SCENE-SETTING AND REFERENT INTRODUCTION IN TURKISH AND TURKISH SIGN LANGUAGE (TÜRK İŞARET DİLİ, TİD): WHAT DOES MODALITY TELL US?

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DECLARTION OF ORIGINALITY

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ABSTRACT

Scene-setting and Referent Introduction in Turkish and Turkish Sign Language (Türk İşaret Dili, TİD): What Does Modality Tell Us?

The aim of this thesis is to track developmental patterns setting the scene and introduce referents in narrations produced by hearing children acquiring Turkish and deaf children acquiring Turkish Sign Language (Türk İşaret Dili - TİD).

Data were collected from three age groups in TİD and Turkish: younger children aged 3.5 – 6.8 years, older children aged 7.2 – 9.11 years, and adults. There were 10 participants in each group in each language. Each narrated a picture story to a deaf or a hearing person. The data were coded for linguistic elements used to set the scene (i.e., who/where/what information for the first picture) and the use of explicit linguistic forms to introduce referents (i.e., the boy, the balloon man, the balloon).

TİD-signing and Turkish-speaking children reached adult patterns in scene setting elements at similar ages: In both languages, older children were similar to adults in how frequently they used different types of scene setting elements. As for referent introduction, younger children in both languages were adult-like in making explicit referrals to different referents of a story. Turkish speakers used explicit referrals to main and secondary animate and inanimate characters of the story more frequently than TİD signers, possibly an effect of modality or typological difference between the two languages.

ÖZET

Türkçe ve Türk İşaret Dili (TİD)'nde Hikaye Başlangıçları ve Karakter Tanıtımları: Dil Kanalının Farklı Olması Bize Neyi Gösterir?

Bu çalışmada Türkçe'yi anadili olarak öğrenen işiten çocuklar ile Türk İşaret Dili'ni (TİD) anadili olarak edinen işitme engelli çocukların hikaye anlatmaya nasıl başladıkları ve hikayede geçen karakterleri nasıl tanıttıkları incelenmiştir.

Bu çalışmada her iki dilden ve üç farklı yaş grubundan katılımcılar yer almıştır (küçük yaş çocuklar 3,5 – 6,8 yaş arası, büyük yaş çocuklar 7,2 – 9,11 arası, yetişkinler). Her yaş grubunda 10 kişi, toplamda 60 kişiden veri toplanmıştır. Katılımcılara bir resimli hikaye gösterilmiş ve bunu duyan veya işitme engelli birisine anlatmaları istenmiştir. Bütün veriler işitme engelli ve duyan araştırmacılar tarafından kodlanmıştır. Bu kodlamada katılımcıların hikayeye başlarken hangi bilgileri anlattıkları (kim, nerede, ne) ve hikayedeki üç farklı karakteri (çocuk, baloncu, balon) açık bir şekilde tanıtıp tanıtmadıklarına bakılmıştır.

Analiz sonuçları göstermiştir ki hem işiten hem de işitme engelli çocuklar 7,2 – 9,11 yaşları arasında hikaye başlangıçlarındaki farklı bilgileri yetişkinler kadar sıklıkla ifade etmişlerdir. Daha küçük yaş grubunda ise böyle bir benzerlik bulunmamıştır. Karakterlerin tanıtılması konusunda ise her iki dilde de küçük yaş grubundaki çocuklar bile yetişkinler kadar sık bir şekilde karakterleri açık olarak tanıtmışlardır. İki dil arasında saptanan en önemli fark, Türkçe konuşanların hikayedeki farklı karakterleri tanıtırken, TİD kullanıcılarına göre, daha fazla açık dil

yapıları kullanmış olmalarıdır. Bu durum her iki dil arasındaki kanal farklılığından olabileceği gibi bu iki dil arasındaki yapısal farklılıktan da kaynaklanmış olabilir.

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LIST OF ABBREVIATIONS AND TRANSCRIPT CONVENTIONS

Abbreviations of sign languages:

ASL	American Sign Language
Auslan	Australian Sign Language
BSL	British Sign Language
LSF	French Sign Language (*Langue des Signes Française*)
LSQ	Canadian Sign Language (*Langue des Signes Québécoise*)
NZSL	New Zealand Sign Language
TİD	Turkish Sign Language (*Türk İşaret Dili*)

Abbreviations in general:

∅	Zero marking
1	First Person
ABL	Ablative
ACC	Accusative
DAT	Dative
EVID	Evidential
FUT	Future tense
INDEF	Indefinite
GEN	Genitive
GER	Gerund
LOC	Locative
NP	Noun phrase
PRE	Present tense
PROG	Progressive tense

Transcription conventions:

CAR	Lexical sign
CA	Constructed action
$CL(apple)_{loc}$	The location of the referent presented with a classifier is in subscript
$CL(man)_{walk}$	The movement of the referent presented with a classifier is in subscript
LH	Left hand
RH	Right hand
SASS(moustache)	Shape and Size Specifier followed by the size and/or shape feature of the referent
--- HOLD ---	A sign form holds for the duration of the dotted line

CHAPTER 1

INTRODUCTION

Acquiring a language means much more than learning the individual words and knowing the rules to form sentences. An important aspect of language acquisition lies in the ability to narrate events in a grammatically accepted way. This ability involves having a command on linguistic structures at discourse level in addition to sentence level. It also requires a cognitive ability to understand how much knowledge is shared with the interlocutor while narrating an event. Thus, children should learn to provide adequate background information to the story that they are about to tell (Menig-Peterson & McCabe, 1978). One way of doing this is to provide such information at the segment of the narrative discourse that constitutes its start or opening, and to present background information about the events that are about to happen by specifying who, where, when (i.e., scene-setting elements) (Berman & Slobin, 1994; Berman, 2001). Another way is to use linguistically appropriate devices to mark the identifiability of the referents that are introduced during the discourse. Identifiability, here, concerns the ability of the addressee to establish a link between the referring expression used by a speaker and the concept it refers to (Küntay, 2002).

The analysis of "how to start a story" constitutes an important feature of the development of both narrative knowledge and storytelling performance among children (Berman, 1995; Reilly, 1992). First of all, giving a suitable setting to the story means that the narrator is aware of what the interlocutor needs to know to be able to understand the narration. Furthermore, it requires a preplanning of the text as a whole and with a global view of the events to be told. Thus, it is obvious that

narrative discourse development is more than acquiring lexical items and grammatical rules in a language due to such complex cognitive demands, which take a long time to evolve. Studies with children acquiring a spoken language, indeed, show that the younger the children are, the less information they provide to set the scene in their narratives (Peterson, 1990; Umiker-Sebeok, 1979; Peterson & McCabe, 1983; Berman, 2001). However, these studies are conducted with children who are required to translate events presented usually in spatial-visual mode (as in the case of picture-story narrations) into sequential segments of verbal output, thus causing a particular kind of cognitive demand (Berman & Slobin, 1994). Thus, it might be interesting to examine the narrative discourse development in children who acquire a sign language where space is used to talk about space (Emmorey, 2002). Therefore, no such translation as observed in spoken languages is necessary while narrating, for example picture stories, in sign languages.

The studies done with signing children on the acquisition of narrative skills are few in number – especially when compared to the studies done with speaking children. Moreover, most of these studies with signing children focus on the development of narrative skills at a more macro level without paying close attention to the linguistic forms used by them (e.g., Morgan, 2002; Morgan & Woll, 2003). Analysing linguistic structures at discourse level, on the other hand, presents insight on different areas such as linguistic and pragmatic knowledge and cognitive abilities. Comparing the acquisition of these linguistic forms by signing and speaking children by using the same tasks provides cross-modal and cross-linguistic understanding on the development of skills to set the scene while narrating events.

The aim of the current study is to track the developmental patterns in learning to set the scene and introduce referents in narrations produced by children who

acquire Turkish Sign Language (Türk İşaret Dili [TİD]) and Turkish through direct comparisons to the narrations elicited from adults in each language. To the best of my knowledge, no study has been conducted with such research questions on TİD before. Indeed, linguistic analysis of this type (i.e., focusing on the start of narrations) has also been rare in many other sign languages. Comparing the linguistic devices of setting a narrative scene and introducing referents in two different languages which operate on different modalities (i.e., auditory-vocal as in Turkish and visual-spatial as in TİD) will present evidence to what extent modality and linguistic factors are at work during language acquisition, at least during the narrative discourse development.

In the following chapter (Chapter 2), I present literature review on the studies about scene-setting and referent introduction in narrative discourse in spoken and sign languages in addition to the studies investigating the acquisition of narrative skills in scene-setting and introducing referents in narrations by signing and speaking children. In Chapter 3, detailed information related to the current study is provided, and its results are given in Chapter 4. This thesis ends with Chapter 5 where I discuss the results of the current study in relation with previous studies, in addition to the its limitations and suggestions for further research.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The analysis of "how to introduce referents" relates to one of the primary issues in discourse studies. For a successful communication, speakers should be clear about the referents that they are talking about, and use linguistic devices (e.g., definite versus indefinite articles) available in their language accordingly. Proper initial identification of referents is not only crucial for the addressee to understand what the narrator has in mind, but also for the narrators to structure their own discourse. So, linguistic (i.e., use of appropriate linguistic forms), social (i.e., needs of the addressee), and cognitive (i.e., structuring one's own discourse) factors have crucial roles on learning how to introduce referents.

Naturalistic and experimental studies in English and French show a late mastery in learning the appropriate introduction of referents by children (Brown, 1973; Karmiloff-Smith, 1979; Maratsos, 1976; Warden, 1981). In these studies, researchers investigated the languages that employ formal article systems to identify the referents (i.e., definite and indefinite articles). Other studies with languages that do not employ such article systems (e.g., Japanese, Chinese, Finnish, Warlpiri, Turkish) also point toward relatively late emergence of marking indefiniteness of new referents in discourse (Hickmann & Liang, 1990; Clancy, 1992; Nakamura, 1993; Hickmann, 1995; Dasinger, 1995; Hickmann, Hendriks, Roland, & Liang, 1996; Bavin, 1987; 1999; Küntay, 2002). Such similar developmental patterns across different spoken languages suggest that the acquisition of scene-setting skills seem to be driven by the universal principles of cognitive development rather than language-

specific factors. However, no similar studies have been done with sign language acquiring children so far. Therefore, it is currently not known if these results are also extendable to signing children who acquire a sign language where the iconic and deictic affordances of the hands and space provide unique means of identifying and representing referents.

In the next section (2.2), I provide further information about linguistic structures for scene-setting and referent introduction in narratives in spoken and sign languages. It is followed by the section where brief literature review on the studies investigating the acquisition of these skills by speaking and signing children (2.3).

2.2 Scene setting and referent introduction in narrative discourse

A narrative constitutes a particular kind of discourse activity, which can have a number of forms, occur in a number of situations, and serve various aims (Hickmann, 1982). It involves the descriptions of events which are removed from the listener's time, space, and participation (Hickmann, 1982) and requires the speakers to build up layers of information about characters, places, and events (Rathmann, Mann, & Morgan, 2007). In order to produce a narrative, three domains should be integrated with each other. First of all, linguistic devices are used within and between sentences and among bigger discourse units such as settings or different episodes (Peterson & McCabe, 1991). Secondly, pragmatic abilities (i.e., the awareness of a conversation partner, the amount of information to be shared) play a central role both in production and comprehension of a narrative (Hudson & Shapiro, 1991). Finally, domain general cognitive abilities such as working memory are involved to produce a coherent narrative (Eisenberg, 1985).

One of the layers of a narration is "setting" in which the narrator introduces the protagonist and other characters, and provides background information such as time and space of the event. This layer is mostly built at the beginning of the narration and during the story, the narrator refers back to the characters or other points (i.e., time or space) introduced at this layer. The opening of a story serves to specify information related to who, where, when and why questions. By introducing the characters, it serves a presentative function; by giving spatio-locative and temporal information, an informational function, and by explaining what triggers the events, it serves a motivating factor (Berman, 2001).

