoted the children's active use of converbs and the development of their Turkish in general.

In a recent study, Özsoy (2021) examined heritage Turkish speakers' use of temporal connectors in Germany and the USA. The study utilized a large systematic corpus of semi-naturalistic narrations in the RUEG corpus (Wiese *et al.* 2020) and investigated the role of age, register, mode, and grammatical aspect in the use of temporal connectors. The study reported more frequent use of temporal connectors by Turkish heritage speakers in Germany and the USA compared to Turkish monolinguals. The researcher argued that because there is no significant difference in the use of grammatical aspect between the two Turkish varieties, the results cannot be explained in relation to language contact with German and English. Instead, the study argued that the difference is related to language use patterns as “they use [Turkish] mostly [to] communicate in informal, spoken settings, compared to monolinguals who use Turkish in written and formal settings too” (2021: 5).

## 6. Study

This study aims to answer the following research questions:

1. Do the narratives of the Turkish-English and Turkish-Russian bilingual children differ from that of monolingual Turkish children in terms of anchored tense markers, conversial forms and temporal connectors?
2. In case of the differences between the bilingual and monolingual participants, can cross-linguistic influence from L1 Russian and English be considered as an underlying factor accounting for the divergence?

## 7. Participants

The participants of the study were two bilingual groups, Turkish-Russian (Group 1) and Turkish-English (Group 2), consisting of five children each, and a control group consisting of seven monolingual Turkish children. The age of the participants in the Turkish-Russian group varied from 4,9 to 16,0 years old, and the age of the participants in the Turkish-English group varied from 5,0 to 6,0 years old. The Turkish-Russian bilinguals were born and raised in Russia in Turkish-Russian families where mothers are Russian and fathers are Turkish, while Turkish-English bilinguals were born and raised in England in families where both parents are Turkish native speakers. All the bilingual participants were recruited into the study during their summer vacation in Turkey. The participants in the control group were aged from 4,9 to 16,2. All of them were born and raised in Turkey in monolingual Turkish families. The parents in all the families were university graduates and reported their socioeconomic status as middle class.

## 8. Data Collection Tools

To collect the narrative data, a picture book, “Frog where are you?” (Mayer 1969) was used. The above-mentioned book has been often used in research focusing on the language development of monolingual and bilingual children (Aksu-Koç 1988; Berman 1999; Kupersmitt, Berman 2001, among others) because it allows researchers to collect data from participants of different age groups, including very young ones, and provides researchers with natural narrative data, which allows researchers to examine language devices occurring only in connected speech. The participants were requested to retell a story about a boy and his friend dog, who have lost their frog pet, using the pictures in the book. Both the researchers and one of the children’s parents were present during the data collection. The narratives of the children were recorded upon their parents’ consent and later transcribed by the researchers using the transcription software CLAN\_CHILDES (MacWhinney 2000).

### 8.1. DATA ANALYSIS

#### 8.1.1. RESULTS

##### 8.1.1.1. TENSE ANCHORING

The ability to anchor tense in the narrative, that is, to consistently use a favoured tense, is considered as one of the criteria for the well-formedness of a narrative (Aksu-Koç 1994). Table 1 presents the percentage of tense consistency in the narratives for each of the participants in the bilingual and monolingual groups.

As Table 1 displays, from the age of approximately five to eleven, the bilingual participants do not anchor their narratives to one tense but they tend to shift between two (or three) tenses. Example 5 illustrates tense shifts from the narrative of the eight-year-old Turkish-English participant.

**Table 1.** Tense consistency in the narratives of the bilingual and monolingual participants

Participants	1	2	3	4	5
Turkish-Russian Group					
Age	4.9	6.0	8.3	11.3	16.0
Tense consistency (%)	51	60	63	79	100
Turkish-English Group					
Age	5.0	6.2	8.1	11.1	16.2
Tense consistency (%)	52	48	64	70	100
Monolingual Group					
Age	4.9	5.9	8.0	10.11	16.2
Tense consistency (%)	99.9	100	100	100	100

- (5) *Şimdi çocuk uyandı ve kurbağayı bulmaya çalışıyor çünkü şişeden çıktı.*

*Now the child woke up and tried to find the frog because it had gone out.*

In Example 5, the participant anchors the narrative with the past tense marker *-DI* and uses it in the first three utterances of the narrative. However, in the fourth utterance he uses the present imperfective marker *-(I)yor* and then shifts back to the past tense marker *-DI*. Such shifts take place throughout the whole narrative.

