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# STRATEGIES USED DURING THE ACQUISITION OF NOUN-VERB COLLOCATIONS: SYNTAX-SEMANTICS INTERFACE

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# **ABSTRACT**

This study is an extension of a previous research conducted by Sofu & Dönük (2011) to answer the research questions as for the acquisition of noun-verb collocations. In terms of the procedure of the previous study and the current research, the raw data obtained from the four children periodically and transcribed into the written format have been processed through some tests to answer the extended research question for the strategies used during the acquisition of noun-verb collocations. The research has revealed that the four children use syntactic and semantic bootstrapping very often, and scaffolding they receive from the other people during the recording might have diverted the flow of the conversation towards the verb bias or noun bias. Moreover, the research has unfolded that the use of NPs as the most frequent, VAVs and TLVs respectively, imply that these word forms should be included in the education materials and school curriculums in line with their frequency and order of acquisition.

Keywords: Strategies, L1 acquisition, noun-verb collocations, ELT

#### **INTRODUCTION**

The research related to child first language acquisition of Turkish mostly relies on the acquisition of lexical, syntactic or morphological items as individual units of focus. The research related to child first language acquisition of Turkish mostly relies on the acquisition of lexical, syntactic or morphological items, all taking place together, but investigated individually. There is a lot of research on the acquisition of L1 (first language) in other languages and in Turkish: the acquisition of verb inflections (Ekmekçi, 1982), the acquisition of question words (Sofu, 1988), the development of argument structure (Ketrez, 1999), the acquisition of morpho syntax through child interaction (Küntay & Slobin, 2002), the acquisition of early lexicon in terms of noun-verb dominance (Türkay, 2005), (Şahbaz, 2015) among others. However, this type of research in the field of L1 acquisition in Turkish does not throw light upon morpho-syntactic processes, which are related to the acquisition of the verb phrase, realizing at the interface between syntax and semantics.

In addition to the abovementioned related research as independent fields, the acquisition of the verb phrase realizing at this interface remains to be seen through the evidence from the corpus data obtained via adult-child interaction. The verb and its arguments as the starting point of all semantic, syntactic and morphological occurrences on the sentence and the context itself falls to the very center of research to be conducted in language acquisition. The argument structure (Nilsson, 1984),noun incorporation (Mithun,1984; Baker,1988) and lexicalization patterns (Talmy,1985;1991) besides other potential processes with varying labels tend to refer to the same procedure, in which the verb is interrelated with its selected arguments. In this sense, the interface between syntax and semantics as a morpho-syntactic process needs further elaboration.

This paper is an extension of a previous study by Sofu& Dönük (2011) conducted with four female children at the age of 3 whose transcribed conversations have been extracted from the database by Sofu (1995). As for the procedure of the abovementioned study and the current research, the data recordings were compiled once a month, for sixty minutes in a naturalistic environment by the researcher, and each subject was recorded from the age; 2;0 to 3;0. The corpus was processed on the grounds of noun-verb collocations, which can be distinguished through some tests (Mohanan, 1995; Arslan, 2000; Dönük, 2001; Kearns, 2002). The tests by Kearns (2002) have been used to see whether there are true light verbs in child speech while those developed by Mohanan (1995), and the Turkish versions adapted by Arslan (2000), and Dönük (2001) were used to make out the semantic and syntactic behavior of the verb and its noun. In this way, it has become possible to distinguish the noun-verb collocations; in other words, the verb and its satellite to Talmy (1991) to extract data from the child speech.

According to the findings of the research by Sofu and Dönük (2011), which makes the foundation for this research, the four children have used the noun-verb collocations initially in many instances, which shows that these children can initiate the lexical choices in a context. The less frequent, repeated use of these structures comes out either as the repetition of an adult speech, or as the repetition of the initial use of the same nounverb collocation. The most common of the noun-verb collocation is cumulated on the literal use of the verb and

its particle as NP, the spurt of which is after 2; 3, when the child has had the mastery of verb island constructions correctly for an extended period of time prior to formulating any general constructions (Tomasello & Brooks, 2000). As proposed by Kearns (2002), the use of True Light Verbs (TLV) (e.g. fotograf çek- (to take a photo)) shows the transition to the verb polysemy, which seems to be acquired later than that of Vague Action Verbs (VAV) (e.g. 'banyo yap-' (to have a bath)). Gapping or Ellipsis, as the overt syntactic markers seems to have more repeated use than initial use. This can be interpreted as that the child can use the context syntax effectively, out of which, (s) he is able to cope with such complex processes. The free variation of the word order can be traced back to the competency of the construction of the syntactic structures in terms of complements and adjuncts.

