An Experimental Approach to Word Order in Turkish Sign Language*

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Abstract

The present study offers an experimental linguistic perspective to investigate word order in sign languages, focusing particularly on word order in Turkish Sign Language (Türk İşaret Dili-TİD), one of the oldest, yet relatively understudied, sign languages. Two experiments were conducted to investigate TİD signers' acceptability judgments of various orders of linguistic forms in a sentence. Experiment 1 consisted of 26 intransitive sentences with a 2x2 (SV vs. VS; Human vs. Animal) within-subjects design whereas Experiment 2 consisted of 28 transitive sentences with a 3x2 (Subject order: First vs. Middle vs. Last; Object order: Object-before-Verb vs. Object-after-Verb) within-subjects design. Both experiments asked native TİD signers (n=8 and n=6, respectively) to rate sentences using 5-point Likert scales. Results from Experiment 1 showed that there was a significant main effect of Sign Order, indicating that participants gave significantly higher ratings to SV order over VS order. There was no main effect of Subject Type but an interaction between Sign Order and Subject Type. Results from Experiment 2 showed a significant main effect of object-verb order indicating that participants' ratings for the Object-before-Verb order were significantly higher than those for the Verb-before-Object order. In Experiment 2, there was no significant main effect of subject order or interaction. These findings suggested that TİD has a preference for SV and OV over other possible orders.

Keywords

Word order, Turkish Sign Language, Experimental Linguistics.

Introduction

Grammar, age of acquisition, education, identity, subculture, grammaticality judgments, and elicitation techniques may lead to great variation in word order, the sequential order of elements in a sentence (e.g. Greenberg 1963, Vennemann 1976, Lehmann 1978, Hawkins 1983, Dryer 1992, new "evolutionary" typology Dunn et al. 2011, for sign languages see Sandler & Lillo-Martin 2006, Leeson & Saeed 2012). While a great deal of research has been conducted on this topic in spoken languages, comparatively little exists for many sign languages. The present study contributes to research on word order by offering a new way to investigate variations by applying an experimental linguistic method to analyze word order in (in)transitive sentences in Turkish Sign Language (TİD), one of the oldest sign languages (Zeshan 2003). Results show that although TİD may allow variations in order of signs in a sentence, TİD signers judge Subject-Predicate (SV) order in intransitives, and Object-Predicate (OV) order in transitives, more acceptable than VS and VO, respectively.

Word Order

Word order in spoken languages

Following Greenberg (1963), word order is defined as the order of the subject (S), object (O), and verb (V) in a sentence. Although there are 6 possible orders –SOV, SVO, OSV, OVS, VOS, and VSO in transitive sentences-, the most common orders are SOV and SVO cross-linguistically. It has been argued that perhaps the basic word order of the earliest language was SOV (e.g. Gell-Mann & Ruhlen 2011), and that SOV languages tend to become SVO languages over time (e.g. Vennemann 1976). SOV order is also found in gesture productions. In one study (Goldin-Meadow, So, Ozyurek & Mylander 2008), 10 English speakers, 10 Turkish speakers, 10 Spanish speakers, and 10 Chinese (Mandarin) speakers were asked to describe video recorded events without using language. Results showed that the order of their gestures was similar to an SOV order in speech, regardless of their native language.

In a classic study, Lehmann's (1978) showed that English has an unmarked SVO order of words in simple sentences and in subordination (but see LaPolla & Poa 2006). In another classic study, Dryer (2005) examined word order in a total of 1,228 languages. He found that 497 languages

have SOV order (e.g. Japanese) and 435 languages have SVO order (e.g. English). Moreover, VSO was found in 85 languages (e.g. Irish); VOS was found in 26 languages, (e.g. Nias); OVS was found in 9 languages (e.g. Hixkaryana); and, OSV was found in 4 languages (e.g. Nadëb). 172 of 1,228 languages were found to not have a dominant word order. According to Tomlin (1986), there are functional explanations for why SOV and SVO orders are more common than other word orders. First, the subject, which is the theme of an utterance, generally comes before the object. Second, the object and verb in transitive sentences are close to each other because they have a tighter relationship than the subject and verb. Finally, more animate nouns come before less animate nouns in transitive sentences.