The analysis of the narratives produced by the bilingual participants at the age of 16 has revealed that they anchor their narratives through the use of a consistent tense. Example 6 illustrates the consistent use of tense from the narrative of the sixteen-year-old Turkish-Russian participant.

- (6) *Bir akşam çocuk ve köpek bir kurbağa yakaladılar. Sonra onu kavanoza koydular. Çocuk ve köpek gece uyurken kurbağa kavanozdan çıktı.*

*One evening, a child and his dog caught a frog. They put it into the jar. When the child and the dog were sleeping, the frog went out of the jar.*

In Example 6, the participant anchors his narrative with the past tense marker *-DI* and uses it through the whole narrative.

As for the monolingual control group, already at the age of five, the monolingual participants are able to use one tense consistently to anchor their narratives. Example 7 illustrates the consistent use of tense markers in the narrative of the monolingual participant aged 4.9.

(7) *Köpek aşağıya düşüyor. Sonra köpeğini alıyor çocuk ve ormana gidiyorlar.*

*The dog is falling down. Then the child is taking the dog and they are going to the woods.*

Example 7 illustrates how the monolingual child successfully anchors the narrative with the imperfective present tense *-(I)yor* and sticks to it throughout the narrative.

Further, the tense use in the narratives of both the bilingual and monolingual participants was examined. Table 2 presents the type and distribution of tenses used in the participants' narratives.

**Table 2.** *The distribution of tense markers in the narratives of the bilingual and monolingual participants*

Participant	1	2	3	4	5
Turkish-Russian Group					
Age	4.9	6.0	8.3	11.3	16.0
Tense marker use (%)					
<i>-DI</i>	51	48	63	21	100
<i>-mİş</i>	–	40	37	79	–
<i>-(I)yor</i>	49	2	–	–	–
Turkish-English Group					
Age	5.0	6.2	8.1	11.1	16.2
<i>-DI</i>	48	40	64	70	100
<i>-mİş</i>	–	–	56	–	–
<i>-(I)yor</i>	52	60	–	30	–
Monolingual Group					
Age	4.9	5.9	8.0	10.11	16.2
<i>-DI</i>	–	–	–	–	–
<i>-mİş</i>	–	99.8	100	100	100
<i>-(I)yor</i>	100	0.2	0	0	0

As evident from Table 2, the bilingual participants use past tense marker *-DI*, indirect evidentiality marker *-mİş* and present imperfective marker *-(I)yor*. Though all the three tense markers are used in the narratives, there seems to be a preference for the past tense marker *-DI* among the bilingual participants. This marker is also exclusively used throughout the narratives by the sixteen-year-old bilingual participants to anchor their narratives.

As for the monolingual participants, our data indicate that at the age of 4.9 they use the imperfective present tense *-(I)yor* to anchor the narrative, and at the age of 5.9 and later, they anchor their narratives with the indirect evidentiality marker *-mİş*. Example 8 illustrates the use of the indirect evidentiality marker *-mİş* to anchor the narratives by the monolingual participant aged 5.9.

- (8) *Bir çocuk varmıŝ ve onun da bir köpeęi varmıŝ. Bir de bir tane de kurbaęası varmıŝ. Kurbaęa kavanozdan çıkmıŝ. Sonra uyanınca, çocuk ve köpek kurbaęanın olmadıęını görmüşler ve onu aramaya karar vermışler.*

*Once there was a child and there was a frog. The frog got out of the jar. After having woken up the child and the frog saw that there was no frog and they went to look for it.*

#### 8.1.1.2. USE OF TEMPORAL CONVERBIALS

In the following stage, we examined the use of temporal converbial forms used to link clauses and indicate the sequentiality of the events.