In the study (2011), three research questions took place. For the first research question which focuses on the possible acquisition stage for the noun-verb combinations in the development of the lexicon, it has been found out that the four children begin to use this category at a very early age if all these collocations that denote one single activity is accepted to be the norm for lexicalization as proposed by Talmy (1985; 1991). The second finding of the study mentioned previously is the role of context in the acquisition of the noun-verb collocations. The data processed show that the children have acquired words in this class from the daily context cues of the adults' speech around them as early as 2 years of age. This implies that the children make use of the daily interaction while amassing the morpho-syntactic items in the lexicon. However, except the context they have taken place, it becomes hard for them to produce novel utterances in different environments, for they use frozen, imitated, but meaningful and relevant lexicon gathered from their environments such as kitchen, garden, park or childcare centers. The third finding displays that children attempt to make novel utterances with some shortcomings, which need interference of an adult as an instructional help. At this stage, children have been observed to match different verbs with different nouns such as 'sakız ye-' (to eat gum), 'cereyan (elektrik) kes-((power) to go out), etc. The previous research also revealed that the acquisition of the nouns or verbs and the blurred boundary between the biases for these parts of speech is yet to be seen in a further research. With the findings on the agenda, this study aims to find an answer to the following research question:

1. What strategies are used during the acquisition of noun-verb collocations?

This study shares the same methodological procedures mentioned in the research conducted before (Sofu & Dönük, 2011). The data obtained from the children have been processed according to the traditional strategies such as Syntactic Bootstrapping (Naigles, 1996), or Gapping Mohanan (1995). Chapter 2 has been designed to act as a complementary part to the other three research questions and their findings that take place in Sofu & Dönük (2011).

# THE STRATEGIES USED IN THE DEVELOPMENT OF THE LEXICON

While developing the lexicon, the child uses some strategies to infer the meaning of the words from the input. While this is possible in some cases, in others she resorts to other strategies.

## **Lexical Strategies**

## Supply of the New Verb as a Survival Strategy

When the noun and verb combination has been acquired together, the child still manages to convey the meaning through some other mechanisms, which can replace the target word. In example 1, the child cannot find the right verb for 'diş çektir-' (to have a tooth pulled); instead, she chooses to say 'diş çıkar-' (to have new tooth during infancy). When the researcher directs a question about it, she does not hesitate to answer the question, for she has mastered that structure though in a different meaning. It is also noteworthy to see that the child can use the overt causative marker, -er together with the active voice of the same verb.

#### Ex. 1:

```
*MEL: Nenem- in
                                 diş- i
                                                      tı.
        Grandma- gen. 3.sg.
                               tooth-acc.
                                             come out- Past.
         Çık-
                         dı-
                               lar.
         come out-make-Past-3.pl.
        (Grandma had her teeth come out. They took it out)
*RES: Öyle mi? (Is that so?)
*RES: Senin diş- ler- in de
                                                  mi? (Have your teeth come out, too?)
       Your tooth-pl.-Gen. too
                                   come out - Past- Q?
 *MEL: IIh.
```

As the dialogue suggests, the child responds to the question whether she has had her new teeth, she has clearly misinterpreted the question and thought she had not had her tooth removed. The noun 'tooth' seems to evoke the idea of going to the dentist more than having a new tooth come out.

# VAV as a Smooth Transition to Two-Word Stage in the Lexicon

Some child utterances include verb combinations that are produced with some helping verbs, which Kearns (2002) calls vague action verbs (VAV) such as 'make an inspection' and 'do the ironing'. These verbs do not behave independently of their complements, and they tend to produce noun-verb collocations.