It is well documented that the order of elements is not directly related to morphological markings of subject and object in a sentence. For instance, languages such as Thai (dominantly SVO), Arára Karó (dominantly SOV), Quiegolani Zapotec (dominantly VSO), and Minangkabau (no dominant order), also called zero-marking languages, do not mark subject and object morphologically (references cited in Sinnemäki 2010). It is also well documented that there can be some variation in the order of elements, especially in highly agglutinative languages with SOV order. For example, as a highly suffixal language, Turkish has a dominant SOV order; however, all possible word orders can occur in discourse due to pragmatic reasons (Erguvanli 1984). To show this, a set of examples is given below. (DAT=dative, LOC=locative, SG=singular, PL=plural, CL=classifier. By convention small caps are used only for sign glosses).

(1)   a.   Çocuk top-a   vurdu-∅   (SOV)   Turkish

                Child   ball-DAT hit-PAST-3SG

                'The boy hit the ball'

        b.   Çocuk vurdu-∅ top-a.   (SVO)

        c.   Top-a çocuk vurdu-∅.   (OSV)

        d.   Top-a vurdu-∅ çocuk.   (OVS)

        e.   Vurdu-∅ çocuk top-a.   (VSO)

        f.   Vurdu-∅ top-a çocuk.   (VOS)

The basic word order of a language also affects other phrasal structures. According to Dryer (1991, 1992), the order of noun phrases and adpositions is adposition before noun phrase in VO languages and noun phrase before adposition in OV languages (e.g. (2a,b)). Similarly, copula precedes predicate in VO languages whereas copula comes after predicate in OV languages. Verb phrases follow the want-type of predicates in VO languages while the want-type of predicates follow verb phrases in OV languages (e.g. (3a,b)). These differences can also be observed in the orders of tense marking and verb phrase; negation and verb phrase; complementizer, question particle, adverbial subordinator, and main clause; definite, plural, genitive markers and noun; relative clause and noun; standard of comparison and noun; and, prepositional phrase, manner adverb, and verb.

(2) a. kitap-ta /   kitab-ın   içi-n-de   Turkish

       book-LOC   book-GEN   inside-POSS-LOC

     b. in the book   English

(3) a. Ali   ev-e   git-mek   iste-di-Ø   Turkish
         Ali   house-DAT   go-INF   want-PAST-3SG

     b. Ali wanted to go home   English

In the literature, there is a discussion on the possible six orders of words and their typological implications. On the one hand, Newmeyer (2004, 2005) proposed that rather than classifying languages as OV or VO languages, language-specific classifications should be adopted instead. For example, normally, English is considered as an SVO language but it allows other orders, too (e.g. (4a,b,c)). Thus, there need to be more 'rules' to explain these orders as well. Following Hawkins (2004), Newmeyer claimed that variations in word order are possible and explainable by the on-line processing preferences of the speakers.

(4) English examples from Newmeyer (2004: 190):

       a. The last lecture Mary really hated. (OSV)

       b. Drink the whole bottle, John never would. (VOS)

       c. Away ran John. (VS)

On the other hand, Dryer (2013) proposed two-way typological parameters: OV vs. VO and SV vs. VS. This proposal indicates that there are four different types of languages according to their basic word orders: OV and SV languages, OV and VS languages, VO and SV languages, and, VO and VS languages. This typology also covers the basic word order in intransitives, which the classical approaches (6 possible word orders) often neglect. The present study loosely follows Dryer's classification: OV vs. VO in transitives and SV vs. VS in intransitives (Dryer 2013).