The data analysis revealed that neither Turkish-Russian nor Turkish-English bilingual participants use converbial forms before the age of eleven. Moreover, the bilingual participants do not use any other non-finite forms in their narrative before the age of eleven, and all their utterances are formed with the help of finite verbal forms, as demonstrated in Example 9, taken from the narrative of the eleven-year-old Turkish-English participant:

**Table 3.** *The use of converbial forms in the narratives of the bilingual and monolingual participants*

Participant	1	2	3	4	5
Turkish-Russian Group					
Age	4.9	6.0	8.3	11.3	16.0
Use of converbials (N)	0	0	0	1	2
Turkish-English Group					
Age	5.0	6.2	8.1	11.1	16.2
Use of converbials (N)	0	0	0	0	1
Monolingual Group					
Age	4.9	5.9	8.0	10.11	16.2
Use of converbials (N)	0	2	3	4	4

(9) *Çocuk arıları gördü ve korktu. Arılar sinirlendi çünkü çünkü köpek onu rahatsız etti.*

*The child saw bees and got scared. The bees got nervous because because the dog disturbed them.*

The bilingual participants at the age of 16 use converbial forms. Example 10, taken from the narrative of the sixteen-year-old Turkish-Russian participant, is illustrative.

(10) *Köpek düşünce çocuk de aşağıya düştü ve köpeği tuttu.*

*After the dog's falling down the child fell down as well and held the dog.*

In Example 10, the bilingual participant uses the converbial *-(I)nce* (*düşünce*) to link the events and indicate their sequence in the utterance.

As for the monolingual participants, the data analysis revealed that converbial forms appear in the narratives of the child aged 5.9, and further temporal converbials are available in the narratives of all the older monolingual participants. Example 11, taken from the narrative of the monolingual participant aged 5.9, illustrates the use of a converbial form.

- (11) *Sonra çocuk pencereden çıkı**ı**p bağırmış*  
*Then having got out of the window the child shouted.*

As illustrated in Example 11, the monolingual children used the temporal converbial *-(I)p (çıkı**ı**p)* to indicate the sequential order of the events performed by the same agent.

#### 8.1.1.3. TEMPORAL CONNECTORS

As for the use of temporal connectors by the participants, the data revealed that the temporal connector *sonra* and its variants *ondan sonra* and *daha sonra* are used by all the participants in their narratives. No other temporal connectors are found in the participants' narratives. Table 4 presents the use of temporal connectors as the number of the connectors per the number of clauses in the narrative.

**Table 4.** *The use of temporal connectors in the narratives of the bilingual and monolingual participants*

Participant	1	2	3	4	5
Turkish-Russian Group					
Age	4.9	6.0	8.3	11.3	16.0
Number of temporal connectors per number of clauses	21/41	10/40	9/35	9/38	6/35
Turkish-English Group					
Age	5.0	6.2	8.1	11.1	16.2
Number of temporal connectors per number of clauses	10/20	11/29	7/40	0/23	2/30
Monolingual Group					
Age	4.9	5.9	8.0	10.11	16.2
Number of temporal connectors per number of clauses	16/26	14/33	7/30	5/28	3/33

## Discussion

The present study aimed to examine the use of temporal connectivity elements in the oral narratives of Turkish-English and Turkish-Russian bilingual children in comparison to Turkish monolingual children. The study focuses specifically on the use of tense/aspect markers utilized to anchor narratives, temporal converbs used to link clauses in narratives and also temporal connectors used to link clauses.

Our first research question concerned whether the Turkish-English and Turkish-Russian bilingual children diverge from the monolingual Turkish control group in their use of tense/aspect markers to anchor the narratives. Our data obtained from the bilingual participants demonstrated that the bilinguals between the ages of five and eleven have difficulties in anchoring a tense/aspect marker in their narratives, but rather they show a tendency to shift between two (or even three) tenses. Yet, the data also revealed that the bilingual participants who are at the age of 16 are able to anchor their narratives by consistently using one tense. When we further examined the tense/aspect markers favored by the bilingual participants, the results revealed that while the bilingual participants use three different markers (past tense marker *-DI*, indirect evidentiality marker *-mİş* and present imperfective marker *-(I)yor*), they seem to use the past tense marker *-DI* at higher frequencies than the other markers. The monolingual participants, on the other hand, are able to consistently use one tense to anchor their narratives. Our data demonstrate that at the age of 4.9 the monolingual participants use the imperfective present tense *-(I)yor* to anchor the narrative, and at the age of 5.9 and later, they anchor their narratives with the indirect evidentiality marker *-mİş*.