During the narration, different referents appear at different points of the narration. For a successful communication, narrators have the responsibility of formulating their utterances in a way in which the referents that they are introducing are accessible to their addressees. In all languages, speakers can denote to objects by different ways such as using their names, pronouns, or deictic expressions such as *this* and *that*. These linguistic forms differ in the way how explicitly they refer to the entities. In order to create coherent and comprehensible narrations, the narrators' use of linguistic forms heavily depends on the shared information with their interlocutors. For example, if the narrator has a specific referent in mind and assumes that it is known by the interlocutor, s/he will most probably use a certain linguistic device to indicate the definiteness. On the other hand, if there is no specific referent, the linguistic form chosen by the narrator will reflect indefiniteness. In other words, the narrators' uses of referring expressions with first and subsequent mentions of referents will depend on whether the narrators can assume that the interlocutors share background presuppositions about the referent in question (Chafe, 1976; Hickmann, 1982). In the following sections, further information about linguistics ways of setting

a narrative scene and introducing referents from spoken (2.2.1) and sign languages (2.2.2) are provided.

2.2.1 Linguistic devices that are used to set the scene and introducing referents in narrations in spoken languages

In discourse, a variety of linguistic forms (e.g., full noun phrases, pronouns, zero anaphora) are preferred by the speakers depending on the referential context and the accessibility of the referents. Speakers choose a fuller referring expression when introducing (i.e., first mention) a referent into discourse, which corresponds to lower accessibility of the same referent for the addressee (Ariel, 1990), and vice versa.

Highly accessible referents require less linguistic marking in order to be correctly identified by the addressee, as exemplified in the example (1) below where the protagonist is introduced (i.e., A man) and re-introduced (i.e., The man) by full noun phrases (NPs). He is referred back by a pronoun (i.e., he) and then zero anaphora (i.e., ∅) in the rest of the example.

(1) Yesterday a man came up to me in the street. [...] The man was so drunk that he fainted and, ∅ taken to the hospital.

These correspondences between linguistic device, referent accessibility, and referential context conform to the Principle of Quantity for topic continuity (Givon, 1984) (see Figure 1 below). This principle has been shown to hold across typologically different spoken languages (Cameron, 1992; 1998; Yoshioka, 2008).

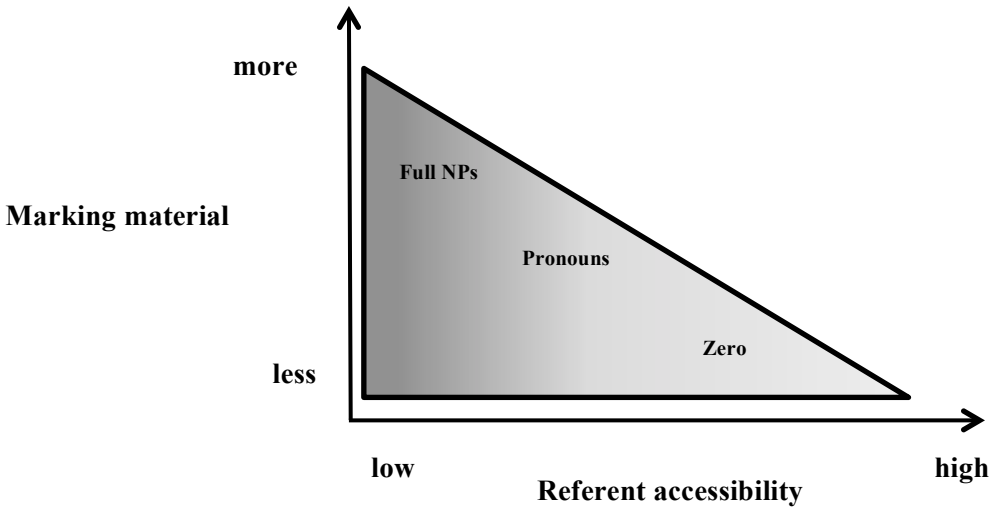


Figure 1. Schematic representation of the Principle of Quantity for topic continuity (adapted from Perniss & Özyürek, 2015, p. 39).

The Principle of Quantity for topic continuity, then, suggests that speakers will introduce the referents with full NPs at the beginning of their narrations. At this point, it is important to highlight the notion of definiteness and its linguistic marking across different spoken languages since both definite and indefinite forms may require the speakers to use full NPs (e.g., a book versus the book in English), but still an indefinite form (e.g., a book), rather than the definite one (e.g., the book), will most probably be appropriate while setting the scene for a narration.

The notion of "definiteness" leads to the separation of "definite" forms from "indefinite" ones, such as "the" versus "a/an" in English, depending on strict formal properties of these linguistic elements. "A man" in the example (1) above introduces its referent in the discourse for the first time and its interpretation does not depend on antecedent co-referential forms. On the other hand, the referent of "the man" again in the same example is dependent on the surrounding linguistic elements such as previously expressed indefinite form of the referent (i.e., "a man").

Instead of using the definiteness marker (i.e., the) just before the noun (i.e., man), some other linguistic forms of English can be employed, though with varying in degree for the definiteness. For instance, instead of "the man", third person pronominal form can be used (i.e., he) and it is considered to presuppose more than "the man". Additionally, using zero forms (i.e., […] "and ∅ was taken to the hospital") can be another option. When compared to other two forms, they presuppose most since it gives the hint that its referent is so presupposed in the previous linguistic context that no overt signal is necessary at all (Hickmann, 1982).

Introducing referents in a narration in a clear and comprehensible way for both narrators and interlocutors is universal, but different languages employ a variety of linguistic devices to achieve this goal. One set of these devices consists of article system (as "a/an" and "the" in English). The use of definite and indefinite articles and how they refer to different narrative characters can be complicated. Maratsos (1976) suggests two semantic factors determining the appropriate use of such articles. Firstly, the definite article is preferred when the referent is distinguished from all other members of its class by some unique specification and the indefinite article is employed where only the referent's class membership or the idea of its class membership is marked. Secondly, it is important if the same identification of the referents is shared by both parties in the narration. In other words, if the narrator and the addressee see the characters of a story at the same time by looking at the story pictures together, then, they will have shared information about these characters through extra-linguistics ways. In such a case, the characters shown in the picture can take definite article since both the narrator and the interlocutor see them, but at the same time since these characters are introduced for the first time in the narration, indefinite article use would be acceptable, as well.

Not all languages do indicate definiteness or indefiniteness through an English-like article system. For example, Japanese offers postnominal articles *wa* (definite article) and *ga* (indefinite article) in addition to the use of nominals and ellipsis (Nakamura, 1993; Clancy, 1992). In Mandarin Chinese, word order devices are primarily employed to mark the (in)definiteness of the referents (Hickmann, 1995; Hickmann et al., 1996). Finnish has a more distributed strategy over a variety of linguistic devices, including case distinctions, word order, and optional lexical items (Dasinger, 1995). Warlpiri speakers use ellipsis or full nominal phrases to introduce new referents into their discourse (Bavin, 1987; 1999).

So far, general information about the expression of definiteness and indefiniteness has been presented by giving examples across different spoken languages. Since the main focus of the current thesis is to explore the acquisition of linguistic structures of (in)definiteness to set the narrative scene in Turkish, below I will concentrate on the studies conducted with Turkish speakers.

Turkish has an optional determiner system. So, new information is not obligatorily marked by an indefinite determiner and the expression of definiteness can be realized by linguistic devices with in the systems of lexicon, case assignment, and word order (Küntay, 2002).

In Turkish, the numeral "one [*bi(r)*]" can be considered to be an optional marker for indefiniteness (Dede, 1986). In the example (2) below, "*bir*" indicates that the following referent is a newly introduced one. However, in the example (3), lack of the same linguistic device preceding the same referent signals that the status of the

referent is unmarked and leaves it to the situational context or the inferential system of the interlocutor, or both (Küntay, 2002).[1]

(2) Bir çocuk ev+in+den çık+mış.

INDEF child house+GEN+ABL go.out+EVID

"A child went out of his house."

(3) Çocuk sokak+ta yürü+r+ken bir baloncu+ya rastlı+yor.

Child street+LOC walk+PRE+GER INDEF balloonman+DAT run.into+PROG

"While a/the child was walking on the street, [s/he] runs into a balloonman."

However, nominals are not always in subject positions in a sentence. When they are in non-subject positions (e.g., direct-object) in Turkish, (in)definiteness status of the referents depends on case endings in addition to the indefinite numeral. Erguvanlı-Taylan & Zimmer (1994) mention four distinct direct-object categories with different parameters of definiteness.

i. Definite direct object which is marked with accusative suffix -(y)I.

a) [...] baloncu+yu gör+müş.

balloonman+ACC see+EVID

"[s/he] saw the balloonman."

ii. Indefinite direct object with accusative case marking and preceded by indefinite article "bir"

[1] The examples (2-9) are taken & adapted from Küntay, 2002; pp. 81-84.

b) Adam bir doktor+u arı+yor.

Man INDEF doctor+ACC look.for+PROG

"[The] man is looking for a (specific) doctor."

iii. Indefinite direct object with no case marking and preceded by indefinite article "bir"

c) Bir baloncu gör+üyor.

INDEF balloonman see+PROG

"[He] sees a balloonman."

iv. Indefinite direct object with neither indefinite article "bir" nor any case marking

d) Baloncu gör+müş.

Balloonman see+EVID

"[He] saw [a] balloonman."

So, the general conclusion from these examples is that lack of accusative case marking on the nominals as direct object indicates that the referent has an indefinite status, while presence of it shows definiteness. Oblique objects with ablative (4), dative (5), locative, or instrumental case markings are considered to be definite unless they are preceded by indefinite article "bir" (Küntay, 2002).

(4) Baloncu+dan bir balon al+ıyor.

Balloonman+ABL INDEF balloon buy+PROG

"[He] buys a balloon from the balloonman."

(5) Bir baloncu+ya rastlı+yor.

INDEF balloon+DAT run.into+PROG

"[He] runs into a balloonman."

In Turkish, in addition to "definite" and "indefinite" forms, Dede (1986) also defines "non-definiteness" in cases where the identifiability of the referent is not important. If a nominal direct object in a sentence lacks accusative case marking and *bir* (one), then it has the status of non-definiteness. When the narrator is not interested in the identifiability of the referent, but interested in conveying the class membership of the referent, these forms can be employed (see example 6 below).[2]

(6) Yarın Ali'ye çorap, Pınar'+a elbise, Aytül'+e ayakkabı al+acağ+ım

Tomorrow Ali+DAT sock, Pınar+DAT dress, Aytül+DAT shoe buy+FUT+1

"I will buy socks for Ali, a dress for Pınar and shoes for Aytül tomorrow."

Similarly, when the narrator's aim is to modify the action itself, a nominal can be incorporated and it behaves as an attributive. In this case nothing intervenes between the nominal and the verb. In example (7) below, nominal direct object '*kitap*' (book) does not refer to a specific book or books, but the action of reading itself (Dede, 1986).

(7) Aytül kitap oku+yor.

Aytül book read+PROG

"Aytül is reading a book/books."

[2] Examples 6-7 are taken from Dede (1986).

In addition to these noun level determiners, clause-level determines may play a role in giving (in)definiteness information about the referents. The canonical word order in Turkish is subject – object – verb, but the pragmatically determined word order is usually defined as topic-focus-predicate-background (Erguvanlı, 1984; Dede, 1986). New referents in discourse are mostly placed immediately preceding the verb, which corresponds to "focus" position and post-verbal positions are usually reserved for continuing and backgrounded discourse referents. However, in understanding the (in)definiteness status of a referent, the position of the referent in a clause has a less minor role if that referent is marked with noun-level determiners (Küntay, 2002).

2.2.2 Linguistic devices that are used to set the scene and introduce referents in narrations in sign languages

While narrating events, sign languages use the physical space around the signer to associate referents with locations and to indicate the relationship between them for spatial expressions. In order to linguistically express these relationships, signers use classifier predicates to express the location and motion of the referents. Classifier predicates are complex morphological structures in which the position and the movement of the hand(s) in signing space communicate information about the location and motion of the referent(s) in real events (Supalla, 1982; Emmorey, 2002; Zwitserlood, 2003; Perniss, 2007). Classifiers are expressed by handshapes that *classify* entities by representing their salient characteristics (Supalla, 1982; Emmorey, 2002; Zwitserlood, Perniss, & Özyürek, 2012). For example, in (8) below, a TİD signer first introduces the box (1st still, both hands) and the apple (2nd still, right hand) by their lexical signs in TİD. Then, she localizes them with respect to each other in classifier predicates, in which she uses different classifier handshapes

for the box (3rd still, left hand) and the apple (3rd still, right hand).



(8) 

LH: BOX $CL(box)_{loc}$

RH: BOX APPLE $CL(apple)_{loc}$

"There is a box. There is an apple. The apple is in the box."