Word order in sign languages

There are probably more than one hundred sign languages worldwide. Recent handbooks on sign languages have listed 44 (Brentari 2010) and 47 (Pfau, Steinbach & Woll 2012) sign languages, respectively, while WALS Online listed 40 sign languages (Dryer & Haspelmath 2005). Sign languages exhibit both SOV and SVO orders. Some sign languages appear to have relatively stable word order and some others allow variations (see Leeson & Saeed 2012 for an overview). Previous research has shown that American Sign Language (e.g. Fischer 1975, Kegl et al. 1996, Liddell 1980, Neidle et al. 2000, Pichler 2001, Sandler & Lillo-Martin 2006), Brazilian Sign Language (de Quadros 2003), Croatian Sign Language (Milkovic et al. 2006), Finnish Sign Language (Jantunen 2008), Hong Kong Sign Language (Sze 2003), Russian Sign Language (Kimmelman 2011, 2012), and Taiwanese Sign Language (Smith 2005) have an SVO order. Al-Sayyid Bedoin Sign Language (Sandler, Meir, Padden & Aronoff 2005), Austrian Sign Language (Wilbur 2002), Catalan Sign Language (Quer 2002), German Sign Language (Glück & Pfau 1998, Rathmann 2000), Japanese Sign Language (Fischer 1996, Torigoe 1994), and Nicaraguan Sign Language (Senghas, Coppola, Newport & Supalla 1997) have an SOV order. Saudi Arabian Sign Language exhibits all SVO, OSV, and SOV orders (Sprenger & Mathur 2012).

Nevertheless, British Sign Language (Deuchar 1983); Danish Sign Language (Engberg-Pedersen 1994); Israeli Sign Language (Rosenstein 2001); Quebec Sign Language (Nadeau & Desouvrey 1994, Bouchard & Dubuisson 1995); Sign Language of the Netherlands (Coerts 1994, Crasborn et al. 2009); and, Spanish Sign Language (Morales-Lopez et al. 2012) allow variations depending on topic-comment structures. Since variations have

been observed, there has been some discussion of the basic (underlying) word order of a given sign language. For example, BSL might have an SVO order (see Cormier & Fenlon 2009) rather than having the topic-comment structures suggested by Deuchar (1983). Other discussions have focused on variations due to semantic and pragmatic factors such as topicalization, which are derived from basic word order.

Some issues such as 'articulatory factors,' 'verb classes,' and 'classifier constructions' might affect variations in the basic word order of any sign language (see also Kimmelman 2011). While spoken languages have limited articulatory gestures, notably mouth movements alone, sign languages have a wide variety of articulators: the two hands, facial expressions, mouth and body movements, and the space around the body. Thus, sign languages, in principle, can use these articulators at the same time, which can lead to a simultaneous expression of words in a sentence. For example, facial expressions, called nonmanuals, co-occur with manual signs to mark negation and interrogation in a variety of sign languages. Nonmanuals marking negation and interrogation also occur simultaneously with other words (see Zeshan 2006). In these cases, it is often difficult, if not impossible, to distinguish the order of words. Canonical studies on the basic word order of sign languages have generally focused on so-called plain verbs, verbs that are sequentially identifiable. Yet, according to Padden (1988), there are two more constructions or verb types: spatial agreement verbs such as TAKE and classifier (CL) constructions.

To exemplify these issues, a classifier construction in TİD is given in (5) (see also Arık 2013). In this expression, first, it is not easy to identify how many sentences there are because prosodic breaks are unclear. Second, because there are two manual articulators, the right hand (RH) and left hand (LH), more than half of the expression is constructed in two channels at the same time starting with STAND signed by LH. Third, given that there are two CLIs in use, the expression contains multi-componential predicates. In this expression, the CLIs convey information about the postures, locations, orientations, and actions of the two arguments, MAN and WOMAN, including the arguments themselves relative to each other and from the signers' point of view. Therefore, it is a daunting task to identify the word order in these constructions, which are excluded in the present study.

(5) TİD

RH: MAN   BEHIND   WOMAN   CLI:STAND-WALK_____move-proximal-to-distal

LH: CLI:STAND_____ distal

'(lit.) The man is behind/in front, facing away from me, and standing up. While he is standing up, facing away, the woman is close to me, standing up, facing away from me, walks toward him from behind.'