These results are consistent with Rehbein and Karakoç (2004) and Karakoç (2007), who reported differences between Turkish-German bilingual and Turkish monolingual children's ability to anchor a tense/aspect marker. Similar results were also reported by

Akıncı (1998; 2003) based on the data obtained from Turkish-French bilingual children. The bilingual children in the German and French contexts were not able to favour and anchor a tense, unlike their monolingual counterparts, and shifted tenses throughout their narratives. Nevertheless, the picture changes as the bilingual children grow older. Similar to our findings, the Turkish-French bilinguals (Akıncı 2003) were reported to be able to consistently use one tense in their narratives.

From a typological perspective, we expected a variation between the Turkish-English and Turkish-Russian bilinguals due to cross-linguistic influence. Since both Turkish and English narratives require anchoring a tense while in Russian narratives tense shifts are quite common, we expected the Turkish-English bilinguals to show more monolingual-like anchoring patterns than the Turkish-Russian bilinguals. Yet, our bilingual data of the two groups revealed similarities in their inability to anchor a tense/aspect marker. Thus, the deviation of the bilinguals from the monolinguals cannot be explained due to cross-linguistic influence and the typological properties of the languages. Since both the Turkish-English and Turkish-Russian bilinguals have different typological properties in their repertoires and have performed similarly, we hypothesise that the difficulty in tense anchoring between the ages of 4.9 and 11 might be explained in relation to tense anchoring being a marked ability in bilingual language acquisition, which may require prolonged exposure and use of the language. The fact that the 16-year-old bilingual participants were consistent in their use of tenses allows us to support this hypothesis. Although the scope and data of this study do not allow us to draw conclusions regarding the cognitive load of tense anchoring, as the monolinguals and the bilinguals above 16 can anchor their narratives, it is possible to speculate that tense anchoring might require an additional cognitive process when narrating events.

The second issue we investigated concerned the use of temporal converbials, which are utilised to indicate the sequentiality of

the events in narratives. The analysis of the bilingual data indicated that no converbial forms are utilised by the Turkish-Russian and Turkish-English bilinguals who are younger than 11. A common peculiarity observed in the bilingual data concerned the avoidance of using non-finite temporal converbs. All the clauses formed by the bilingual participants included finite verbal forms exclusively. Only the participants above 16 used non-finite converbs. The monolingual data, on the other hand, revealed the use of non-finite converbial forms in the narratives of the children aged 5.9 and above.

When we compare our findings regarding the use of temporal converbials with those presented in prior research, once again we see similarities between the performances of our Turkish-Russian and Turkish-English participants and those of the Dutch-Turkish (Akkuş 2019) and German-Turkish bilinguals (Turan *et al.* 2020). Even though the participants were adult bilinguals in Akkuş (2019) and Turan *et al.* (2020), the studies reported significantly less use of converbs by the bilinguals in comparison to the monolinguals.

When we examined how the events in narratives are connected to one another from a typological perspective, the bilingual data revealed that the bilingual participants refrain from combining clauses via subordination by means of temporal converbials. From a typological perspective, while Turkish clause linkage relies predominantly on non-finite subordination (on the use of converbials to indicate temporal connectivity) and coordination, Russian and English rely primarily on finite subordination and coordination and less on non-finite subordination. The fact that both the Turkish-English and Turkish-Russian bilingual participants showed similarity in their preference to use finite clauses, unlike the Turkish monolinguals, allows us to assume that the acquisition of temporal converbial subordination by bilinguals is a challenging phenomenon. Akin to the difficulties in tense anchoring, the use of temporal converbial markers seems to develop later in bilinguals than in monolinguals (Bohnacker and Karakoç 2020).