#### Ex. 2:

```
*MEL: Hamur yap- a- lim (Let's make dough).

Dough make let's- 1.pl.

*MEL: Al unu. (Take the flour)

*RES: Napiyim ben bunu şimdi? (What shall I do with this now?)

* MEL: Onu hamur yap. (Make it dough)

It dough make-2.sg.
```

In example 2, the child does not yet create a semantically independent collocation of a compound, but she can use the noun verb combination through selecting a VAV.

## **Syntactic Strategies**

The strategies used by the child as to the word formation and meaning mapping from syntactic clues show that the child is capable of using noun-verb collocations despite the lack of lexical accuracy. The following syntactic tests work as the evidence for the existence of these strategies.

## Genitive Case Marker: The Proof for Lexical Integrity Principle

In example 3, even when the child has not mastered the pronunciation of words, she can use the two words together integrated with their possessive inflection as well as the mastery of using the verb, kes- (to cut) as true light verbs (TLV) (Kearns, 2002)as in the examples of 'give the floor a sweep', 'give a groan', etc. (in this context 'to cut' instead of 'to hurt'). Another interesting observation lies in the pronoun deletion which is naturally used by the child. Only after the clarification question of the researcher is the use of the pronoun triggered overtly in the context.

# Ex.3:

```
*AYÇ: İpini bağlıyorum. (I am tying its lace.)

*RES: Neyin ipi- ni bağlı-yor- sun? (The lace of what are you tying?)

*AYÇ: abacı- nın ipi- ni. (The lace of the shoes)

shoes-Gen. lace-acc.

*RES: Ayakkabının. (The lace of the shoes)
```

\*AYÇ:. Abacı- nın ipi ağcı-mı detti [=kesti(The lace of the shoes hurt my foot.)

The shoes-Gen. lace foot- my -hurt- Past

Lexical Integrity Principle adapted by (Arslan, 2000) to Turkish seems to work with the utterances of the children in example 3. This is the evidence for the fact that the noun and the verb are acquired together even before the phonological mastery of the acquisition.

# Gapping/Ellipsis as the Mastery of the Form

Mohanan (1995) states that if gapping or ellipsis is allowed at the syntax level, there is no lexical integrity. However, in Turkish, this can be interpreted on the basis of the co-occurrence of the verb and noun: if the verb and the noun behave together during some syntactic operations such as focusing, adjacency, gapping, etc. in the sentence structure, then they can be considered as collocating words. In Example 4, Ayça uses gapping, and the word 'pencereden' is deleted in the utterance of the child; yet, the meaning is preserved ideally, and lexical integrity principle (Mohanan, 1995) is not violated. Obviously, the child linguistically knows that anaphoric referent is used for the second mention of the noun.

## Ex.4:

\*SIB: Neden kapattı rüzgar o pencereyi? (Why did the wind close the window?)

\*WOM: Ayça pencereden düşmesin diye (So that Ayça would not fall off the window.).

\*AYÇ: ...[ pencere-den] sark - ma- dı- m (I have not leant out of the window.).

Window- Abl. lean out of- Neg.-Past-1.sg.

Ellipsis, the removal of the verb phrase replaced by 'do so' is the indication of the mastery of the form while also indicating that the verb phrase at the syntax level can be replaced by another phrasal constituent. Damla, in example 5 clearly shows the linguistic choice, 'öle yap' (do so) to show how to clear the nose.

## Ex. 5:

\*RES: Ben bu peçete- ye burnu- mu sileyim mi? (Shall I clear my nose with this napkin?)

1.sg. This napkin- Dat.nose- Gen. clear- Q?

\*DML: [Peçeteye burnumu] sil. (Clear it.)

\*RES: Burnum akmış. (I have a running nose.)

\*DML: Öyle yap. (Do so.)

## Syntactic Bootstrapping

When the child hears some new concepts, she resorts to syntactic bootstrapping (Naigles, 1996) by which she uses syntactic cues to deduce meaning. In the following conversation, in example 6 Ayça tries to figure out the meaning of 'fitil sok-' (insert a seton) by asking about the instrument, which shows that she has made out that part of speech, asking about some constituents that make up the adjuncts for a verb phrase, 'neresine', 'neyle', (where, with what) etc. The following example is some evidence for such a strategy.