Previous studies on word order in TİD

Previous studies have claimed that the basic sign order in TİD is SOV, although variations have also been observed (Arik 2006, Sevinç 2006, Açan 2007, Gökgöz and Arik 2011, Gökgöz 2011). Those studies used a number of tasks for which a differing number of TİD signers participated. For example, Arik (2006) analyzed data collected from 15 native TİD signers in Istanbul and Izmir, where a large deaf population lives. He used elicited, experimental, context-controlled and quasi-experimental data in his analysis. He found that TİD appears to be a verb final language, marks phrases with manual and nonmanual signals, and allows for variations in noun phrases. For example, TWO BOOK (6) and BOOK TWO (7) meaning 'two books' were both observed in his data. Verbs can be inflected for negation, often associated with a head tilt or head shake (8) (see also Gökgöz 2011). Wh-elements can be in situ or at the end of the sentence.

(6)   I   TWO BOOK   EXIST…   TİD

             _bl   __bl

'I have two books…'

(7)   MUSTAFA   BOOK TWO   READ…   TİD

             __bl   __bl

'Mustafa read two books…'

(8)   I   SPOUSE CRY-NOT   TİD

      _____bl

      _____head shake __hand down

'My spouse did not cry.'

In another study, Açan (2007) collected data from 4 informants in Ankara to investigate the order of constituents in declarative, negative, interrogative, and imperative sentences. Açan's data revealed that TİD does not allow extreme deviations from the SOV order, especially in transitive sentences of the type '(subject)NP-(object)NP-transitive verb.' However, the author does not comment on the constraints which can restrict the order of signs.

Sevinç (2006) also investigated basic word order in simple sentences in TİD. She collected data from 8 native signers located in Ankara using both natural data and grammaticality judgments in order to find acceptable orders and analyze her data for markedness. According to her findings, (in)animacy of the arguments and types of verbs (e.g., agreement vs. plain) were observed to be the main factors affecting the basic word order of TİD. That is, for intransitive clauses, SV order was most frequently observed, while A (agent), P (patient), V(verb) order was significant for transitives with two animate arguments. Furthermore, AVP order was observed in transitive sentences with agreement verbs. The signers signed transitives with one animate and one inanimate argument using both APV and PAV orders interchangeably. Possible examples are listed below.

(9)   CHILD FALL   (Intransitive)

     'The child fell down.'

(10)   a. ALI AYŞE FORGET   APV (two animate arguments)

     'Ali forgot Ayşe.'

    c. DOG BITE CHILD   AVP   (agreement verb)

     'The dog bite the child.'

    d. GIRL DRESS CHOOSE   APV (one animate-one inanimate argument)

     'The girl choose the dress.'

    e. DRESS GIRL CHOOSE   PAV (one animate-one inanimate argument)

    'The girl choose the dress.'

Present Study: Word Order in TİD

Previous research has observed that even though predicate final orders are very common in TİD, there might be other possible orders. We observed that some of the other orders could be in use, too. Because little is known about the restrictions, we first report the basic word order in TİD here. Then, we detail experiments concerning variations in the TİD word order. The two experiments were conducted to investigate TİD signers' acceptability judgments of various orders of linguistic forms in a sentence. These two experiments focused on plain verbs only. The first experiment targeted predicates consisting of one argument, as in intransitive sentences, and the second experiment targeted predicates consisting of two arguments, as in transitive sentences. In order to do this, an experimental linguistic methodology was used to analyze TİD signers' ratings.

Order when there is a single argument

TİD appears to prefer Subject-Predicate order when the predicate has a single argument. We give examples for this when the predicate is a verb (11), a nominal (12), and an adjectival (13). Ungrammatical sentences with the same intentional meaning are given with a star (*) in the beginning of the sentence.