Previous studies on sign language classifiers suggested different categorization of classifiers, and the types of classifiers suggested so far ranges from two to nine (see Schembri, 2003; Zwitserlood, 2003). Below I will present two of them:

i. Entity Classifiers: They represent the referents by encoding certain salient characteristics through handshape. Although entity classifiers can represent both animate and inanimate objects, the predicates formed with entity classifiers are non-agentive and intransitive (Schick, 1990). In the example (8) above, the TİD signer describes the location of a box and an apple with respect to each other by using entity classifiers, which represent visual

features of the apple (i.e., roundness, right hand) and the box (i.e., flatness, left hand).

ii. Handling Classifiers: They represent the handling or the manipulation of the objects usually by an animate referent. Classifier predicates with handling handshapes are agentive and transitive constructions with an object argument. In the example (9), a TİD signer is describing a picture, which depicts a man carrying a box. After introducing the agent (i.e., man) and the patient (i.e., box) with their lexical signs in the 1st and 2nd stills respectively, she uses a handling classifier to indicate that the box is being carried. Please note the difference in the entity and the handling classifier handshape used to represent the box in (8) and (9).



(9)

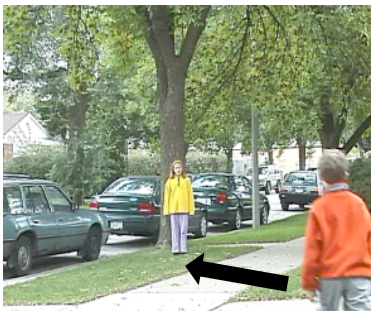


LH: BOX $CL(box)_{carry}$

RH: MAN BOX $CL(box)_{carry}$

"There is a man. There is a box. The man is carrying the box."

In sign languages, signers can locate an index for a specific referent by directing different signs towards locations in front of them (i.e., their signing space) and they can move their signs among these already determined locations to create a cohesive discourse. After establishing these locations in the signing space for their first mentions of the referents, subsequent use of these locations will serve as indexes for the referents (Morgan, 2000). In (10) below, a TİD signer is narrating a video in which a boy walks towards a girl. After introducing the girl by its lexical sign (1st still), she localizes it in the signing space in a classifier predicate in which her extended upright index finger refers to the girl (2nd still). While holding this classifier for the girl, she introduces the boy by its lexical sign (3rd still), and she moves her right extended upright index finger, representing the movement of the boy, towards the location of the classifier for the girl (4th still). In this way, she uses the signing space in front of her to narrate the video that she is watching.



(10) 

LH: GIRL $CL(girl)_{loc}$ ----------HOLD----------

RH: BOY $CL(boy)_{mov}$

"There is a girl, and she is here. There is a boy. The boy is moving to the girl."

In sign languages, referents are identified by a full NP before information about them (e.g., their location, movement) is predicated, and signers mostly use classifier predicates to encode such information about the introduced referents (Aronoff, Meir, Padden, & Sandler, 2003; Meier, 2002; Newport & Supalla, 2000; Talmy, 2003). Therefore, classifier predicates are not used to introduce referents. Rather, the referents should be first introduced by their lexical signs first (see examples 8, 9, 10 above).

In addition to lexical signs and classifier predicates, signers have also been reported to use another language forms called *constructed action* (CA) while narrating events (e.g., Metzger, 1995; Cormier, Smith, & Sevcikova, under review). CA refers to a stretch of discourse that represents one role or combination of roles depicting actions, utterances, thought, attitudes and/or feelings of one or more referents. For example, in the example 11 below (taken from Cormier et al., under review), the token of manual CA (CA:swinging-arms) in the 3rd still is clearly a representation of action (i.e., the man swinging his arms as he is walking). However, the string "WANT (4th still), COOK (5th still), SOMETHING (6th still)" produced directly

afterwards within the same stretch of constructed action neither represents action nor dialogue (since the man does not say anything). This stretch of CA could be considered to represent the thoughts of the man, as they are imagined/constructed by the signer, or it could be the signer's narration while in character as the man to indicate to the addressee that the man wanted to cook something (Cormier et al., under review).

(11)



MAN SASS-moustache <CA:man *CL-swinging arms*



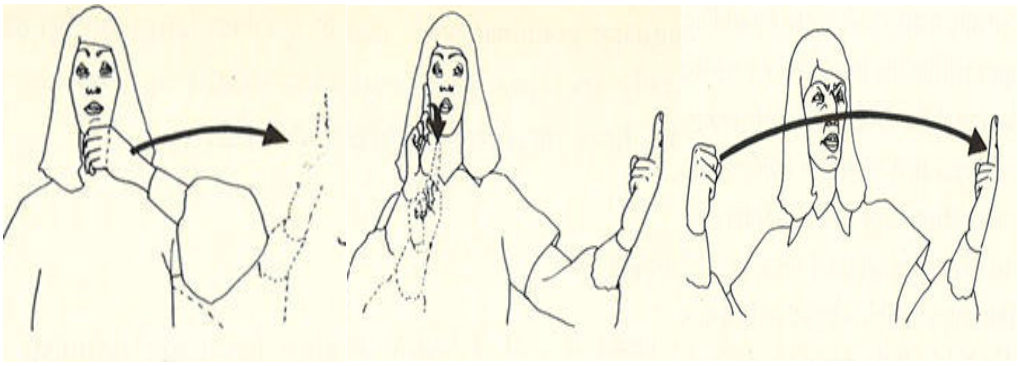
WANT *COOK* *SOMETHING>*

So far, I have introduced most frequently used linguistic devices used by signers while narrating events. As to how they set the scene and introduce different referents

throughout their narrations, which constitute the main research questions of the current thesis, will be briefly discussed in the following lines.

Compared to the wealth of research on linguistic structures that are used to introduce referents in spoken languages, sign languages have received little attention in this domain. The existing research with signers mostly focused on reference tracking rather than referent introduction (Wulf, Dudis, Bayley, & Lucas, 2002 for American Sign Language [ASL]; R. McKee, Schembri, D. McKee, & Johnston, 2011 for New Zealand Sign Language [NZSL] and Australian Sign Language [Auslan]). These studies mainly explored a certain group of verbs, called directional (or agreement) verbs, which can be moved between locations which are previously associated with the subject and/or the object arguments of the verb (e.g., Padden, 1988). For example, in British Sign Language [BSL], as shown below in (12), MAN is signed with the left hand. Then, the index finger of the left hand is held upright as the classifier that indicates its location in signing space. As the left hand is held stationary, the right hand signs WOMAN, and expresses its location with the index finger of the right hand. Then, the right hand, in a fist, is brought towards the left hand.

Wulf et al. (2002) claims that with these verbs, signers may consider the presence of an overt subject or object pronoun as providing redundant information. As a result of analysing narratives elicited from 10 adult ASL signers, they found that even with plain verbs, signers omitted manual pronouns more often than they supplied them. Similar results were also found for Auslan and NZSL, where signers skipped the use of subject noun phrases more frequently than they expressed those (McKee et al., 2011).

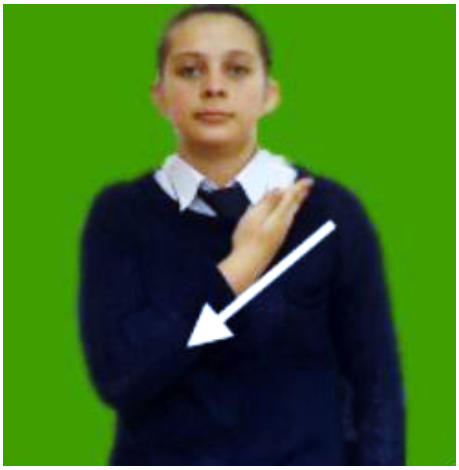
(12) 

LH: MAN $CL(man)_{loc}$ ----------HOLD----------

RH: WOMAN $CL(woman)_{loc}$ HIT

"There is a man. He is here. There is a woman. She is here. She hits him." (Taken from Kyle & Woll, 1985, pp. 141).

Please note that not all verbs in sign languages function in this way. Verbs that cannot be spatially modified in this way (such as SEVMEK - to Love in TİD, see (13)) are called plain verbs (e.g., Padden, 1988). Plain verbs would theoretically have to occur with separate signs for subject and object since they are fixed forms and they cannot have initial or final location to show associations between spatial locations and referents (Lillo-Martin, 1986). However, Wulf et al. (2002) and MacKee et al. (2011) found that signers do not always use separate signs for subject and object arguments for these verbs.

(13)  TİD (from TİD Dictionary, 2011)

Sign language researchers propose that certain pointing signs (i.e., pointing towards a referent established in the signing space) constitute determiner system (Wilbur, 1979; Kegl, 2003). Wilbur (1979), summarizing Kegl (2003), hypothesizes that the definite/indefinite distinction in ASL may be made by the contrast between the existence of a surface determiner (i.e., definiteness), or the lack of a surface determiner (i.e., indefiniteness). However, what Zimmer & Patschke (1990) found was inconsistent with this hypothesis. They found many instances in which a noun being mentioned for the first time did occur with a determiner (i.e., pointing determiner). Moreover, they suggest that pointing signs are not used with generic nouns, but only with specific entities. Thus, they do not mark the definite/indefinite status of the nouns.

On the other hand, MacLaughlin (1997) argues that ASL pointing signs differentiate between definite and indefinite status of the nouns depending on where they were used in an utterance. Thus, there is not much consensus about the role of pointing signs as a determiner in ASL. Furthermore, pointing signs as determiners in ASL are apparently optional, and noun phrases with or without pronominal pointing signs are perfectly acceptable (Sandler & Lillo-Martin, 2006). Finally, it is not clear if and how these pointing signs function as scene-setting elements in sign language narrations.

It seems that pointing signs as determiners in ASL are optional. Noun phrases articulated without any determiner are perfectly acceptable, and seem to have the same range of interpretations as those with determiners (Sandler & Lillo-Martin, 2006).

2.3 Learning to set the scene and introduce the referents in spoken and sign languages

The analyses of "how to start a story" and "how to introduce referents" contribute to the understanding of the development of both narrative knowledge and storytelling performances of children (Berman, 1995; Reilly, 1992). Understanding of how different functions of narrative setting (i.e., presentative, informational, motivating) and how linguistic forms for appropriate introduction of the referents gives insights about the cognitive abilities of children to develop a representation of an addressee (Berman & Slobin, 1994). It means that the narrator should take the presence of the addressee and the amount of shared knowledge between them about the story. These abilities also require preplanning of the text as a whole, which is quite a demanding cognitive task (Berman, 2001). In the following sections, I present how children develop abilities to set the scene and introducing referents during narrating events in spoken (2.3.1) and sign languages (2.3.2).

2.3.1 Learning to set the scene and introduce the referents in spoken languages

Previous studies show that children's narrative skills start to develop after the emergence of two-word utterances. At the age of 3 or 4 years, children are able to talk about their past experiences by constructing "proto" narratives in mostly single sentences with little or no coherence (Peterson, 1990; Umiker-Sebeok, 1979). Such type of narrative includes the skills of narrating events which are not "here and now" and putting the events in a chronological order (Morgan, 2000).

The narratives of young children include the setting of information that mostly includes "where", but not "who" information. By 5 – 7 years, children start to include "who" and "when" information into their narratives. At 8 – 10 years, children

get better in telling a coherent narration by using most structural components correctly and showing an understanding of the emotions of the characters. Only after 9 years old, these children become adult-like and provided when information in addition to "who", "where", "why" information (Rathmann et al., 2007; Peterson, 1990; Peterson & McCabe, 1983). For example, Berman (2001) found a clear developmental pattern in providing answers to "who", "where", "when", and "why" questions in a beginning of a narration. Analyzing the narrations from a picture book called "Frog, where are you?" (Mayer, 1969) and fight stories (e.g., asking "Have you ever had a fight?"), 3-year old Hebrew acquiring children (N=24) provided little information about "who" and "where". Actually, while narrating the picture book, only half of the children, aged 3 to 4, introduced the main character (i.e., the boy) either by an explicit noun phrase (i.e., the boy) or by a pronominal (i.e., he). 5-year olds in the study, on the other hand, added "why" information to their settings.