#### Ex. 6:

```
*AYÇ: Bobo- su- na
                                 iğne-
                                         mi
                                                 yap- tı-
                                                          lar?
      Bottom-Dat.- Gen. 2.sg.
                                injection- Q
                                                give- Past-3.pl.
      (Have they given an injection to his bottom?)
*RES: Poposuna iğne yaptılar. (They have given an injection to his bottom)
*RES: Fitil de soktular. (They have inserted a seton, too)
*AYÇ: Hı?
                         (What?)
*AYÇ: Nere- si- ne dok +... (Where have they inserted it?)
     Where- Gen.-Dat.
*AYÇ: Neyle
                    sok- tu- lar? (With what have they inserted it?)
      What-with insert- Past-pl.?
*RES: İğneyle. (With an injection.)
```

# The Mastery of the Word Order Flexibility

The child has the mastery of changing the word order of the sentence acceptable in Turkish. In example 7, she seems to topicalize the frequency of the word noun combination, 'okula git-'(go to school) by placing stress on 'doktor' (the doctor) in example 8, and uses the subject overtly for emphatic purposes.

#### Ex.7:

\*GRA: Annesi giderken gitmeyecek artık burda kalacak.

(She will not go with her mother, she will stay here.)

```
*RES: Öyle mi? (Is that so?)

*AYÇ: Daha çok gid- iyor- um ben oku- la. (I go to school more often)

*More often go-Pr.Prog. 1.sg. 1.sg. school-Dat.

*RES: Okula?

Ex. 8:

*NAZ: Doktor-a git- ti- n mi? (Have you been to the doctor's?)

*Doctor- Dat go- Past-2.sg. Q?

*NAZ: Doktor-a mi git- ti- n? (Have you been to the doctor's?)

*Proctor-Dat Q go-Past- 2.sg?

*RES: Ben mi? (Me?)

*RES: Doktora gitmedim. (I have not been to the doctor's)
```

The examples given above underline the fact that the linguistic knowledge of the child allows for maintaining a conversation with an adult, and that it is possible for the child to draw meaning, understand and use the new noun-verb collocations through the lexical and syntactic strategies.

#### **CONCLUSION**

This study as a complementary follow up of the research by Sofu & Dönük (2011) aims to find out the strategies used during the acquisition of lexical units. The research has revealed that the children use syntactic and semantic bootstrapping very often, and scaffolding they receive from the other people during the recording might have diverted the flow of the conversation towards the verb bias or noun bias. So, the bias of the language is at stake when the context is considered. Besides, it is not possible to count the verb and noun individually, for they act as a whole unit, which means according to the nature of the language, and its frame (Talmy, 1991), the bias might change. Moreover, the most important finding is: the use of these words, NPs as the most frequent, VAVs and TLVs respectively, shows that these verbs should be included in the education materials and school curriculums in line with their frequency and order of acquisition. That the NPs are used most often initially can be explained by the nature of the verb acquisition in its literal meaning. In other words, children acquire the literal meaning of the verb earlier than other meanings of the same verb. The use of the flexible word order and some other syntactic mechanisms such as ellipsis and gapping takes place as the repetitive use of the verb, which shows that the child uses some other strategies for them.

As for the use of syntactic (Gleitman&Gleitman,1994) and semantic bootstrapping (Clark,1995), children have been observed to use these strategies as well as the scaffolding provided by the adult in almost every dialogue, so it can be

the subject for another argument. The use of idioms is less common than the other multi-word combinations, which are naturally acquired later in the language. If the linguistic competence is innate, and can be triggered through the exposure to linguistic data, then the corpus must be prepared to serve the need of the children who acquire the language. However, when the relations of these categories are taken into consideration, if they will take place in the Turkish language instruction as a corpus, they should follow the word combinations in a system starting with literal meanings towards the use of idioms. In this sense, if they are included in the education programs using a system, the learning and teaching activities flow in a more natural course which goes hand in hand with the language acquisition strategies. When the implications for ELT (English Language Teaching) are considered, it is important to observe the order of acquisition in both languages, for the ELT curriculum and related materials should be prepared by comparing and contrasting the facts based on first language acquisition systems and procedures. Under the circumstances, the best course of action would be to trace the first language acquisition research findings for a more fruitful and more effective foreign language teaching.

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