

Current Directions in Turkish Sign Language Research

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in Turkish Sign Language Research

Edited by

Engin Arik

CAMBRIDGE
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P U B L I S H I N G

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TABLE OF CONTENTS

List of Figures.....	vii
List of Tables.....	xi
Abbreviations	xiii
Contributors.....	xvii
Chapter One.....	1
Introduction: Previous and Current Research on Turkish Sign Language (TİD)	
Engin Arık	
Chapter Two	19
Communicative Practices of Deaf People in Turkey and the Sociolinguistics of Turkish Sign Language	
Deniz İlkbaşaran	
Chapter Three.....	55
Documenting Turkish Sign Language (TİD): A Report on a Research Project	
A. Sumru Özsoy, Engin Arık, Aslı Göksel, Meltem Keleş and Derya Nuhbalaoğlu	
Chapter Four.....	71
Hand Reversal and Assimilation in TİD Lexicalized Fingerspelling	
Süleyman S. Taşçı	
Chapter Five	101
The Phonology and Phonetics of Reciprocals in Turkish Sign Language (TİD)	
Okan Kubus and Annette Hohenberger	

Chapter Six	143
Interrogatives in Turkish Sign Language (TİD): The Role of Eyebrows	
Bahtiyar Makaroğlu	
Chapter Seven.....	167
Wh-movement in Turkish Sign Language	
Selçuk İşsever and Bahtiyar Makaroğlu	
Chapter Eight.....	191
Aspects of Reported Utterances in Turkish Sign Language	
Meltem Kelepir and Aslı Göksel	
Chapter Nine.....	219
Expressions of Space in Turkish Sign Language	
Engin Arık	
Chapter Ten	243
Acquisition of Locative Expressions in Children Learning Turkish Sign	
Language (TİD) and Turkish	
Beyza Sümer, Inge Zwitterlood, Pamela Perniss and Aslı Özyürek	
Chapter Eleven	273
Expression of Multiple Entities in Turkish Sign Language (TİD)	
Inge Zwitterlood, Pamela Perniss and Aslı Özyürek	
Subject Index	303

LIST OF FIGURES

Fig. 1-1 A total number of studies on TİD, by year.....	2
Fig. 2-1 Distribution of deaf students in deaf elementary schools by city 2005-06	31
Fig. 2-2 TİD variants of ‘MSN’ and ‘Facebook’	36
Fig. 2-3 TİFALDİ comprehension total accuracy for TİD and Turkish. ..	42
Fig. 2-4 TİFALDİ comprehension total accuracy by age normed lexical items.....	43
Fig. 3-1 A view from the sign language studio: Boğaziçi University Linguistics Laboratory.....	61
Fig. 3-2 Some frames from recording sessions.....	62
Fig. 4-1 TİD manual alphabet.....	72
Fig. 4-2 One-handed letters in the TİD manual alphabet.....	78
Fig. 4-3 Hand reversal in the letters L and V.....	79
Fig. 4-4 A sample representation of a sign in the Hand-Tier model.....	81
Fig. 4-5 Sequential form of ÇEKET= C^COAT ‘jacket’.....	82
Fig. 4-6 FAINT in ASL (Adapted from Sandler & Lillo-Martin, 2006; p. 155).....	86
Fig. 4-7 PSİKOLOJİ ‘psychology’	88
Fig. 5-1 Signing space (Steinbach, 2007, p. 154).....	102
Fig. 5-2 The reciprocal form ${}_x^x\text{HELFL}_y^y\text{HELFL}_x^x$ (Pfau & Steinbach, 2003, p. 13, Fig 5).....	109
Fig. 5-3 The reciprocal form ${}_x^y\text{GEB}_y^x$ (Pfau & Steinbach, 2003, p. 18, Fig. 7).....	110
Fig. 5-4 The reciprocal form ${}_1^1\text{VERTRAU}_2^2{}_x\text{PAM}_y\text{PAM}_x$ (Pfau & Steinbach, 2003, p. 21, Fig. 10).	110
Fig. 5-5 BİRBİRİMİZ ‘we, each of us’.....	113
Fig. 5-6 An example of the reciprocal strategy “conversion and second hand copy”: the base form ${}_x\text{GÖNDER}_y$ (‘to send’) (picture on the left) and its reciprocal form: ${}_x^y\text{GÖNDER}_y^x$ (‘to send each other’) (pictures on the right, beginning and ending of the reciprocal sign).....	114
Fig. 5-7 An example of the reciprocal strategy “movement conversion”: base sign ${}_x\text{ANLAT}_y$ (‘to tell’) (picture on the left) and its reciprocal form: ${}_x\text{ANLAT}_y\text{ANLAT}_x$ (‘to tell each other’) (pictures on the right)...	115
Fig. 5-8 (a) ALAY-ET (‘to bully’) (b) DAVET-ET (‘to invite’)	116
Fig. 5-9 S=Signer, A=Addressee, Signing Space (SS), and Neutral Signing Space (NSS).....	118