Studying the introduction of referents in children's narratives, researchers observed that children's narrative skills do not become adult like before the age of 7 years (Karmiloff-Smith, 1981; 1983; 1985; Hickmann, 1982; Hickmann & Liang, 1990; Wigglesworth, 1990). Most of them derive their conclusions from the speakers of Indo-European languages, whose main strategy to mark (in)definiteness status of the referents is to use articles as distinct grammatical elements. The results of the naturalistic and experimental studies in such languages demonstrated a relatively protracted development for the mastery of appropriate (in)definite linguistic forms for the introduction of the referents (Brown, 1973; Maratsos, 1976; Karmiloff-Smith, 1979; Warden, 1981; Kail & Hickmann, 1992). Similar results were also shown by the studies that focus on languages without a formal article system to mark the referent status of nominal, and found a late mastery in learning to introduce referents

during narrations (Nakamura, 1993; Clancy, 1992; Hickmann, 1995; Hickmann et al., 1996; Hickmann & Liang, 1990; Miu, 1994; Dasigner, 1995; Bavin, 1987; 1999). For example, studying Turkish acquiring children between the ages of 3 and 9 years and comparing them to Turkish speaking adults in a 6-picture story elicitation task, Küntay (2002) reported inappropriate uses of deictic forms until the age of 7 years and a gradual movement away from the use of bare noun phrases toward explicit indefinite marking with increasing age. The results of her study show that Turkish adult speakers use mostly indefinite and bare noun phrases to introduce the main character of a picture-book story. Turkish children, on the other hand, mostly prefer to use bare noun phrases for the same purpose until the age of 7.

All of these studies are restricted to the data elicited in spoken languages. Thus, we do not know if similar acquisition patterns are observed in sign languages that operate on visual-spatial modality. As suggested by Berman & Slobin (1994), children who acquire a spoken language (auditory-vocal modality) need to translate events presented usually in spatial-visual form (as in the case of picture-story narrations) into sequential segments of verbal output, thus causing a particular kind of cognitive demand. Therefore, it might be interesting to examine the narrative discourse development in children who acquire a sign language where space is used to talk about space (Emmorey, 2002).

2.3.2 Learning to set the scene and introduce the referents in sign languages

When compared to the number of studies conducted with spoken-language-acquiring children in the domain of narrative discourse development, there are fewer studies conducted with sign-language-acquiring children, and they proposed some general milestones for the narrative discourse development for these children (Morgan, 2002;

Morgan & Woll, 2003 for British Sign Language [BSL]). These studies report that signing children at the age of 3 years use linguistic devices for reference in quite unclear ways and cannot use signing space to maintain the characters introduced at the beginning. The characters are also usually introduced without a clear indication of who they are. When signing children are 4 – 6 years old, they begin to use classifiers. However, the children at this age are not yet able to use signing space referentially and use the same location for many different characters. Between 7 and 10 years of age, their ability to mark reference in narratives improves, but they still have difficulties in maintaining the reference. These studies suggest that full mastery of narrative devices takes place between the ages of 11 and 13. Similar results have also been found for children acquiring sign languages other than BSL (Anthony, 2002 for ASL; Niederberger, 2004 for French Sign Language [LSF]; Vercaingne-Menard, Godard, & Labelle, 2001 for Canadian Sign Language [LSQ]). Moreover, studying two children with deaf parents, Morgan (2000) found similar developmental patterns in their narrative structures in both English and BSL. It is important to note that these studies focused on the general acquisition of narrative skills by signing children, thus they do not provide specific information about how these children learn to start narrations (i.e., scene-setting). They may not be able to use the signing space in adult-like way to refer to the location of the entities, but they might still introduce scene-setting elements in qualitatively and quantitatively similar ways to adults.

CHAPTER 3

PRESENT STUDY

3.1 Introduction

The goal of the current study is to track the developmental pattern in learning to use different scene-setting elements (e.g., who, where, what) and introduce referents during narrating events in a sign (i.e., Turkish Sign Language [TİD]) and a spoken (i.e., Turkish) language. In order to establish target and developmental patterns for the use of these elements in TİD and Turkish, narrations of a picture story (Balloon Story) were elicited from children and adults. This way, patterns observed in the children data were directly compared to the adult data – rather than assumed adult preferences. Since previous studies done in the domain of narrative discourse development lack direct comparisons between signing and speaking children by using the same elicitation tasks, the data in this study were collected by using the same task from both languages. Developmental patterns observed in TİD and Turkish were compared to each other to see whether and to what extent modality plays a role on learning to use scene-setting elements in linguistically appropriate ways.

Previous studies have shown that children have difficulty in expressing indefiniteness, and start their narrations with definite forms, which is mostly not the case in adult patterns of the specific language that they acquire (Brown, 1973; Karmiloff-Smith, 1979; Maratsos, 1976; Warden, 1981; Hickmann & Liang, 1990; Clancy, 1992; Nakamura, 1993; Hickmann, 1995; Dasinger, 1995; Hickmann et al., 1996; Bavin, 1987; 1999). This has been shown for Turkish-acquiring children who showed a tendency to use bare noun phrases while introducing referents while Turkish-speaking adults prefer indefinite and bare noun phrases (Küntay, 2002). Late

emergence of marking indefiniteness across spoken languages suggests that its acquisition seems to be driven by the universal principles of cognitive development rather than language-specific factors.

Compared to the studies with speaking children, there are much fewer studies with signing children in his domain. As shown in the previous chapter, linguistic structures available in sign and spoken languages operate on different modalities, and signers use the signing space in front of them while narrating events. Such differences in the form of linguistic forms may lead different acquisition patterns in learning how to set the scene between sign and spoken languages. However, there are no previous studies that have explored the linguistic devices used by signers in sign languages, including TİD.

To what extent the modality difference between sign and spoken languages influences the development of narrative skills in introducing scene-setting elements has not been studied before. To a naïve eye, the affordance of using space might help deaf children visualize their narration more easily, thus decreasing their cognitive demands for a cohesive narration. On the other hand, as suggested by Berman & Slobin (1994), children who acquire a spoken language (auditory-vocal modality) need to translate events presented usually in spatial-visual (as in the case of picture-story narrations) into sequential segments of verbal output, thus causing a particular kind of cognitive demand. This may lead to later emergence of narrative skills to set the scene and introduce the referents in a spoken language than in a sign language. However, as shown by previous studies on sign languages (e.g., Morgan, 2002; Morgan & Woll, 2003), a cohesive narration also requires the use of space in an unambiguous way, thus adding one more layer of complexity. In this case, TİD-acquiring children are expected to lag behind Turkish-acquiring children. One more

possibility can be that modality does not play a determining role in this domain, and there will be similar developmental patterns for Turkish and TİD.

In the following section (3.2), I provide background information about the participants of the study, and I proceed with section (3.3) that presents detailed information about how the data were collected in Turkish and TİD. This chapter ends with section (3.4) in which the coding and analysis of the current data are described in detail.

3.2 Participants

To be able to track the development of abilities in setting the scene and introduce referents in narrating events, I established the target patterns as used by adults in each language. I collected data from the same signers and speakers in the same data collection set-up. Due to time restrictions, the studies were cross-sectional, where the data were collected from different age groups of participants.

As a result, 10 adult Turkish speakers and 10 deaf TİD native signers (i.e., exposed to TİD from their both deaf parents since birth) participated in this study. The development of these skills was studied by comparing the expressions elicited from adults to the ones elicited from children in two age groups for each language: One group of 20 younger children whose ages range between 3.5 – 6.10 (mean age: 5.2) and one group of 20 older children between the ages of 7.2 – 9.11 (mean age: 8.3).[3] There are 10 children in each age group for each language (see Table 1 below).

[3] Throughout the study, while indicating the ages of the participants, the first number refers to year and the second number following the period refers to month.

While forming these age groups, the age which children start primary school in Turkey was taken as the decision criteria.[4]

Table 1. Age Ranges and (M=age means) for Signing and Speaking Children Who Participated in the Study.

	TİD	Turkish
Adults (N=10)	18.5 – 45.10 (M=31.4)	28.2 – 51.3 (M=37.9)
Older Children (N=10)	7.2 – 9.10 (M=8.3)	7.2 – 9.11 (M=8.2)
Younger Children (N=10)	3.5 – 6.10 (M=5.2)	3.8 – 6.8 (M=5.3)

All signing children who participated in the study are profoundly deaf and acquired TİD natively from their deaf parents. Of these 20 deaf children, six of them have also deaf grandparents and five have deaf uncles and/or aunts in their families. Three of the deaf children (two in the older and one in the younger age group) have cochlear implants (CI).[5] One of the older deaf children received his CI when he was 4 and the other at the age of 6. The younger deaf child got her CI when she was 3 years old.

In the older age group, seven deaf children attend a primary school for the deaf and three are in the mainstream schools for the hearing. As for the younger age group of deaf children, three of them are full-time (five days in a week) and four are part-time (two days in a week) attenders of a preschool education program for the deaf. The rest did not attend any preschool education programs and stay at home. All of the deaf children in this study also attended four-hour rehabilitation sessions (one

[4] When we established age groups for this study, the starting age for primary school was 7 years in Turkey. However, after a change in the educational policy in September, 2012, children now start school at the age of 5-6 years.

[5] A cochlear implant (CI) is a surgically implanted electronic device that provides a sense of sound to a person who is profoundly deaf or severely hard of hearing.

session per week), which mostly included speech therapy. It is also important to note that the education in the schools for the deaf in Turkey is conveyed through oral methods, and TİD is not part of the curriculum. However, in one preschool education program, which four of the deaf children in this study attend, TİD lessons are provided by a deaf teacher for one hour in a week, although its teaching has not been very systematic yet. For the hearing children, all of them in the older age group receive formal education. Five of the younger hearing children attended a preschool education program five days in a week while the rest did not. Thus, overall, 30 deaf native TİD signers and 30 Turkish speakers, all residing in İstanbul, Turkey participated in the current study.

3.3 Stimulus material and procedure

In data collection sessions, signers/speakers were asked to sit opposite the addressee, who was a deaf or hearing confederate depending on the language condition. There was a laptop located on a table between them, and the table was below the waist of the participants so that their hands could easily be seen, as shown in Figure 2, where a schematic overview of the recording set-up is presented.

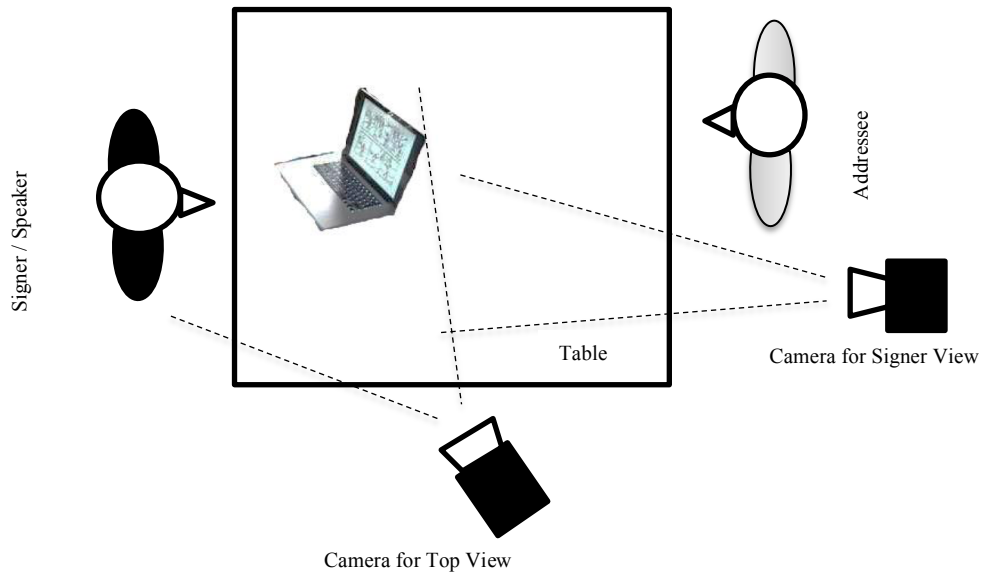


Figure 2. Data collection set-up

The data were collected through the narrations of "Balloon Story", which was developed and originally used by Karmiloff-Smith (1981) to study extended discourse. The story consists of six pictures, which are arranged two groups of three pictures, each placed above the other (See Appendix A). The pictures depict the story of a little boy, who is walking on the street, sees a balloonman and buys a balloon. Later, the balloon flies off and the boy starts crying and continues to walk. In order to elicit data systematically, the participants in both languages were asked to narrate the same picture story to a deaf or hearing addressee depending on the language condition. The participants were recorded by two cameras from different angles, as illustrated in Figure 3 below, so that an approximation of a 3-dimensional view was achieved, which facilitated the coding. The recordings were done in various schools or home environments and the consents are given by the adult participants or the parents of participating children.