Finally, we examined whether the temporal connectors are used differently by the Turkish-English and Turkish-Russian bilingual children and the Turkish monolingual children. The results revealed that the temporal connector *sonra* and its variants *ondan sonra* and *daha sonra* are used by all the participants in their narratives with no difference. Thus, the similarity in the restricted use of converbial forms and overuse of temporal connectors by the Turkish-English and Turkish-Russian bilingual children in comparison to the monolingual control group cannot be explained via Russian and English influence, either.

These results are in line with the previous studies, especially those conducted in the German context based on Turkish-German bilingual data (Rehbein 2001; Karakoç 2007; Özsoy 2021). Since the bilingual participants had difficulties in using temporal converbials to indicate sequential relations between the events they narrated, they needed to use lexical temporal connectors to indicate the sequential relations. We believe the use of temporal connectors can be perceived as a communicative strategy applied by the bilinguals due to a linguistic gap in their repertoire, which is likely to occur due to the restricted use of Turkish, mainly in informal settings, in the dominant context of the other language.

Indeed, these results can also be explained in relation to length and rate of exposure to the heritage language, language use frequency, language use environment, educational level, reading habits, and/or perceptions of language prestige as well as age and typological proximity. Yet, since these factors, which we assume to probably have an important impact on the findings of the study, were not specifically investigated in this study, further research may look into their roles in narrative development of bilinguals.

## REFERENCES

- Aarssen, Jeroen 2001. Development of temporal relations in narratives by Turkish–Dutch bilingual children. – Narrative development in a multilingual context. Eds. Ludo Verhoeven, Sven Strömquist. John Benjamins Publishing Company, 209–233.
- Akıncı, Mehmet-Ali 1999. Turkish spoken by bilingual children in France: Mother tongue or weak language? – Turkish Language in Diaspora. *TASG News* 48, 40–46.
- Akıncı, Mehmet-Ali 2003. France multilingue: richesse ou danger? Résultats d'une enquête dans les écoles élémentaires de Lyon. – *Ecarts d'identité* 102, 41–47.
- Akkuş, Mehmet 2019. A usage-based investigation of converbial constructions in heritage speakers' Turkish living in the Netherlands. Unpublished doctoral thesis. Ankara. Middle East Technical University.
- Aksu-Koç, Ayhan 1988. The acquisition of aspect and modality: The case of past reference in Turkish. Cambridge: Cambridge University Press.
- Aksu-Koç, Ayhan 1994. Development of linguistic forms: Turkish. – *Relating Events in Narrative: A Crosslinguistic Developmental Study*. Eds. Ruth A. Berman, Dan Isaac Slobin. Lawrence Erlbaum Associates, 329–385.
- Berman Ruth A.; Slobin Dan Isaac (eds.) 1994 *Relating Events in Narrative: A Crosslinguistic Developmental Study*. Lawrence Erlbaum.
- Bishop, Dorothy; Donlan, Chris 2005. The role of syntax in encoding and recall of pictorial narratives: Evidence from specific language impairment. – *British Journal of Developmental Psychology* 23 (1), 25–46.
- Bohnacker, Ute; Karakoç, Birsal 2020. Subordination in children acquiring Turkish as a heritage language in Sweden. *Studies in Turkish as a Heritage Language*. John Benjamins Publishing Company.
- Bondarko, Aleksandr Vladimirovits 2005. *Teorija morfoložičeskikh kategorij i aspektologičeskie issledovaniya* [The theory of morphological categories and aspectological investigations]. *Jazyki Slavjanskikh Kul'tur*.
- Botting, Nicola 2002. Narrative as a tool for the assessment of linguistic and pragmatic impairments. – *ChildLanguage Teaching and Therapy* 18 (1), 1–21.
- Bohnacker, Ute 2016. Tell me a story in English or Swedish: Narrative production and comprehension in bilingual preschoolers and first graders. – *Applied Psycholinguistics* 37 (1), 19–48.