Fig. 5-10 Y plane of outer signing space (SS) and inner, neutral signing space (NSS). x: signer's locus, xo: signer's locus in neutral space, y: referent's locus, yo: referent's locus in neutral space, o: the center line of signing space	119
Fig. 5-11 (a) ETKİLE ('to affect someone') (b) FAKS-GÖNDER ('to fax') (c) GÖR ('to see') (d) HABER-VER ('to inform') (e) KÖTÜLE ('to badmouth')	120
Fig. 5-12 (a) SORGULA ('to interrogate') (b) DESTEKLE ('to support') ...	123
Fig. 5-13 (a) ETKİLE (<i>HE-HER>THEY</i>) ('They affected each other.') (b) FAKS-GÖNDER (<i>HE-HER>THEY</i>) ('They faxed each other.') (c) GÖR (<i>HE-HER>THEY</i>) ('They saw each other.') (d) HABER-VER (<i>HE-HER>THEY</i>) ('They informed each other.') (e) KÖTÜLE (<i>HE-HER>THEY</i>) ('They badmouthed each other.') (f) DESTEKLE (<i>HE-HER>THEY</i>) ('They supported each other.').	129
Fig. 5-14 The x and z planes in signing space, the half circle (signing space) is located on the y plane. We look at the first, second and third persons' locations	133
Fig. 5-15 The x and z planes in signing space (outer half circle), and in NSS (inner half circle). Signing space is located on the y plane in which the first, second and third persons' locations are shown	134
Fig. 5-16 HABER-VER [reciprocal+exhaustive aspect]	136
Fig. 5-17 GÖR [reciprocal+exhaustive aspect]	136
Fig. 6-1 Content question nonmanual marking throughout sentence in TİD	147
Fig. 6-2 Content question without wh-sign in TİD	149
Fig. 6-3 Nonmanual markers in polar questions in TİD	150
Fig. 6-4 Simultaneous mouthing of -mI during the manual articulation of the Q-MARK: Face	151
Fig. 6-5 Simultaneous mouthing of -mI during the manual articulation of the Q-MARK: Upper Body	151
Fig. 6-6 Video cameras placements	155
Fig. 6-7 Facial landmarks from Clapham, Bottoms, Mehta, & Davis (2006) (Reprinted with permission)	157
Fig. 6-8 Screen Calipers and Facial Landmarks (Clapham, Bottoms, Mehta, & Davis, 2006) from Weast (2008). (Reprinted with permission)	158
Fig. 9-1 The two trucks are located on the lateral axis and oriented in opposite directions	226
Fig. 9-2 The female and male doll were put side- by-side and located on the sagittal axis	227
Fig. 9-3 A bear is on top of an elephant	228

Fig. 9-4 The female and male dolls were located on the lateral axis, facing the same direction. The female doll moved to the male.....	229
Fig. 9-5 Still frames of a causative motion event: The orange in the distal region rolls down and hits the peach in the distal region then stops. The peach continues moving.....	231
Fig. 9-6 Still frames of a causative motion event: The peach on the left rolls down and hits the orange on the right. They move together to the right.....	231
Fig. 9-7 Still frames of a causative motion event: The orange on the left and the peach on the right roll down and hit each other then go back	232
Fig. 9-8 Perspective taking strategies in TİD and HZJ	233
Fig. 9-9 Direct mappings of causation.....	234
Fig. 10-1 Spatial configuration of a Figure object (cat) and a Ground object (chair)	245
Fig. 10-2 Examples of stimulus items in which the target spatial relations (indicated with a red frame) are containment (a), support/contact (b), and occlusion (c)	253
Fig. 10-3 Combined camera view on the signer	254
Fig. 10-4 Different strategies used to describe spatial relations by deaf participants. (Error bars are based on standard errors).....	261
Fig. 10-5 Different strategies used to describe spatial relations by hearing participants (Error bars are based on standard errors).....	262
Fig. 11-1 Examples of stimulus materials	278
Fig. 11-2 Distribution of types of expression of multiple entities in the elicited data (N=645) (percentages of all expressions of multiple entities)	297
Fig. 11-3 Distribution of types of expression of multiple entities in the spontaneous data (N=219) (percentages of all expressions of multiple entities)	298