Figure 3. Combined camera view on the signer

3.4 Data coding and analysis

For the analysis of the data, the narrations of "Balloon Story" elicited from the signers and speakers were coded by using ELAN, a free annotation tool (http://tla.mpi.nl/tools/tla-tools/elan/) for multimedia resources, developed by the Language Archive Group at the Max Planck Institute for Psycholinguistics in Nijmegen, The Netherlands (Wittenburg, Brugman, Russel, Klassmann, & Sloetjes, 2006) (see Figure 4). For each picture story narration, all signs were transcribed with Turkish and English glosses on separate tiers for the left and right hand by a hearing researcher who has knowledge of TİD. These annotations were checked by a deaf TİD signer, as well. A native speaker of Turkish annotated the Turkish narrations by using the same program.

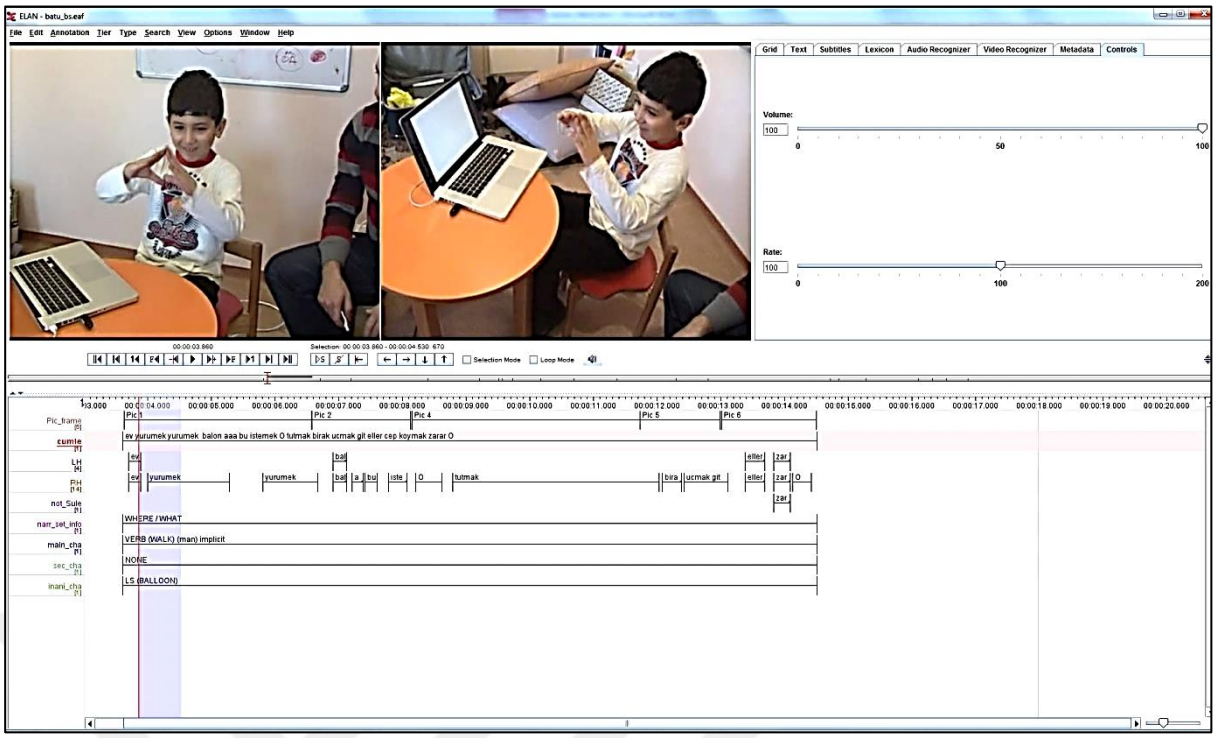


Figure 4. A screen snapshot that shows (TİD) annotations done in ELAN.

In the present study, data were analysed for the presence/absence of each scene-setting element in Turkish and TİD (3.4.1) and how different referents are introduced through event narrations in both languages (3.4.2). I also explored linguistic devices used within explicit first mentions of different referents in Turkish and TİD.

3.4.1 Coding decisions for the analysis of scene-setting

Previous studies with speaking children presented evidence for a clear age-related development in the ability to begin a story with scene-setting information, and only after 9 years old, these children become adult-like and provided "who", "where", "when", and "why" information (Morgan, 2000; Berman, 2001; Rathmann et al., 2007). However, there are no previous studies with signing children in this domain. Thus, the aim of the current analysis of scene-setting elements in Turkish and TİD is to explore linguistic expression of scene-setting in TİD, and compare their

acquisition to those of Turkish. In this way, I aim to understand if and to what extent the modality of language (i.e., visual-spatial versus auditory-vocal) influences the expression of scene-setting elements in event narrations, and if deaf and hearing children are similar to each other in when they learn to use these elements as frequently as adults in both languages.

In order to analyze scene-setting elements, I focused on the narrations of the first picture in the story (see Figure 5). Berman & Slobin (1994) defines "setting" as a part of the story that specifies the characters, the time and the space in which the story occurs. The first picture of the story shows a house with a tree near it, and a street where the boy is walking, Thus, scene-setting elements in this story include "who" (i.e., the boy), "where" (i.e., the house, the tree, and the road), and "what" (i.e., walking) type of information.[6] In the following lines, I define how these three scene-setting elements are mentioned in Turkish and TİD.



Figure 5. The first picture of the "Balloon Story" that includes "who", "where", and "what" type of scene-setting elements.

[6] At the beginning of the "Balloon Story", the events take place at daytime, but since there is no specific reference to it (e.g., the sun), this type of information is not included in the current analysis.

The first picture of the "Balloon Story" shows a boy, and the referral to him is considered to be relating "who" type of information in this analysis. For example, both a 9.5-year-old Turkish speaking girl and a 8.8-year-old deaf child refer to the boy in the first picture of the story to provide this type of information at the beginning of their narrations (see (1a)[7] and (1b)[8] for Turkish and TİD, respectively).

(1a) Bir çocuk yol+da yürü+yor. (girl, 9.5)

One child road+LOC walk+PROG

"A child is walking on the road. Then, she sees a balloonman."

(1b)  (8.8)

LH: BOY $CL(boy)_{walk}$

RH:

"There is a boy. He is walking."

The first picture also depicts a house and a tree near the house in addition to the road where the boy is walking. The referral to any of these three elements (i.e., house, three, road) is accepted as providing "where" type of information. For example, in (1a) above, the Turkish speaking girl encodes "where" information in her sentence by

[7] See Appendix B for the full narration.
[8] See Appendix C for the full narration.

referring to the road (i.e., yol+da - road+LOC). In (1c)[9] below, a 7.10-year-old deaf child refers to the house (1st still) while setting the scene for his narration. However, in (1b) above, the deaf child skips this information for scene-setting in his narration, and does not mention the house, the tree, or the road.

(1c)  (7.10)

LH: HOUSE

RH: HOUSE CHILD GO

"There is a house. There is a child. The child goes."

Finally, the boy is depicted as walking, thus in a kind of action, in this first picture. The referral of the action of the boy is accepted as "what" type of information in the current analysis. Signing and speaking children in the above examples (1a, b, c) all refer to the action of the boy as depicted in the first picture. The Turkish-speaking girl narrates this action by saying "yürü+yor - walk+PROG". In TİD, one of the deaf boys (1b) uses a classifier construction where he shows the walking of the boy by his upside down, extended index and middle fingers that wiggle (his left hand in the 2nd still). The other deaf boy (1c) uses a lexical sign meaning GO to indicate the action of the boy.

[9] See Appendix D for the full narration.

In the analysis of the presence/absence of the scene-setting elements, I counted each referral to any of these elements (i.e., the boy for "who", the house, the tree, the road for "where", and the action of the boy for "what"). Thus, story beginnings such as in (1a) and (1c) receive credit for all three since they include all three types of information. However, beginnings such as in (1b) are analysed as having only "who" and "what" type of information, thus lacking information about "where".

3.4.2 Coding decisions for the analysis of referent introduction

In the current study, I also examined how referents are introduced by children and adults in both languages. This analysis is different from the previous one in the sense that it focuses on three different referents that appear through the story. Thus, this analysis is not restricted to the narrations from the first picture only. Following the Küntay (2002) study, the referents of the "Balloon Story" include the boy, the balloonman, and the balloon for the current analysis. These referents appear at different points in the story; the boy appears in the first picture and the balloonman in the second picture. It is possible to say that "the balloon", the inanimate referent, appears in the second or the third picture as the first time since the balloons in the second picture actually refer to the role of the man as "the balloonman", thus may not be salient as a third referent for the participants. However, the balloon given to the boy in the third picture obviously adds more than the role of the secondary character (i.e., the balloonman). Therefore, I focused on the referral of "the balloon" as the first time whether it is expressed for the second or the third picture (see Figure 6).

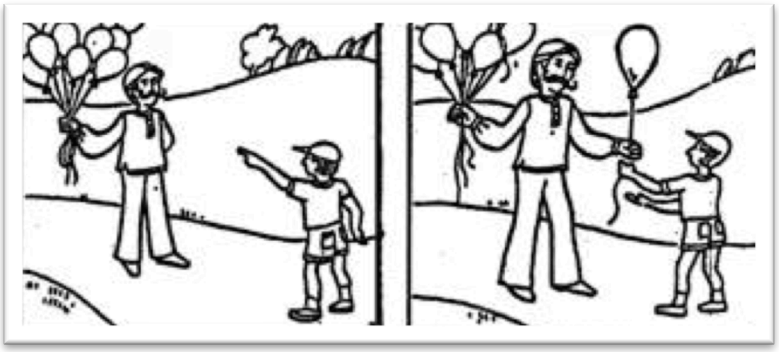


Figure 6. The second and the third pictures of the Balloon Story.

The focus of this analysis is on whether the referents in the Balloon Story (i.e., the boy, the balloonman, the balloon) are introduced through linguistic devices that make explicit reference to them. So, in this sense, it differs from the previous studies that focus on the use of linguistic devices for the (in)definiteness of the referents since there is not much consensus about a possible determiner system in sign languages (see Sandler & Lillo-Martin, 2006), and there is no previous research investigating this domain for TİD. Therefore, in this study, I take a general perspective and analyse the explicitness in the mention of the referents during the narrations. However, an analysis of how frequently different types of linguistic structures are used in Turkish and TİD is provided in Chapter 4.

I follow the principle of quantity for topic continuity (Givon, 1984) which proposes the use of full noun phrases while introducing a referent into discourse for the first time ("a woman" in (2)); use of pronominal forms for the referents which are accessible for the addressee (because they are previously mentioned as in "she" in (2)); and use of zero forms when the speakers think the referent will be understood by the addressee immediately because enough information about it has been given, as in "taken to the hospital" in (2) below. The important point here is that more linguistic marking (as in noun phrases) is required when the referent is new or less

accessible. Therefore, in this study, the forms such as pronouns and zero markings are considered to be implicit ways of referring to the referents in Turkish.

(2) Yesterday, a woman came to the hospital. She had a terrible pain in her stomach, and was taken to the surgery immediately.

In this current analysis, explicitness refers to the use of full noun phrases in Turkish and using lexical signs in TİD. In the following lines, I will introduce examples from both languages for the explicit reference to each of these three referents. In Turkish, the explicit referral to the boy is realized by using a full noun phrase (e.g., "bir çocuk - one child" as in (1a)). The cases where the speakers used a noun without a determiner are also accepted as an explicit reference (e.g., "çocuk - child"). In (1b and 1c), both deaf children introduce the boy by lexical signs, thus making an explicit reference to him in their narrations. If, for example, a Turkish speaker introduces the boy with a pronoun (e.g., "O - he" in (3a)), then I would consider this linguistic marking to be implicit since it can refer to the boy or the balloonman. Similarly, in (3b),[10] an adult TİD signer refers to the boy in the classifier predicate that also refers to the action of the boy (his right hand in the 2nd still). In sign languages, it is possible to encode different types of information (e.g., agent and action) in these constructions, thus signers sometimes directly refer to the characters or entities in their classifiers without mentioning them previously by lexical signs.

(3a) O ev+den çık+ıyor.
S/he house+ABL leave+PROG
"S/he is leaving the house."

[10] See Appendix E for the full narration.