- Chang, Chien-Ju 2004. Telling stories of experiences: Narrative development of young Chinese children. – *Applied Psycholinguistics* 25, 83–104.
- Dickinson, David K.; Tabors, Patton O. 2001. *Beginning literacy with language: Young children learning at home and school*. Brookes Publishing.
- Göksel, Aslı; Kerslake, Celia 2004. *Turkish: A comprehensive grammar*. Routledge.
- Hickman, Maya 1991. The development of discourse cohesion: Some functional and cross-linguistic issues. – *Language bases... discourse bases: Some aspects of contemporary French-language psycholinguistics research*. Eds. Gilberte Piérait-Le Bonniec, Marlene Dolitsky. Amsterdam: John Benjamins, 158–185.
- Iluz-Cohen, Peri; Walters, Joel 2012. Telling stories in two languages: Narratives of bilingual preschool children with typical and impaired language. – *Bilingualism: Language and Cognition* 15 (1), 58–74.
- Johanson, Lars 2007. Aspectotemporal connectivity in Turkic Text construction, text subdivision, discourse types and taxis. – *Connectivity in grammar and discourse*. Eds. Jochen Rehbein, Christiane Hohenstein, Lukas Pietsch. John Benjamins Publishing Company, 187–198.
- Johanson, Lars 2007. Alternative subordination strategies in Turkish. – *Connectivity in Grammar and Discourse*. Eds. Jochen Rehbein, Christiane Hohenstein, Lukas Pietsch. John Benjamins Publishing Company, 231–258.
- Karahan, Leyla 2007. „Sonra, Önce“ kelimelerinin edat kategorisi içindeki durumu. – *Dil Araştırmaları* 1 (1), 39–48.
- Karakoç, Birsal 2007. Alternative subordination strategies in Turkish. – *Connectivity in Grammar and Discourse*. Eds. Jochen Rehbein, Christiane Hohenstein, Lukas Pietsch. John Benjamins Publishing Company, 199–227.
- Kerslake, Celia 2007. Alternative subordination strategies in Turkish. – *Connectivity in Grammar and Discourse*. Eds. Jochen Rehbein, Christiane Hohenstein, Lukas Pietsch. John Benjamins Publishing Company, 231–258.
- Kornfilt, Jaklin 1997. On the syntax and morphology of relative clauses in Turkish. – *Dilbilim Araştırmaları Dergisi* 8, 24–51.

- Kupersmitt, Judy R.; Berman, Ruth A. 2001. Linguistic features of Spanish-Hebrew children's narratives. – Narrative Development in a multilingual context. Eds. Ludo Verhoeven, Sven Strömquist. John Benjamins Publishing Company, 277–317.
- Labov, William 1972. Language in the inner city: Studies in the Black English vernacular. No. 3. University of Pennsylvania Press.
- MacWhinney, Brian 2000. The CHILDES Project: Tools for Analyzing Talk. 3rd edition. Lawrence Erlbaum Associates.
- Montanari, Simona 2004. The development of narrative competence in the L1 and L2 of Spanish-English bilingual children. – International Journal of Bilingualism 8, 449–497. <https://doi.org/10.1177/13670069040080040301>.
- Norbury, Courtenay Frazier; Bishop, Dorothy V. 2002. Inferential processing and story recall in children with communication problems: a comparison of specific language impairment, pragmatic language impairment and high-functioning autism. – International Journal of Language & Communication Disorders 37 (3), 227–251.
- Ögel-Balaban, Hale; Aksu-Koç, Ayhan 2020. Clause chaining and discourse continuity in Turkish children's narratives. – Frontiers in Psychology 11, 115. <https://doi.org/10.3389/fpsyg.2020.00115>.
- Özsoy, Onur 2021. Temporal connectors in relation to grammatical aspect in heritage Turkish in Germany and the United States. Unpublished Master's thesis. Humboldt University.
- Paducheva, Elena 2011. The linguistics of narrative: the case of Russian. Lambert Academic Publishing.
- Rehbein, Jochen; Herkenrath, Annette; Karakoc, Birsal 2009. Turkish in Germany – On contact-induced language change of an immigrant language in the multilingual landscape of Europe. – Multilingualism and universal principles of linguistic change. Special Issue of Sprachtypologie und Universalienforschung – Language Typology and Universals, vol 1. Eds. Gisella Ferraresi, Esther Rinke. Akademie Verlag, 6–43.
- Rehbein, Jochen; Herkenrath, Annette 2015. Converbs in monolinguals' and bilinguals' Turkish. Turkish in Germany – On contact-induced language change of an immigrant language in the multilingual landscape of Europe. – Ankara papers in Turkish and Turkic linguistics, Turcologica,