LIST OF TABLES

Table 1-1 Main topics in Turkish Sign Language studies	3
Table 2-1 16-item sentence comprehension test scores by group.....	44
Table 6-1 Eyebrow height ranges for each signer from the natural data	159
Table 6-2 Minimum eyebrow height values in the three sentence types	160
Table 6-3 Maximum eyebrow height values in the three sentence types	160
Table 6-4 Mean eyebrow height values in the three sentence types	161
Table 6-5 Eyebrow height values in the three sentence types	162
Table 9-1 Types of classifiers in referring to static locational spatial relations.....	224
Table 9-2 Types of classifiers in referring to causative motions events with round middle-sized fruits	232
Table 10-1 Age ranges and (age means) for deaf and hearing children who participated in the study.....	252
Table 10-2 Mean proportions and (Standard Errors) of descriptions encoding the locative relation between Ground and Figure by all participants across age and language groups	257
Table 10-3 Mean proportions and (Standard Errors) of "Ground before Figure" order in the descriptions with a spatial relation encoded	259
Table 10-4 Mean proportions and (Standard Errors) of classifier constructions that include simultaneous expression of Ground and Figure.....	265

ABBREVIATIONS

1 st	First person, i.e. I.
2 nd	Second person, i.e. you.
3 rd	Third person, i.e. he, she, it.
1/2/3/SG/PL	First/second/third person singular/plural.
A	Addressee.
ABL	Ablative.
ACC	Accusative.
AGR	Agreement.
ANOVA	Analysis of variances.
ASL	American Sign Language.
AUSLAN	Australian Sign Language.
BSL	British Sign Language.
DSL	Danish Sign Language.
CA	Constructed action.
CI	Cochlear Implant.
CISS	International Committee of Sports for the Deaf.
CL/CLF	Classifier.
CODA	Hearing child of deaf adults.
COST	European Cooperation in Science and Technology.
CP	Complementizer Phrase.
Cyl	Cylindrical.
DGS	German Sign Language.
DPT	Devlet Planlama Teşkilatı (A Section in the Ministry of Development).
ELAN	EUDICO Linguistic Annotator.
ERC	European Research Council.
Fig.	Figure.
FP	Functional Phrase.
FUT	Future.
GEN	Genitive.
GSL	Greek Sign Language.
h1/H1	Dominant hand.
h2/H2	Non-dominant hand.
HC	Hand configuration.
HS	High school students

hs	Handshape.
HKSL	Hong Kong Sign Language
HSL	Hause Sign Language.
HZJ	Croatian Sign Language.
ICT	Information and communication technology.
IMPF	Imperfective.
IPSL	Indo-Pakistani Sign Language
ISL	Israeli Sign Language.
ix1	First person index.
ix2	Second person index.
ix3	Third person index.
İM	İşaret imi (Index).
L	Location.
LH	Left hand.
LIS	Italian Sign Language.
LOC	Locative.
LSB	Brazilian Sign Language.
LSC	Catalan Sign Language.
LSF	French Sign Language.
M	Movement.
MANOVA	Multivariate analysis of variances.
MEB	Milli Eğitim Bakanlığı (The Ministry of Education of Turkey).
NEG	Negative.
NGT	Sign Language of the Netherlands.
NNMs	Nonmanuals.
NP	Noun Phrase.
NSL	Nicaraguan Sign Language.
NSS	Neutral signing space.
NTFD	The Turkish National Federation of the Deaf.
NZSL	New Zealand Sign Language
PAM	Person agreement marker.
PAST	Past tense.
POSS	Possessive.
PF	Phonetic form.
PL	Plural.
POV	Point of view predicate.
Px	Pixel.
RAM	Rehberlik ve Araştırma Merkezleri (Counseling and Research Centers).
RH	Right hand.