(11)   a.   GIRL   RUN

            'The girl is running.'

       b.   * RUN GIRL

(12)   a.   MY   FATHER TEACHER

            'My father is a teacher.'

       b.   * MY   TEACHER   FATHER

(13)   a.   BAG   HEAVY

       b.   * HEAVY BAG

            'The bag is heavy.'

When there is a single predicate but more than one noun with various semantic rules, predicate is again at the end of the utterance. We give examples below: a locative sentence (14), existential sentence (15), and possessive sentences (16) and (17).

(14)   TABLE   OVER   BOOK

'The book is on the table/On the table is the book.'

(15)   ROOM   BED   EXIST

'There is a bed in the room.'

(16)   MY   HOUSE   EXIST

'I have a house.'

(17)   HER   SISTER   EXIST

'She has a sister.'

Word order when there are two arguments

TİD appears to prefer Subject-Object-Predicate order when the predicate has two arguments. We give two examples (18) and (19) below.

(18)   GIRL   BABY   KISS

'The girl kissed the baby.'

(19)   GIRL   BOY   LOVE

'The girl loves the boy.'

Word order when there are three arguments

TİD appears to prefer Subject-Object1-Object2-Predicate order when the predicate has three arguments. We give two examples (20) and (21) below.

(20)   CHILD   FATHER   MONEY   TAKE

'The child took money from the father.'

(21)   CHILD   GRANDFATHER   LETTER   SEND

'The child sent a letter to the grandfather.'

Experiment 1: Intransitive Sentences

Hypothesis

It was hypothesized that TİD signers would prefer SV order to VS order regardless of the semantic category of subjects.

Participants

Eight fluent deaf TİD users (4 males, 4 females) ranging in age from 22-45 years old participated in this study. The education level of the participants ranged from primary school to high school. Most of them attended the schools for the deaf located in Istanbul. All of them are fluent signers and use TİD as their primary means of communication. They signed consent forms and were compensated for their participation.

Materials

TİD was the only language used during the experiments with the help of two TİD-Turkish native bilingual assistants who set up guidelines and signed all of the words in the testing items one-by-one to diminish the effects of (in)voluntary facial expressions and prosody. All of the signs were video recorded and then put in order to create sentences using iMovie. A single movie consisted of only one sentence.

For Experiment 1: Intransitive Sentences, a 2x2 repeated measures within-subjects design was used. The first factor was Sign Order with two levels (Subject-Verb vs. Verb-Subject). The second factor was Subject Type with two levels (Human vs. Animal). For Human Subject Type, two common nouns, 'man' and 'woman' were chosen. For Animal Subject Type, two animals, 'cat' and 'dog' were chosen. In addition, for the testing items, action verbs 'fall' and 'sit' and emotion verbs 'cry' and 'smile' were used. There may have been a possible animacy effect on word order but it was ignored in the current study. For fillers, two stationary verbs 'sleep' and 'look' were used in either an SV or VS order.

From 8 token sets, hence out of all possible 8x2x2x4, 128 sentences, two scripts including 4 representatives of 8 token sets were created and randomly ordered. Each script had 26 sentences (2 warm-up, 16 testing items, and 8 filler items). Two examples are given from Script 1 below:

(22)   Subject-Verb, Human, Action (Script 1, Item #22)

MAN   FALL

Intended meaning: 'The man fell (down).'

(23)   Verb-Subject, Animal, Emotion (Script 1, Item #17)

CRY   DOG

Intended meaning: 'The dog cried.'

Procedure

The directions were given in TİD. Participants were asked to rate the sentences according to their understanding of everyday TİD from 1 (inappropriate) to 5 (appropriate) on a 5-point Likert scale. Participants received the testing items one-by-one, which were shown on a laptop screen. Immediately after viewing a testing item, they rated it. They were allowed to view the testing item as many times they requested. However, most of the participants needed to view any given item only once. Each session lasted about 15 minutes.