- vol 103. Eds. Deniz Zeyrek, Çiğdem Sağın Şimşek, Ufuk Ataş, Jochen Rehbein. Harrassowitz Verlag, 493–513.
- Rekemchuk, Aleksandr 1962. Molodo-zeleno. <http://www.rulit.net/books/molodo-zeleno-read87308-1.html> (26.10.2022).
- Roch, Maja; Florit, Elena; Levorato, Chiara 2016. Narrative competence of Italian–English bilingual children between 5 and 7 years. – *Applied Psycholinguistics* 37 (1), 49–67.
- Slobin, Dan I. 1988. The development of clause chaining in Turkish. Paper presentation. The 4th Conference on Turkish Linguistics, August 17–19, Ankara, Turkey.
- Schroeder, Christoph 2016. Clause combining in Turkish as a minority language in Germany. – *Exploring the Turkish linguistic landscape: Essays in honor of Eser Erguvanlı-Taylan*. Eds. Mine Güven, Didar Akar, Balkiz Öztürk, Meltem Keleşir. John Benjamins Publishing Company, 81–102.
- Squire, Corinne; Andrews, Molly; Davis, Mark 2014. *What is narrative research?* Bloomsbury Publishing.
- Turan, Dilek; Antonova-Unlu, Elena; Sağın-Şimşek, Çiğdem; Akkuş, Mehmet 2020. Looking for contact-induced language change: Converbs in heritage Turkish. – *International Journal of Bilingualism* 24 (5–6), 1035–1048.
- Uccelli, Paola; Pérez, Mariela M. 2007. Narrative and vocabulary development of bilingual children from kindergarten to first grade: Developmental changes and associations among English and Spanish skills. – *Language, Speech, and Hearing Services in Schools* 38, 225–236. [https://doi.org/10.1044/0161-1461\(2007/024\)](https://doi.org/10.1044/0161-1461(2007/024)).
- Verhoeven, Ludo 1989. Acquisition of clause linking in Turkish. – *Linguistics in the Netherlands*. Eds. Hans Bennis, Ans van Kemenade. De Gruyter Mouton, 153–162.
- Wiese, Heike 2020. Language Situations: A method for capturing variation within speakers' repertoires. – *Methods in Dialectology* 16, 105–117.

RESÜMEE

## TÜRGI-INGLISE JA TÜRGI-VEENE KAKSKEELSETE NARRATIIVIDE SIDUSELEMENTIDE KASUTUS

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Uurimus keskendub türki-inglise ja türki-vene kakskeelsete laste narratiivmoodustusele, püüdes välja selgitada, kas nende suuliste narratiivide siduselemendid erinevad ükskeelsete türki laste omadest. Eesmärgiks oli vaadelda türki-inglise ja türki-vene kakskeelsete laste ajasuhteid väljendavate konnektiivide kasutust suulistes narratiivides, võrreldes ükskeelsete türki lastega, keskendudes aja/aspekti markeritele, mida kasutatakse narratiivide ülesehitamiseks, sündmuste järjekorda näitavatele konverbimarkeritele, ja lisaks lauseid siduvatele ajasuhteid väljendavatele konnektiividele. Materjali koguti kahest kakskeelsest grupist, türki-vene (grupp 1) ja türki-inglise (grupp 2), mõlemas viis last, ning lisaks kontrollgrupp seitsme ükskeelse türki lapsega. Andmete analüüs näitas, et türki-inglise ja türki-vene kakskeelsed lapsed erinesid ükskeelsetest türki lastest selle poole, kui järjekindlalt nad kasutasid narratiivi ülesehitamiseks aja/aspekti markereid ning narratiivi sündmuste järjekorda näitavaid konverbimarkereid. Tulemuste üle on arutletud varasemate uurimuste taustal ja tüpoloogiliste erisuste vaatenurgast.

**Võtmesõnad:** simultaanne kahe keele omandamine, vene-türki, türki-inglise, siduselemendid, narratiivid

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