RS	Role shift.
S	Signer.
SASS	Size and shape specifier.
SD	Standard deviation.
SE	Standard error.
SES	Socio-economic status.
SF	Selected fingers.
SG	Singular.
#SIGN	Fingerspelled sign.
SIGN	Sign glosses given in small capital letters.
SIGN _i	Co-indexed sign.
SIGN++	Sign repetition.
SIGN___	Continuous sign, e.g. holds.
SIGN---	Continuous sign, e.g. holds.
<u>SIGN</u>	Sign is produced by only an underscored fingerspelled letter.
SIGN^SIGN	Sign assimilation.
S-I-G-N	Sign consisted of fingerspelled letters.
____ ^{xy} SIGN	The line above signs represents suprasegmentals (nonmanuals br: eyebrow, cont-q: content question, hb: head backward, hd: head nod, hf: head forward, hs: head shake, hth: head thrust, pol-q: polar question, y/n: yes-no question).
SL	Sign language.
Spec,CP	Specifier of Complementizer Phrase.
SOV	Subject, object, verb.
SS	Signing Space.
t _i	Trace as used in syntactic movement.
TBMM	Türkiye Büyük Millet Meclisi (The Grand National Assembly of Turkey).
TDK	Türk Dil Kurumu (The Turkish Language Association).
TİD	Türk İşaret Dili (Turkish Sign Language).
TİFALDİ	The battery of Turkish measures consists of comprehension and production tasks at the word level.
TİV	Türkiye İşitme ve Konuşma Rehabilitasyon Vakfı (The Turkish Hearing and Speech Rehabilitation Foundation).
TopP	Topic Phrase.
TP	Tense Phrase.
TRT	Türkiye Radyo Televizyon Kurumu (The Turkish Radio Television Corporation)

TTY	Teletypewriting machine.
TÜBİTAK	Türkiye Bilimsel ve Teknolojik Araştırma Kurumu (The Scientific and Technological Research Council of Turkey).
YA	Young adults.
VGT	Flemish Sign Language
WFD	World Federation of the Deaf
Wh-	Wh question words: who, what, when, where, which, and how.
X ⁰	Head of XP (X Phrase) such as C ⁰ , F ⁰ , T ⁰ .

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CHAPTER ONE

INTRODUCTION: PREVIOUS AND CURRENT RESEARCH ON TURKISH SIGN LANGUAGE (TİD)

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There are two types of natural human languages: Spoken languages that use auditory-vocal modality and signed languages that use visual-gestural modality. Nevertheless, they share many characteristics unique to human languages from emergence of language to language contact, from language acquisition to communicative practices, and from minimal linguistic units to grammar and syntax. Therefore, studying only spoken languages is not enough to explore human communication systems since sign language studies can offer new striking and thought-provoking insights into human languages.

Sign language (linguistic) studies started with the seminal works by Tervoort (1953) and Stokoe (1960). There are a variety of studies on sign languages from, for example, theoretical linguistic, sociolinguistic, psycholinguistic, and neurolinguistic perspectives, which result in handbook-like publications such as Sandler & Lillo-Martin (2006), Brentari (2010), and Pfau et al. (2012) very recently. Studies have shown that signs are composed of minimal units such as manuals (shapes, locations, and movement of hands), nonmanuals (facial expressions, head, and body posture), and the signing space in front of the signers, all of which contribute to sign language phonology, morphology, syntax, and discourse. We now know that there are more than a hundred sign languages. Some of them such as French Sign Language (LSF) and American Sign Language (ASL) are historically related to each other and some of them such as Nicaraguan Sign Language (NSL) have emerged very recently.

This book aims to contribute to our knowledge of Turkish Sign Language (TİD), and sign language linguistics in general. TİD is a relatively old signed language, and is, so far, believed to be historically unrelated to other signed languages. Linguistic studies on this language started in the early 2000s. There has been growing academic interest and a body of work on TİD within the past decade, enhancing the need to compile a book that brings together these studies, offering new insights on linguistic, sociolinguistic, and psycholinguistic aspects of TİD. In this introduction, I overview previous studies on this language then introduce the chapters in this volume.