(3b) 

LH: HOUSE

RH: HOUSE $CL(boy)_{walk}$

"There is a house. [Someone] is walking."

Similarly, explicit reference to the balloonman and the balloon that appear in the second and the third pictures of the story includes the use of noun phrases. In (4a)[11] below, a 8.7-year-old Turkish speaking girl uses full noun phrases to introduce the balloonman and the balloon to introduce them for the first time.

(4a) [...] bir baloncu gör+üyor. Baloncu+dan balon isti+yor. (girl, 8.7)

[...] one balloonman see+PROG. Balloonman+ABL balloon want+PROG

"[he] sees a balloonman. [He] wants a balloon from the balloonman."

In (4b)[12], 7.10-year-old deaf girl introduces the balloonman (1st still) and the balloon (2nd still) by using their lexical signs.

[11] See Appendix F for the full narration.
[12] See Appendix G for the full narration.

(4b) [....]  (7.10)

LH: BALLOONMAN BALLOON

RH: BALLOONMAN BALLOON

"There is a balloonman. There is a balloon."

In some cases, speakers and signers used implicit ways of referring to the balloonman and the balloon. In (4c)[13], a 5.4-year-old Turkish speaking boy refers to the action of the balloonman by using a verb that does not include a person marking. In Turkish, when verbs do not include any person marking, then the interpretation is third person singular. In this case, use of such a verb actually refers to the balloonman in an implicit way.

(4c) [...] Bi(r) tane balon dağıt+ıyor. (boy, 5.4)

[…] One item balloon deliver+PROG

"[…] [Someone] is delivering a balloon."

Such implicit way of marking the balloonman and/or the balloon is also possible in TİD. For example, in (4d)[14] below, a 8.8-year-old deaf boy is using a classifier predicate in which someone is holding something. Since he does not explicitly

[13] See Appendix H for the full narration.
[14] See Appendix C for the full narration.

mention the balloonman and the balloon, the information about "who is holding what" is not clearly presented in his narration. Although unclearly, he still provides information about the balloonman and the balloon, and does not skip this information. His description of balloonman is different than the one by the deaf girl in (4b), where she refers to him by using a lexical sign for MAN and holding something (1st still). She also refers to the balloon by its lexical sign in TİD (2nd still). However, in (4d), although the deaf boy depicts someone holding something, since he is not using any lexical signs, his description is analysed to be an implicit way of referring to the balloonman and the balloon, as well.

(4d) [...]  (8.8)

LH: CL(balloon)$_{hold}$

RH:

"[Someone] is holding [something]."

One could argue that the boy in example (4d) above is also using a CA (constructed action) since he seems to take the role of someone who is holding something (most probably a balloon in this case). Since there is still no explicit referral to the balloonman and the balloon, such constructions were also considered to be implicit way of referring to the referents. It is possible to argue that the boy is using a classifier predicate (i.e., handling classifier for the balloon) and constructed action

for the balloonman at the same time. The current analysis focuses on manual linguistic forms. Therefore, it does not include the ones such as CA, in which the whole body of the signer is engaged. While reporting the language forms used in explicit and implicit referrals (see Chapter 4), I included only the manual linguistic forms (e.g., classifier predicates, pointing, lexical signs).

Following the decisions for coding and analysing how scene-setting elements are used and how referents are introduced in TİD and Turkish, I checked the narrations for the frequency of using scene-setting elements and explicit mention of the referents. Below I present the results of these analyses.

CHAPTER 4

RESULTS

4.1 Introduction

In order to see how different age groups of children learn to produce different types of scene-setting information (e.g., who, where, what) and introduce referents during narrating events in a sign (i.e., Turkish Sign Language [TİD]) and a spoken (i.e., Turkish) language, narrations elicited from children and adults were analysed for the presence/absence of the scene-setting elements and how explicitly the referents are introduced in each language. Before the statistical analyses were performed, arcsine transformations were applied to all the data since mean proportions of different types of descriptions from all relevant descriptions were used as the dependent measures. However, the mean proportions and standard errors reported in the graphs reflect the untransformed data. Corrections in the degrees of freedom were also made whenever the sphericity assumption was violated for repeated-measures ANOVA analyses.

I present the results of the first analysis (i.e., the presence/absence of the scene-setting elements) in (4.2), and proceed with (4.3) where the results of the second analysis (i.e., how explicitly the referents are introduced) are provided. In this analysis, I also explore the linguistic devices used for explicit referral to the referents so that more thorough understanding on how TİD signers and Turkish speakers explicitly refer to the different referents through a narration, and if signing and speaking children present similar tendencies with the adults in each language. Since the linguistic devices between languages are very different from each other, the comparisons of the linguistic devices are conducted within languages, rather than across, to see if and when children reach the target patterns in each language.

4.2 The presence/absence of the scene-setting elements in Turkish and TİD

This analysis is restricted to the narrations elicited from the first picture of the story that shows a house with a tree near it, and a street where the boy is walking, Thus, scene-setting elements in this story include "who" (i.e., the boy), "where" (i.e., the house, the tree, and the road), and "what" (i.e., walking) type of information. First, I analysed all the narrations of the first picture of the Balloon Story by each age group in Turkish and TİD, and calculated how many of them included any of these three scene-setting elements.

Subject-based mean proportions of expressing different scene-setting elements in the first picture were calculated out of subject-based mean proportions of the narrations of the first picture in TİD and Turkish as the dependent measure. A 3 (Between subjects; age; adult, older children, younger children) by 2 (Between subject; language; Turkish, TİD) by 3 (Within subjects; scene-setting type; who, where, what) mixed ANOVA yielded a main effect of age, $F(2,180)=6.39$, $p=.002$, $\eta_p^2=.07$, but no main effect for language, $F(1,180)=3.85$, $p=.05$, $\eta_p^2=.02$ and scene-setting type, $F(2,180)=2.58$, $p=.08$, $\eta_p^2=.03$. There were no two-way interactions between age and language, $F(2,180)=.22$, $p=.80$, $\eta_p^2=.003$; age and scene-setting type, $F(4,180)=.53$, $p=.72$, $\eta_p^2=.01$; and language and scene-setting type, $F(2,180)=.99$, $p=.38$, $\eta_p^2=.01$. Finally, there was no three-way interaction between the variables, $F(4,180)=1.22$, $p=.30$, $\eta_p^2=.03$. Follow-up analyses for the effect of age (Bonferroni) revealed that younger children expressed scene-setting elements less frequently than adults ($p=.002$), but as frequently as older children ($p=.05$). Older children, on the other hand, mentioned them as frequently as adults ($p=.83$). Since there was no main effect of language and scene-setting type, it can be concluded that

younger children in both languages have not become adult-like in how likely they express three types of scene-setting elements at the beginning of their narrations (see Figure 7 for Turkish and Figure 8 for TİD results).

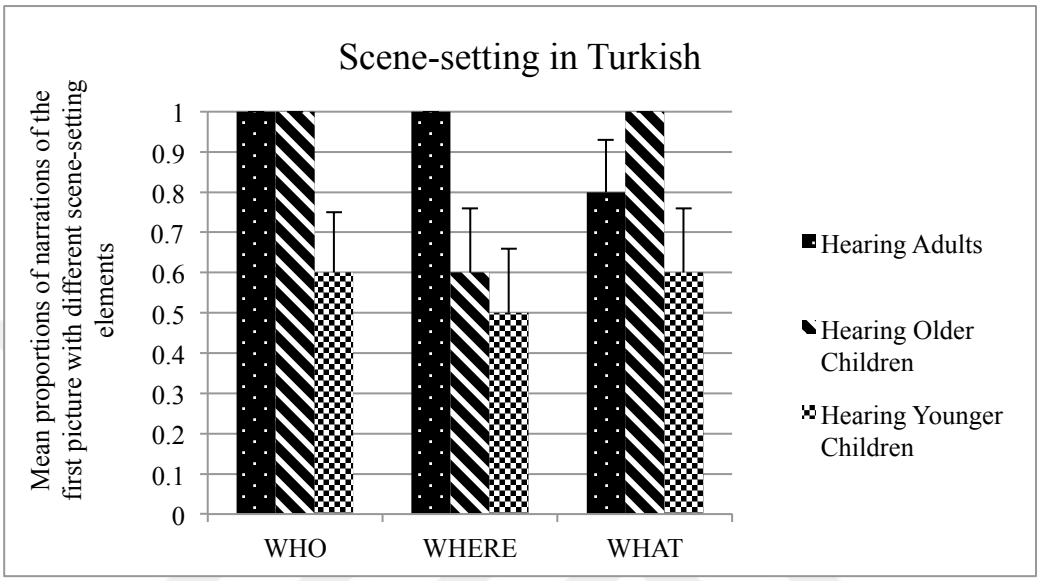


Figure 7. Mean proportions and error bars (representing SE) of narrations of the first picture with different scene-setting elements in Turkish.

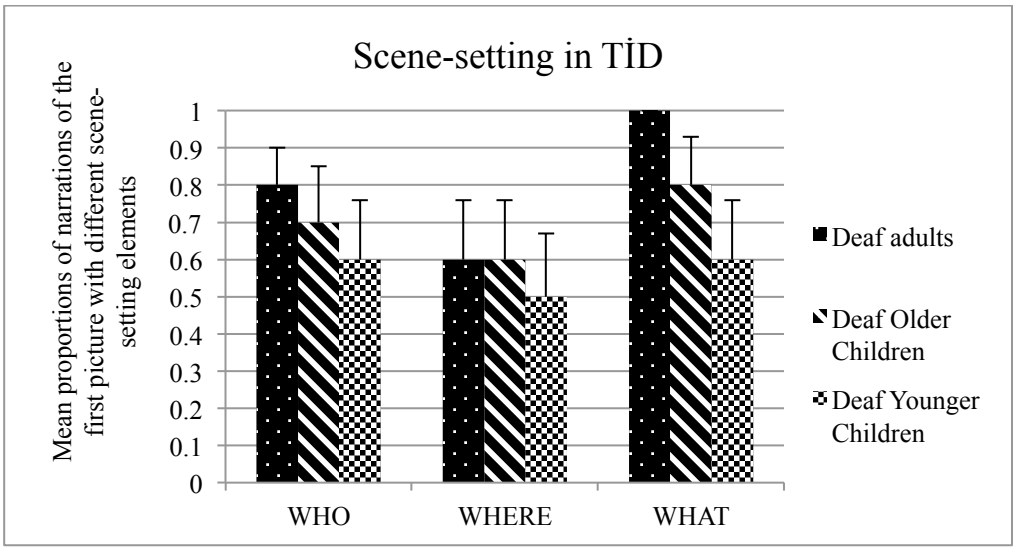


Figure 8. Mean proportions and error bars (representing SE) of narrations of the first picture with different scene-setting elements in TİD.

4.3 How explicitly the referents are introduced in Turkish and TİD narrations

For this analysis, I analysed all the linguistic forms through which three referents (i.e., boy, balloonman, balloon) are first introduced, and calculated how many of them are explicit referrals. As explained in Chapter 3, explicitness refers to the use of full noun phrases in Turkish and using lexical signs in TİD.

Subject-based mean proportions of the explicit first mentions of three different referents (i.e., boy, balloonman, balloon) were calculated out of subject-based mean proportions of all first mentions of these three different referents as the dependent measure. A 3 (Between subjects; age; adult, older children, younger children) by 2 (Between subjects; language; Turkish, TİD) by 3 (Within subjects; referent type; the boy, the balloonman, the balloon) mixed ANOVA showed a main effect of language, $F(1,180)=22.87$, $p<.00$, $\eta_p^2=.12$, and referent type, $F(2,180)=.22$, $p=.04$, $\eta_p^2=.11$, but not for age, $F(2,180)=1.46$, $p=.24$, $\eta_p^2=.02$. There were no two-

way interactions between age and language, $F(2,180)=.44$, $p=.65$, $\eta_p^2=.005$; age and referent type, $F(4,180)=1.66$, $p=.16$, $\eta_p^2=.04$; and language and referent type, $F(2,180)=.14$, $p=.87$, $\eta_p^2= .002$. Finally, there was no three-way interaction between the variables, $F(4,180)=1.15$, $p=.36$, $\eta_p^2=.03$. As a result of the follow-up analyses (Bonferroni) for the main effect of referent type, I observed that the expression of the balloonman elicited significantly less explicit forms than the expression of the boy ($p=.001$) and the balloon ($p<.00$). However, there was no such difference between the balloon and the boy ($p=1.00$). The main effect of language shows that referent introductions in Turkish narrations elicited more explicit referrals to these referents than the narrations produced in TİD. Lack of main effect for age indicates that Turkish- and TİD-acquiring children explicitly referred to these referents as frequently as adults, thus they have reached adult-patterns in this respect (see Figure 9 for Turkish and Figure 10 for TİD results).