Results

There was no significant difference between the ratings from the scripts, indicating that there was no order effect. Descriptive statistics are given in in Figure 1.
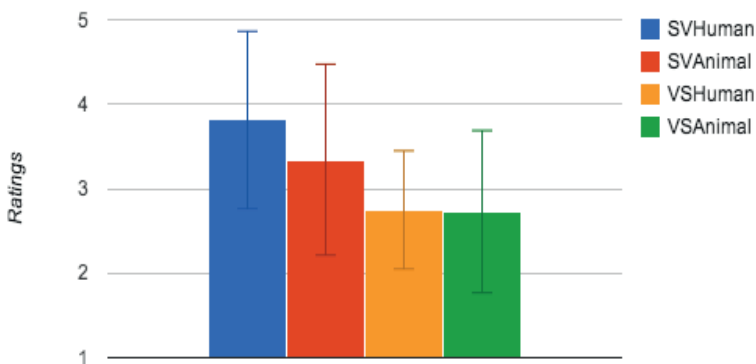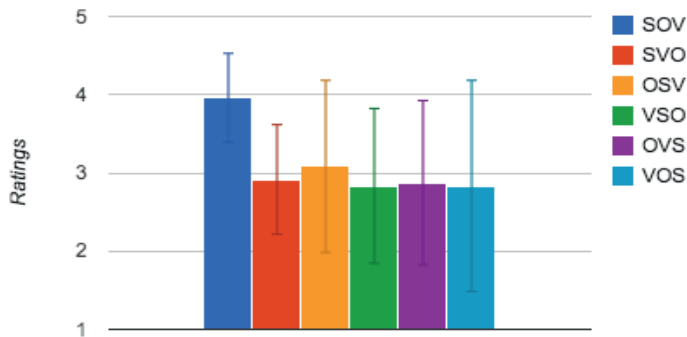

Figure 1. *Means and standard deviations of the ratings for intrasitive sentences*

A repeated measures ANOVA was conducted to examine the effects of sign order, subject type, and verb type on participants' sentence ratings. Results indicated that there was a main effect of Sign Order, $F(1,7) = 7.836$, $p < .05$, showing that participants gave significantly higher ratings to SV order ($M = 3.578$, $SD = .379$) versus VS order ($M = 2.739$, $SD = .272$). There was no main effect of Subject Type, $F(1,7) = 1.620$, $p > .05$, indicating that participants' ratings did not change when the subject of a sentence was either a human or an animal. However, there was a significant interaction between Sign Order and Subject Type, $F(1,7) = 9.271$, $p < .05$. A closer examination of the data revealed that participants' ratings decreased when the subjects were animals in the SV order. This change was not observed in the VS order (see Fig. 2). There was no other significant interaction.
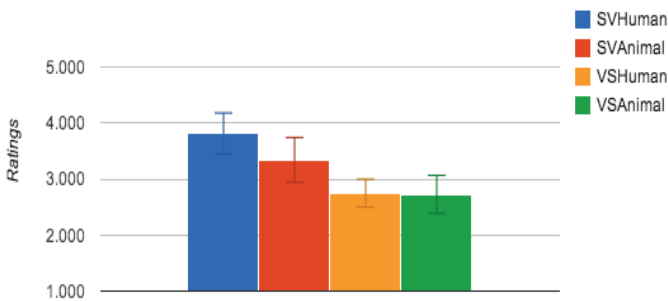
Figure 2. *Means and standard deviations in Sign Order x Subject Type interaction*

Experiment 2: Transitive Sentences

Hypotheses

It was hypothesized that TİD signers prefer OV order to VO order regardless of semantic categories of subjects.

Participants

Six (4 females and 2 males) of the participants from Experiment 1 participated in this experiment.

Materials

For Experiment 2: Transitive Sentences, a 3x2 within-subjects design was used. The first factor was subject order with 3 levels (First vs. Middle vs. Last) whereas the second factor was object order with two levels (Object-

before-Verb vs. Object-after-Verb). For subjects, the first person singular 'I' was used. There were four verbs, 'eat,' 'drink,' 'read,' and 'write.' For objects, the following nouns were used: peach, pear, orange, and apple for eat; milk, water, soda, and beer for drink; letter, petition, and poem for write; and, book, notebook, and newspaper for read. Three scripts including 4 representatives of 6 conditions were created. Each script had 28 sentences: 4 warm-up and 24 testing items. There was no filler item. Two examples from the first script are given below:

(24)   Subject first, Object-Verb (Script 1, Item #8)

      I   LETTER WRITE

Intended meaning: 'I wrote a letter.'