1.1. Previous Studies

To date, the number of publications and presentations on TİD are as follows: sixteen journal articles, eight proceedings and working papers, two books and eighteen book chapters (twelve of which form the current book), two doctoral dissertations (Açan, 2007; Arık, 2009), eight masters theses (Açan, 2001; Arık, 2003; Sevinç, 2006; Kubuş, 2008; Gökgöz, 2009; Makaroğlu, 2012; Taşçı, 2012; Özkul, 2013), forty conference and workshop presentations, three manuscripts, and three websites. The very first studies on TİD are Arık & Özyürek's (2001, 2002) conference presentations, Açan's (2001) and Arık's (2003) master's theses, and Zeshan's overview of TİD (Zeshan, 2002, 2003). I have compiled a bibliography of TİD studies that can be accessed online at <http://www.enginArık.com/turkish-sign-language-bibliography>, which is also included at the end of this chapter. As can be seen in Fig. 1-1, the number of studies in the field has been increasing over time, and is expected to follow this trend in the coming years.

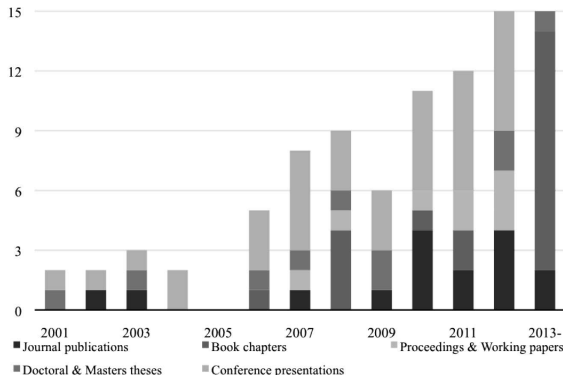


Fig. 1-1 A total number of studies on TİD, by year

While previous work on TID covers a range of topics that can be clustered around various categories, Table 1-1 below is a list of this literature grouped on the basis of their sub-fields.

Table 1-1 Main topics in Turkish Sign Language studies

Topic	Example
Basic grammar	Açan (2001, 2007), Sevinç (2006)
History of the language	Zeshan (2002, 2003), Kemaloğlu & Kemaloğlu (2012)
Phonetics, phonology, and morphology	Kubuş (2008), Kubuş & Hohenberger (2011), Özkul (2013), Taşçı (2012)
Nonmanuals, negation, interrogatives	Zeshan (2006), Gökgöz & Arık (2011), Gökgöz (2011), Makaroğlu (2012)
General syntax	Gökgöz (2009)
Locational and motional events	Özyürek and her colleagues (e.g., 2010), Arık (e.g., 2009)
Acquisition of locatives	Sümer et al. (2012)
Classifiers -- complex predicates of location, motion, and action	Arık (2013)
Locatives, existentials, and possessives	Arık & Wilbur (2008)
Methodology	Özsoy et al. (2012)
Bilingualism and multilingualism	Ergenç and her colleagues (2013)

1.2. The Present Book

The present book consists of new contributions to the above studies. The authors submitted their manuscripts more than a year ago. All of the manuscripts were reviewed by the contributors as well as Zeynep Açan and Aslı Özkul. Each manuscript was reviewed by at least two individuals. The authors revised their manuscripts according to those reviews. Accepted manuscripts were included in the book.

In Chapter 2, Deniz İlkbaşıran provides an excellent overview of the sociolinguistic environment of deafness in Turkey and deaf people's changing communicative practices via new technologies such as the Internet, cell phones, and social media such as MSN. She also provides information on the demographics of the deaf and hard of hearing population in Turkey. There is some disagreement on the total number of the deaf population in Turkey, ranging from a few hundred thousand

according to national reports, to a few million according to deaf rights organizations. She presents a brief history of deaf education in Turkey starting from the very first school for deaf established during the Ottoman era in 1889, to the current status of TİD in educational settings. The author provides a history of deaf organizations in Turkey going back to 1958, with regards to their importance in the lives of deaf people. She then reports findings from a study based on interviews with eight high school students from two cities, and a larger ethnographic study that includes language measures along with a more detailed interview with twenty-eight young deaf individuals in Istanbul. Her studies show that social media platforms such as MSN Messenger and Facebook, and texting via cell phones are popular among deaf individuals to facilitate their communications. The author also discusses the current status of TİD in media, such that there is a slowly growing interest in providing interpreting in TİD for the news and some TV shows, as well as emerging grassroots deaf initiatives online.