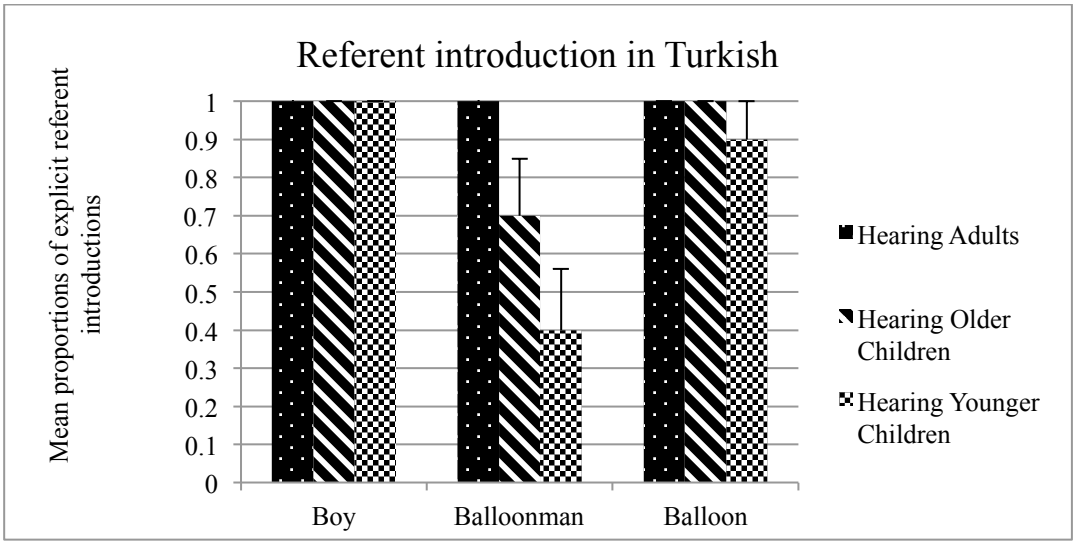


Figure 9. Mean proportions and error bars (representing SE) of explicit referent introductions in Turkish.

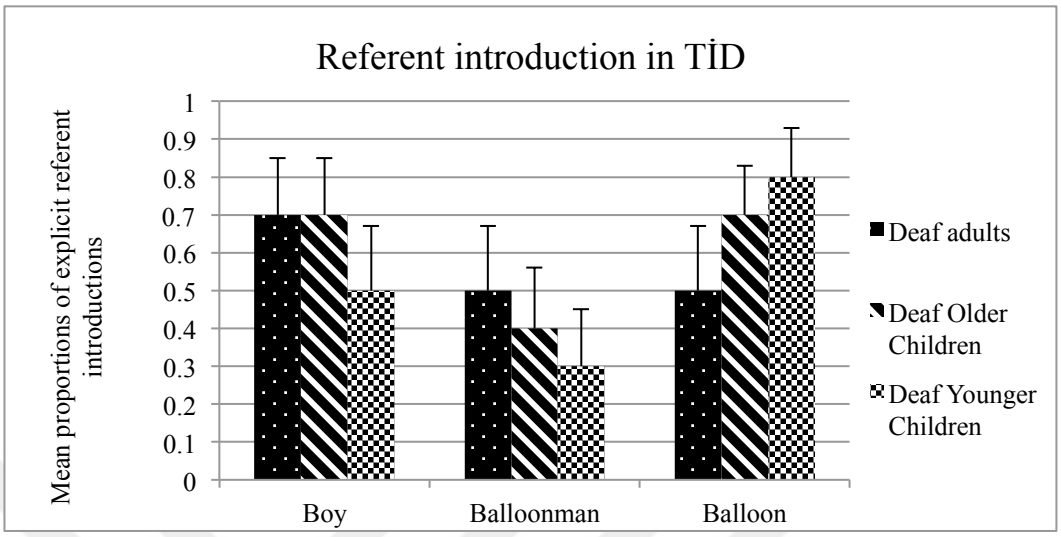


Figure 10. Mean proportions and error bars (representing SE) of explicit referent introductions in TİD.

The analyses presented above show the frequency of the explicit referent introductions by three different age groups in Turkish and TİD. In the following lines, I also provide an analysis of how frequently different types of language forms are used within the explicit first mentions of the boy, the balloonman, and the balloon by Turkish speakers and TİD signers. Since the number of the tokens in each category of language forms is small, no statistical tests were performed, but only the tendencies are presented. Please note that the following analyses have been conducted on the cases where signers and speakers explicitly referred to the boy, the balloonman, and the balloon for the first time. Thus, this analysis excludes the first mentions of these referents in language forms, which were coded to be as implicit ones (e.g., referring to them in classifier predicates for the first time – without first producing their lexical signs in TİD, or referring to them in verb phrases with pronouns or zero forms in Turkish) (see Chapter 3 for coding decisions).

In Turkish, when adult speakers introduce the boy for the first time, they use indefinite NP (e.g., bir çocuk - one/a child; 60% out of all explicit referrals to the boy) or bare NP (e.g., çocuk - child; 40% out of all explicit referrals to the boy). They use these forms for the first mention of the balloonman, as well – although with slightly different percentages: "bir baloncu - one/a balloon" (40% out of all explicit referrals to the balloonman) and "baloncu - balloonman" (60% out of all explicit referrals to the balloonman). Finally, they mostly use an indefinite NP to introduce the balloon for the first time: "bir balon - one/a balloon" (70% out of all explicit referrals to the balloon) and "balon - balloon" (30% out of all explicit referrals to the balloon).

Turkish-acquiring children in school-age group (7.2 – 9.11) present similar tendencies with adults in introducing the boy: They used indefinite NPs (40% out of all explicit referrals to the boy) and bare NPs (60% out of all explicit referrals to the boy). For the introduction of the balloonman, however, they mostly preferred bare NPs (75% out of all explicit referrals to the balloonman) and sometimes indefinite NPs (25% out of all explicit referrals to the balloonman). While introducing the balloon, they used bare NPs (80% out of all explicit referrals to the balloon), instead of indefinite NPs (20% out of all explicit referrals to the balloon) most of the time.

The patterns observed in the narrations elicited from the preschool-age Turkish-acquiring children (3.8 – 6.8) indicated a different pattern than those of adults and school-age children. Almost all of the children at this age used bare NPs to introduce the boy (90% out of all explicit referrals to the boy); only one child used a deictic expression together with the NP (i.e., bu çocuk - this child). As to the first mention of the balloonman, they again mostly used bare NPs (75% out of all explicit referrals to the balloonman) rather than an indefinite NP (25% out of all explicit

referrals to the balloonman). Similar pattern holds true for the first mention of the balloon: They mostly preferred bare NPs (90% of of all explicit referrals to the balloon) rather than indefinite NPs (10% out of all explicit referrals to the balloon).

In TİD, when adult signers explicitly mentioned the boy for the first time, they mostly used bare NPs (i.e., lexical signs not accompanied with anything else such as a numeral or pointing sign) (70% out of all explicit referrals to the boy). They also used a lexical sign combined with numeral "bir çocuk - one child" (15% out of all explicit referrals to the boy) and a lexical sign combined with an index pointing, which is interpreted as "bu çocuk - this child" (15% out of all explicit referrals to the boy). For explicitly mentioning the balloonman and the balloon for the first time, they always preferred bare NPs.

School-age TİD-acquiring children (7.2 – 9.10) mostly used bare NPs to explicitly refer to the boy for the first time (85% out of all explicit referrals to the boy), and sometimes an NP preceded by a numeral (i.e., bir çocuk - one child) (15% out of all explicit referrals to the boy). While explicitly introducing the balloonman for the first time, they preferred bare NPs (60% out of all explicit referrals to the balloonman) and NPs preceded by a pointing sign (40% out of all explicit referrals to the balloonman). For the explicit introduction of the balloon, they mostly preferred bare NPs (70% out of all explicit referrals to the balloon), and sometimes NPs preceded by a numeral (15% out of all explicit referrals to the balloon) or a pointing sing (15% out of all explicit referrals to the balloon).

Finally, preschool-age TİD-acquiring children (3.5 – 6.10) always used bare NPs to explicitly introduce the boy and the balloonman for the first time. For the first explicit mention of the balloon, it was mostly the case that they preferred bare NPs

(85% out of all explicit referrals to the balloon), and sometimes an NP preceded by a pointing sign (15% out of all explicit referrals to the balloon).

CHAPTER 5

CONCLUSION

5.1 Introduction

This chapter first summarizes and discusses the findings of the current study (5.2), and then states the conclusions drawn from these findings (5.3). Finally, I present the possible pedagogical implications in (5.4), and mention the limitations and make suggestions for the further research in (5.5).

5.2 Summary and discussion

In this study, I investigated learning to set the scene and introduce referents while narrating events by children (3.5 – 9.11 years) who acquire Turkish Sign Language (Türk İşaret Dili [TİD]) and Turkish. Direct comparisons were made between the patterns observed in children narrations and those of adults in both languages. The main research question is about whether there are modality effects on learning these specific discourse skills in a sign and a spoken language. The results of the analyses for the presence/absence of scene-setting elements (i.e., who, where, what) indicated that deaf children who acquire TİD and hearing children who acquire Turkish show similar developmental patterns. Younger children in both languages used the scene-setting elements less frequently than adults and older children at the beginning of their narrations. On the other hand, both deaf and hearing older children are adult-like in how likely they express these elements. Furthermore, these elements are mentioned for the first picture of the story in similar amount in Turkish and TİD, and the elements also received similar amount of mentioning (i.e., one of them was not mentioned more frequently than the others). As to how explicitly referents were

introduced in both languages, both age groups of children in each language were similar to adults in how frequently they used linguistic forms that make explicit referral to the referents (i.e., the boy, the balloonman, the balloon). However, narrations in TİD included fewer linguistic forms with explicit referral than the narrations in Turkish. Finally, "the balloonman", in general, were introduced with fewer linguistic forms that make explicit reference to it than "the boy" and "the balloon".

The analyses about the presence/absence of scene-setting elements in Turkish and TİD confirm the results of the previous studies that show that the younger the children are, the less information they provide to set the scene in their narratives (Peterson, 1990; Umiker-Sebeok, 1979; Peterson & McCabe, 1983; Berman, 2001). Obviously, the visual-spatial modality of a sign language does not have a facilitating or hindering role in learning to set the scene at the beginning of narrations. Thus, although Berman & Slobin (1994) suggest translating events presented usually in spatial-visual form (e.g., picture stories) into sequential segments of verbal output as a particular kind of cognitive demand that slows the development of narrative skills in spoken languages, the results of the current study indicate that acquiring a visual-spatial language does not ease this process. So, there seems to be no effect of modality in learning to use scene-setting elements. This conclusion is also consolidated by the results showing no difference between TİD and Turkish in how frequently these elements are used at the beginning of the narrations. Thus, regardless of the modality, language users mentioned them "who", "where", and "what" type of information in similar amounts.

The results about how explicitly different referents are introduced show that even younger children (3.5 – 6.10 years) were able to use linguistic forms that make

explicit reference to the different referents in the story (i.e., the boy, the balloonman, the balloon). At the first glance, this seems to be contradictory with the results of the previous studies that show a protracted developmental trajectory in learning appropriate introduction of referents for the listener (Karmiloff-Smith, 1979; 1981; Hickmann, 1980; 1982, 1995; Bavin, 1987; Bamberg, 1986; Wigglesworth, 1990; Clancy, 1992; Kail & Hickmann, 1992; Dasinger, 1995; Hickmann et al., 1996; Nakamura, 1993; Küntay, 2002). However, these studies focus on the acquisition of linguistic devices that mark (in)definiteness for the referents in spoken languages. Indeed, the analysis of language forms used in explicit first mentions of the referents in the story revealed similar findings with those of Küntay (2002) who reported inappropriate uses of deictic forms until the age of 7 years and a gradual movement away from the use of bare noun phrases toward explicit indefinite marking with increasing age. The results of her study show that Turkish adult speakers use mostly indefinite and bare noun phrases to introduce the main character of a picture-book story. Turkish children, on the other hand, mostly prefer to use bare noun phrases for the same purpose until the age of 7.