(25)   Subject last, Object-Verb (Script 1, Item #19)

      APPLE   EAT   I

Intended meaning: 'I ate an apple.'

Procedure

Experiment 2 used the same procedure as Experiment 1. On average, it took about 15 minutes to collect data from a participant.

Results

There was no significant difference between the ratings from the scripts indicating that there was no order effect. Descriptive statistics are given in Figure 3.

Figure 3. *Means and standard deviations in the ratings of transitive sentences*

A repeated-measures ANOVA was conducted to analyze the effects of object-verb and subject orders on sentence ratings. Results revealed a significant main effect of object-verb order, $F(1,5) = 7.033$, $p < .05$, indicating that participants rated OV order ($M = 3.306$, $SD = .287$) significantly higher than VO order ($M = 2.861$, $SD = .351$). Results also showed no significant main effect of subject order, $F(2,10) = 7.033$, p > .05. There was no interaction, $F(2,10) = 2.867$, p > .05.

Discussion and Conclusion

Natural human languages can be of two types: Spoken or sign language. Studies on sign languages are still in their infancy compared to those on spoken languages. The current study targeted word order in a relatively understudied but old sign language, TİD. The two experiments were reported in which TİD signers were asked to rate sentences composed of all of the possible orders in (in)transitives. It was found that, from Dryer's typological perspective (2013), TİD is predominantly an SV language in intransitives and OV language in transitives. But at this point of inquiry, it is not possible to deduce that TİD is an OV and SV language according to that typology.

The conclusion that TİD is predominantly an SV language is due to the results of Experiment 1, which showed that participants gave significantly higher ratings to SV order SV order ($M = 3.578$, $SD = .379$) than VS order ($M = 2.739$, $SD = .272$). This finding also indicates that TİD allows VS order to some degree due to the fact that the sentences with the VS order received ratings just around average ($M = 2.739$, *max* = 5). Future study will investigate in which linguistic contexts VS order may be preferable to SV order.

Since there was no main effect of the subject type (human or animal) in Experiment 1, it can be assumed that the subject before predicate order is more preferred than predicate before subject order. There was also a significant interaction because participants' ratings were higher when humans in the subject position (e.g., 'MAN SMILE') in the SV order than animals in the subject position in the SV order (e.g., 'CAT SMILE'). This difference was not found in the VS order. This finding might be related to world knowledge, where smiling is more attributed to humans than animals. However, more research is needed to further investigate these issues.

We concluded that TİD is predominantly an OV language in transitives based on the results of Experiment 2, which showed that participants' ratings for the OV order (M = 3.306, SD = .287) were significantly higher than those for the VO order (M = 2.861 , SD = .351). This means that the VO order was also acceptable since their ratings were just above average (M = 2.861, *max* = 5). It is yet to be seen in which linguistic contexts the VO order is more preferable than the OV order. There was no significant effect of the subject order or interaction, suggesting that the OV order is more preferable than the other orders regardless of the subject position. The logical question then is, "Is TİD a pro-drop language?" Future research will explore this issue, too.

The present study also has a number of limitations. Due to some unexpected problems, an equal number of participants did not participate in both experiments. The participants reported that the test items used in the experiments were not very natural sentences. This may have affected their ratings. Yet, this non-naturalness can be expected from any experimental study. Moreover, this study focused only on plain verbs and animate arguments; yet, word order could be varied when other types of verbs with inanimate arguments and complex constructions are used. This is an issue to be investigated in future research.