In Chapter 3, A. Sumru Özsoy, Engin Arık, Aslı Göksel, Meltem Keleşir, and Derya Nuhbalaoğlu present issues regarding the documentation of TİD. They discuss native user competence, the difficulty of accessing deaf informants, collecting reliable and valid data, and how they deal with these issues in their current project. As they argue, collecting data from deaf individuals who have acquired TİD from their deaf parents or very early on in their lives is crucial in analyzing and archiving TİD. Since such deaf children of deaf native signers are significantly fewer than late signer deaf individuals who have acquired TİD at schools for the deaf or even later in life, locating and working with them as participants of a research project can be a daunting task. The authors also present their research environment in which data is collected from native signers, such that written or spoken Turkish based elicitation materials are avoided in order to diminish the effect of Turkish. The final section of the chapter is devoted to theoretical issues such as the nature of morphemes, headedness, iconicity, and simultaneity with regard to sign linguistics, and calls for new methods to tackle these issues.

The next five chapters are concerned with core linguistic issues in TİD research. Chapters 4 and 5 mainly provide new phonetic and phonological research on TİD. Fingerspelling refers to the way sign languages manually represent a written alphabet. Some sign languages such as American Sign Language (ASL) use a one-handed manual alphabet; some others such as TİD use a two-handed manual alphabet. These manual alphabets can differ from one another across sign languages. In Chapter 4, Süleyman S. Taşçı presents a phonological study of fingerspelling in TİD. He discusses the

use of fingerspelling for a spoken word that may not have a corresponding lexical sign and to create new words that undergo some phonological changes such as reduction in signed languages. He focuses on those phonological issues with regard to fingerspelling in TİD. He identifies one hundred and twenty one lexical items in TİD that are part of the lexicon and derived from fingerspelling. His findings indicate that phonological processes, hand reversal and assimilation, are used in fingerspelled lexical items in TİD. To exemplify hand reversal: while the letter L is signed with the dominant hand, i.e. if the signer is right-handed, the dominant hand is the right hand, L signed with the left-hand means ‘lycee’ (LİSE ‘(Tr.) lise’).

Reciprocals such as fight and communicate are used to encode a mutual relationship between two entities. Okan Kubuş and Annette Hohenberger investigate phonology and phonetics of reciprocals in TİD. The authors show that plain verbs carrying reciprocity such as BİL ‘to know’ and DÜŞÜN ‘to think’ remain unchanged yet the use of pronouns or pointing signs provide reciprocal reading. They state that agreeing verbs, i.e. those that can be modified in the signing space depending on the event participants, undergo phonetic and phonological changes such as non-dominant hand copying, simultaneous movement conversion, sequential backward reduplication, movement reduction, and using neutral signing space. To exemplify non-dominant hand copying and simultaneous movement conversion: one-handed sign GÖNDER ‘to send’ is made on the sagittal plane of the signing space with a single hand movement from proximal to distal space. The reciprocal sign GÖNDER ‘to send each other’ is also made on the sagittal plane but the dominant hand moves from the distal to proximal plane while the non-dominant hand (non-dominant hand copying) moves from the proximal to distal plane at the same time (simultaneous movement conversion).

Chapters 6, 7, and 8 present new linguistic research on TİD beyond phonetics and phonology such as interrogatives and reported utterances. There are four types of sentences: Declarative, interrogative, imperative, and exclamatory. Interrogative sentences are sentences of question that usually consist of a wh-word and nonmanuals. Bahtiyar Makaroğlu, in Chapter 6, investigates this type of sentence in TİD focusing on the nonmanuals usually associated with them. After introducing the types of nonmanual expressions such as eyebrow movements (brow raise, brow lowering), eye gaze, mouthing, lip movements, head movements (headshakes, nods, tilt), and body leans (forward, backward) in sign languages, he focuses mainly on eyebrow movements with regard to interrogatives then a sign glossed as Q-MARK, derived from the question mark in orthography. He shows that lowered eyebrows are associated with

content questions whereas raised eyebrows are associated with polar questions. He also shows that Q-MARK in TİD mainly used in tag questions is borrowed from the question particle (-mı) in Turkish and often associated with a -mı mouthing. The author argues that Q-MARK scopes over the questioned phrase, and can therefore be in any position in the sentence with the exception of the sentence initial position.