The fact that TİD narrations elicited fewer linguistic forms with explicit reference to the boy, the balloonman, and the balloon than Turkish might be related to the use of classifier predicates that enable the encoding of the referents in them without prior mentioning. Although it is possible to indicate third person singular information with zero marking on the verb in Turkish, such forms were not frequent in the current Turkish data, which mostly included the explicit mentioning of the referents by their nouns. This might be the result of a typological or modality difference between Turkish and TİD. It is also important to note that similar results were observed in ASL, NZSL, and Auslan, where researchers found less use of overt

subject noun phrases (Wulf et al., 2002; McKee et al., 2011). Therefore, this might be a general feature of sign languages.

There is little research about how sign languages mark (in)definiteness, and the existing ones offer different views on this issue, and are confined to ASL (see Sandler & Lillo-Martin, 2006). The current study is the first attempt to explore TİD in this domain. The findings indicate that adult signers of TİD mostly use lexical signs which are not accompanied by anything else (e.g., pointing signs or numerals). It seems that signing children who acquire TİD are also adult-like, although they sometimes used more pointing signs and numerals that precede the lexical signs for the referents.

The result showing that the introduction of "the balloonman" received fewer linguistic forms with explicit reference to it. This might be related to the picture where it first appears (i.e., 2nd picture). In this picture, in addition to the balloonman, the balloon(s) also come up for the first time, and it might have affected the results. It is possible that participants paid more attention to the balloon rather than the balloonman, and referred to him by a pronoun or a zero marking on the verb. Moreover, when the balloonman appears again in the third picture, he is depicted as giving a balloon to the boy. As has been hypothesized for sign languages before, directional verbs such as GIVE in sign languages should occur with explicit mention of a subject NP (e.g., Lillo-Martin, 1986). However, this was not the case in my data, and the balloonman received the least explicit mention among other referents (i.e., boy, balloonman). Similar "contrasting" evidence were also reported from ASL, NZSL, and Auslan, as well (Wulf et al., 2002; McKee et al., 2011).

5.3 Conclusion

To conclude, this is the first study that investigates the development of narrative skills in the domain of scene-setting and referent introduction in picture-story narrations through direct comparisons of narrations in a sign (i.e., TİD) and a spoken language (i.e., Turkish). The results of this study contribute to our knowledge about how children "start" narrating events by also considering a possible effect of modality (i.e., visual-spatial). The results do not indicate any hindering or facilitating effect of modality in learning to set the scene and introduce the referents in narrating events. In both languages, signing and speaking children achieved target forms (i.e., adult-patterns) in similar ages. The results of the current study are also in line with the ones found for English- and BSL-acquiring children (Morgan, 2000). Thus, it seems that acquisition of narrative skills for the specific domains of scene-setting and referent introduction follows a universal pattern across languages and across modalities.

5.4 Pedagogical implications

As stated at the beginning of the current thesis, acquiring a language means much more than learning the individual words and knowing the rules to form sentences. Analysing language structures at discourse level presents insight on different areas such as linguistic and pragmatic knowledge and the effect of cognitive abilities. This study aims at investigating the domain of linguistic devices used by Turkish-speaking and TİD-signing children. Knowledge about how children develop adult-like skills in narrating events provides useful insights developing/modifying classroom activities and educational materials targeted young learners. The results related to scene-setting have shown that young children, regardless of the language

that they acquire, tend to provide information about "where" slightly less than "who" and "what" type of information – although they do not statistically differ from the adults and older children. Having such knowledge can give an idea to language teachers about what kind of information is more salient to young children while learning to narrate events. Additionally, the results on the referent introduction have revealed that children may possess the linguistic competence of how to introduce referents by using full noun phrases, but may not disclose their competence for every type of referent since the participants used full noun phrases less frequently for the secondary animate characters (i.e., balloonman) in the story. Therefore, teachers should be aware of the distribution preferences of young children in learning to use linguistic forms to introduce different referents in their narrations. These results are not specific to Turkish-acquiring children only, but the data, collected from TİD-acquiring children by using the same materials, consolidate the generalizability of the results across languages and across modalities.

5.5 Limitations and suggestions for further research

The results of the current study should be evaluated in the context of picture-story narration. However, elicitation task and the context may cause different results (Berman, 2001). Similarly, Küntay (1999) highlights the fact that narrative skills for different types of narrations may show different developmental patterns, and the current study sets the first step in tracking these developmental patterns in two modalities for the picture-story narrations. Further research should look into other narrations types for these languages, as well.

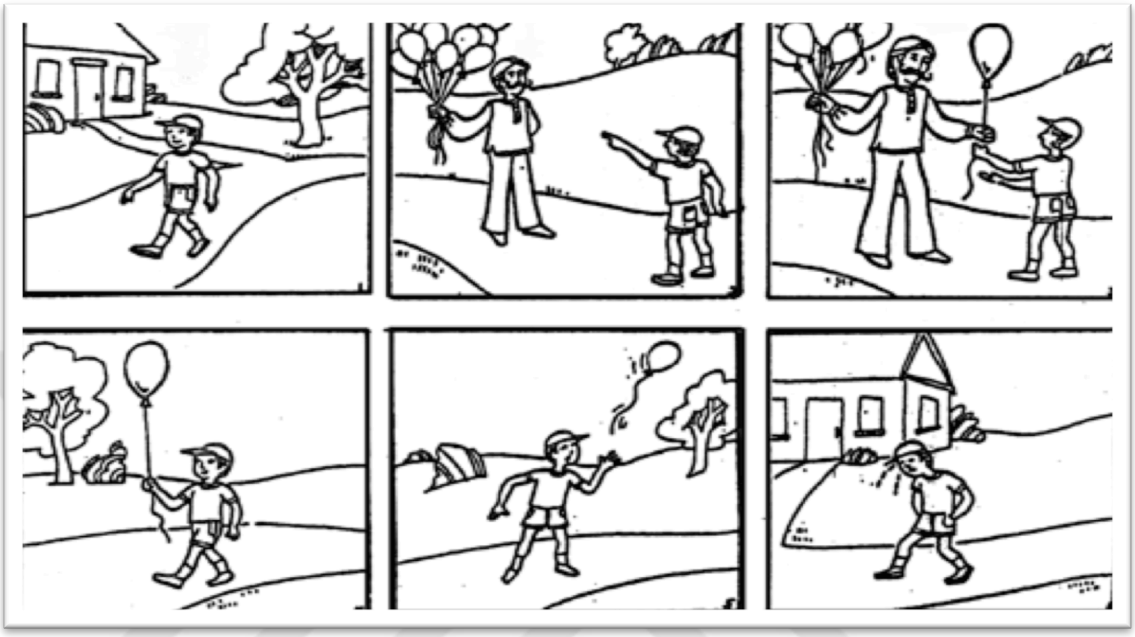
The current study seems to have a small number of participants. However, many deaf children are born into hearing parents; therefore they are not exposed to

TİD until they are 7 years or even later. This study, on the other hand, includes deaf children who acquire TİD since birth from their deaf parents. Since it is difficult to find deaf children with deaf parents, the group sizes had to be rather small.

Further research is needed for other types of narrations such as personal experience to have a full picture about the development of these skills in spoken and sign languages. Moreover, the acquisition of different of narrative skills (e.g., referent maintenance or referent re-introduction) needs also to be studied for the advancement of the current knowledge.

APPENDIX A

STIMULUS MATERIAL



The picture story, "Balloon story" (Karmiloff-Smith, 1981), that was used as the elicitation tasks in the current study.

APPENDIX B

THE WHOLE TRANSCRIPTION OF A NARRATIVE IN TURKISH

Turkish-acquiring girl aged 9.5.

Bir çocuk yolda yürüyor. Sonra baloncu görüyor. Baloncudan balon istiyor. Baloncu da balonu veriyor ona. Sonra, çocuk balonu elinde götürüyor. Sonra balonu kaçırıyor ve üzgün üzgün yolda yürüyor.

English translation:

A child is walking on the road. Then, he sees a balloonman. He wants a balloon from the balloonman. The balloonman gives the balloon to him. Then, the child carries the balloon in his hand. Then, the balloon flies off, and the child walks sadly on the road.

APPENDIX C

THE WHOLE TRANSCRIPTION OF A NARRATIVE IN TİD

TİD-acquiring boy aged 8.8.



LH: BOY $CL(boy)_{walk}$
RH: SEE

"There is a boy. He is walking. He sees [someone/something]."



LH: $CL(ballon)_{hold}$ $CL(ballon)_{hold}$ TAKE
RH: $CL(ballon)_{hold}$ TAKE

"[Someone] is holding [something]. [Someone] is taking [something]."



LH: CA_{boy} CRY $CL(boy)_{walk}$
RH: CA_{boy}

"The balloon flies off. He is crying and walking."

APPENDIX D

THE WHOLE TRANSCRIPTION OF A NARRATIVE IN TİD

TİD-acquiring boy aged 7.10.



LH: HOUSE
RH: HOUSE CHILD GO

"There is a house. There is a child. The child goes."



LH: BALLOON
RH: CHILD MAN ONE BALLOON GIVE

"The man gives one balloon to the child."



LH: $CL(balloon)_{hold}$ CA_{child}
RH: HOW_MUCH GIVE IX_I CA_{child} CRY

"The child asks how much and gives [money] to the man. I (as the child) am walking with the balloon. The balloon flies off, and I cry."

APPENDIX E

THE WHOLE TRANSCRIPTION OF A NARRATIVE IN TİD

Adult TİD signer



LH: HOUSE
RH: HOUSE $CL(boy)_{walk}$ BALLOONMAN BALLOON

"There is a house. [Someone] is walking. There is a balloonman. There is a balloon."



LH:
RH: BOY WANT GIVE TAKE

"There is a boy. He wants [something]. [Someone] gives [something]. [Someone] takes [something]."



LH:
RH: BOY ALONE $CL(boy)_{walk}$ $CL(balloon)_{hold}$ GO_UP

"The boy walks alone. While he is walking and holding the balloon, the balloon flies off."



LH:
RH: SAD BOY CRY $CL(boy)_{walk}$

"The boy becomes sad and cries. He walks away."

APPENDIX F

THE WHOLE TRANSCRIPTION OF A NARRATIVE IN TURKISH

Turkish-acquiring girl aged 8.7.

Şimdi bi(r) tane çocuk evden çıkıyo(r). Sonra yolda yürürken bi(r) tane baloncu görüyo(r). Baloncudan balon istiyo(r). Baloncu da veriyo(r). Sonra evine gidiyo(r). Giderken balonunu elinden kaçırıyo(r) ve çok üzülüyo(r).

English translation:

Now a child is leaving house. Then, while walking on the road, he sees one balloonman. H wants balloon from the balloonman. The balloonman gives [a balloon]. Then, he goes to his house. While going, the balloon flies off from his hand, and he gets very sad.

APPENDIX G

THE WHOLE TRANSCRIPTION OF A NARRATIVE IN TİD

TİD-acquiring girl aged 7.10.



LH: BALLOONMAN BALLOON
RH: BOY $CL(boy)_{walk}$ BALLOONMAN BALLOON $CL(balloon)_{give}$

"There is a boy. He is walking. There is a balloonman. There is a balloon. Balloonman is giving a balloon to the boy."



LH: BALLOON CA_{boy}
RH: BOY BALLOON $CL(balloon)_{hold}$ GO_UP CA_{boy}

"There is a boy. There is a balloon. The boy is holding the balloon. The balloon flies off. The boy gets surprised."



LH: CA_{boy} ----------HOLD----------
RH: BOY CA_{boy} $CL(boy)_{walk}$

"The boy gets sad and walks away."

APPENDIX H

THE WHOLE TRANSCRIPTION OF A NARRATIVE IN TURKISH

Turkish-acquiring boy aged 5.4.

Çocuk eve koşuyo(r). Ağaç orda, ev orda. Bi(r) tane balon dağıtıyo(r). Alıyo(r). Çocuk eve gidiyo(r). Sonra çocuk üflüyo(r). Çocuk böyle balonu alıp, yürüyüp bi(r) yere gidiyo(r). Sonra balon birdenbire uçmaya başlıyo(r).

English translation:

Child runs to house. Tree is there. House is there. [Someone] is delivering a balloon. [Someone] takes [something]. Child goes home. Then, he whiffles. Child takes the balloon like this, and walks to somewhere. Then, the balloon suddenly starts to fly.

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