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Türk İşaret Dili'nde Sözdizime Deneysel Bir Yaklaşım*

Engin Arık

Öz

Bu çalışma en eski işaret dillerinden birisi olmasına rağmen görece üzerine az çalışma yapılmış olan Türk İşaret Dili'nde (TİD) sözdizimine odaklanarak deneysel dilbilim bakış açısıyla işaret dillerinde sözdizim çalışmasını sunmaktadır. değişik sözcük/işaret sıralamalarının yer aldığı tümcelerde TİD işaretçilerinin kabuledilebilirlik yargılarını araştırmak üzere iki deney yürütüldü. Deney 1 katılımcılar-arası 2x2 (Özne-Eylem / Eylem-Özne; İnsan / Hayvan) deseniyle oluşturulan 26 geçişsiz tümceden oluşurken Deney 2 katılımcılar-arası 3x2 (Özne sırası: Başta / Ortada / Sonda; Nesne sırası: Nesne eylemden önce / Nesne eylemden sonra) deseniyle oluşturulan 28 geçişli tümceden oluşmaktaydı. Her iki deneyde de TİD işaretçilerinden (n=8 ve n=6) 5-noktalı Likert tipi ölçek kullanarak tümceleri puanlamaları istendi. Deney 1'den elde edilen sonuçlarda İşaret Sırasının anlamlı bir etkisi bulundu: Katılımcılar Özne-Eylem sıralamasıyle yer alan tümcelere Eylem-Özne sıralamasıyla verilen tümcelerden daha yüksek puan verdiler. Özne Tipinin bir ana etkisi bulunmazken İşaret Sırası ve Özne Tipi anlamlı bir etkileşimdeydiler. Deney 2'nin sonuçları ise Nesne Sırasının anlamlı bir etkisini gösterdi: Katılımcılar Nesne eylemden önce tümcelerine Nesne eylemden sonra tümcelerinden daha yüksek puan verdiler. Bu deneyde ne Özne Sırasının bir etkisi ne de bir etkileşim bulundu. Bulgular göstermektedir ki TİD Özne-Eylem ve Nesne eylemden önce sıralamasını diğer sıralamalara göre daha çok tercih etmektedirler.

Anahtar sözcükler

Sözdizim, Türk İşaret Dili, Deneysel Dilbilim.

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Экспериментальный подход к порядку слов в турецком языке жестов[*]

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Аннотация

Настоящее исследование предлагает экспериментальную лингвистическую перспективу для изучения порядка слов в языках жестов, уделяя особое внимание порядку слов в турецком языке жестов, одном из старейших, но относительно недостаточно изученных. В исследовании приемлемости для использующих турецкий язык жестов различных порядков лингвистических форм в предложении были проведены два эксперимента. Эксперимент 1 состоял из 26 непереходных предложений с конструкцией 2x2 (SV vs. VS; Human vs. Animal) внутри субъекта, тогда как Эксперимент 2 состоял из 28 переходных предложений с конструкцией 3x2 (Subject order: First vs. Middle vs. Last; Object order: Object-before-Verb vs. Object-after-Verb) в рамках темы. В обоих экспериментах пользователей турецким языком жестов просили оценивать предложения с использованием 5-балльной шкалы Лайкерта (n = 8 и n = 6 соответственно). Результаты эксперимента 1 показали, что существенный основной эффект порядка жестов показал, что участники дали значительно более высокий рейтинг порядку SV по сравнению с порядком VS. Не было никакого основного эффекта Типа Предмета, но наблюдалось взаимодействие между Порядком Знака и Типом Предмета. Результаты эксперимента 2 показали значительный основной эффект порядка Объект-Глагол, свидетельствующий о том, что рейтинги участников для порядка Объект-перед-Глаголом были значительно выше, чем оценки для порядка Глагол-перед-Объектом. В эксперименте 2 не было никакого существенного основного эффекта от предметного порядка или взаимодействия. Эти результаты показали, что турецкий язык жестов предпочитает SV и OV другим возможным порядкам.

Ключевые слова

порядок слов, турецкий язык жестов, экспериментальная лингвистика.

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