Wh-questions such as 'who', 'what', 'when', 'where', and 'how' are also used in interrogative sentences. Selçuk İşsever and Bahtiyar Makaroğlu present a generative syntactic account of wh-questions (wh-movement) in TİD in Chapter 7. Proposed by mainstream generative linguists, wh-movement is a syntactic operation in which wh-word is originally generated in the position of targeted phrase then moves to the specifier of complementizer phrase (Spec,CP; the sentence initial position/the leftward position in English) or remains in the same position (in-situ). The authors show that TİD allows both the leftward and rightward wh-movements. For example, 'what did you read?' can be signed in four different ways:

- (1) a. $\overline{\text{INDEX}_2 \text{ WHAT READ}}_{\text{wh}}$
 b. $\text{WHAT}_i \overline{\text{INDEX}_2 t_i \text{ READ}}_{\text{wh}}$
 c. $\overline{\text{INDEX}_2 t_i \text{ READ WHAT}_i}_{\text{wh}}$
 d. $\overline{\text{INDEX}_2 \text{ WHAT}_i \text{ READ WHAT}_i}_{\text{wh}}$

They argue that in TİD, wh-phrases move to the specifier of complementizer phrase on the left whereas wh-words move to the head of complementizer phrase on the right.

In Chapter 8, Meltem Kelepir and Aslı Göksel investigate reported utterances in TİD focusing on role and reference shift, shifted reference of the loci, and the use of 'say' in reported utterances. The authors show that reported utterances in TİD can be made via body shift and change in head position. For example, after establishing a referent slightly on the left or on the right in the signing space, TİD signers turn their body and head slightly to that direction. They also show that TİD signers may break eye contact with their addressees when they shift the referent or take a role of a referent in their reported speech. The signers also shift pronouns in reported speech; for example, when reporting an utterance of a referent, the first-person pronoun, pointing toward the chest, refers to the referent not the signer. The authors also discuss the predicate SAY. They state that when the goal argument is important, this predicate behaves as an agreeing

verb meaning that the direction of hands indicates the goal argument of the linguistic event. Additionally, another sign for this predicate indicating, arguably, double-agreement can be used when two third-person arguments are involved in a linguistic event.

The final three chapters focus mainly on the use of space in linguistic expressions in TİD research. These chapters present accounts of the use of signing space and classifiers (complex predicates of location, motion, and action) in referring to a variety of situations. In Chapter 9, Engin Arık presents an overview of expressing spatial relations with a new account of expressing causative motion events in TİD. He shows that most of the time TİD signers use classifiers and the signing space in referring to locational/static situations and motion events, and they can use lexical signs such as LEFT, IN, NEXT-TO, and BACK for respective locative situations and GO, STAY, HIT, and CRASH for corresponding motion events. TİD signers can also imitate the actions and movements of an entity or 'become an object', usually called constructed action. In causative motion events, too, signers use classifiers and the signing space to locate causative event participants.

In Chapter 10, Beyza Sümer, Inge Zwitserlood, Pamela Perniss, and Aslı Özyürek investigate how locative expressions are acquired by children in TİD in comparison to Turkish. In this novel study, the authors analyze data from preschool aged, school aged, and adult users of TİD and Turkish (a total of twenty-one TİD and twenty-one Turkish speakers) who describe a total of thirty pictures depicting in, on, and at type of spatial configurations. For example, 'The pen is in the cup' in which pen is the Figure, cup is the Ground, and in is the spatial relation. The authors focus on encodings of the targeted spatial relations, the order of Figures and Grounds in a given description, and common strategies in the descriptions. They find that TİD and Turkish user children and adults do not differ in those locative expressions, suggesting that even though there are modality differences between these two languages, children show similar developmental patterns in their linguistic use of space.

In Chapter 11, Inge Zwitserlood, Pamela Perniss, and Aslı Özyürek present a study on the way TİD signers express multiple entities of a kind, e.g., how TİD signers describe a photograph with four paintings hanging on the wall. Their analysis is based on elicited data, i.e. descriptions of photographs, from twelve TİD signers and spontaneous narrative data from fifteen TİD signers. The authors find that TİD uses several strategies to indicate multiple entities. Among them are localization, classifiers, the side-by-side sign, numerals, and quantifiers. An example for localization is the following: when signers refer to two boats, they can sign BOAT

locating their hands in a specified location in their signing space then signing BOAT again locating their hands in another location in the signing space. In contrast to what is found in some other sign languages, TİD does not use plural reduplication (sign repetitions) productively.

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