ACQUISITION OF PASSIVES IN TURKISH

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ACQUISITION OF PASSIVES IN TURKISH

Thesis submitted to the

Institute for Graduate Studies in the Social Sciences in partial fulfillment of the requirements for the degree of

Master of Arts

in

Linguistics

by

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Thesis Abstract

Gülümser Efeoğlu, "Acquisition of Passives in Turkish"

This study aims at investigating the acquisition of passive constructions in Turkish and to shed light on the path that Turkish children follow in their acquisition of passives in different constructions. Turkish, as an agglutinative language, marks the passive voice on the verb as a suffix which has allomorphs determined by final sounds of verbs. Thus, we predict that children would experience difficulty in sorting out the restrictions on the passive marker. Being the first experimental study focusing on the production of Turkish passives, the present study aims at filling an important gap in the acquisition, in particular production of a voice morpheme in Turkish.

In order to figure out this path, elicited production task was administered to 67 Turkish monolingual children (age range 2;2 to 7;5) as the experimental group and 4 Turkish monolingual adults (the control group). Children have been divided into four developmental groups. Passive use was tested in two contexts: passive in the affirmative, generic and passive in the –mAz construction. The experiment involved 71 verb types and 85 tokens which differed in their final sounds, in being monosyllabic or multisyllabic, and in their transitivity.

The findings of the current study indicate that although children's passive use starts early, they do not follow an errorless path. Particularly, children aged between 3;10 and 5;3 commit a high number of irregularization errors, which suggests that they entertain a variety of hypotheses in deciding on the regular and irregular passive markers in the acquisition process and for a certain period they employ the irregular passive morpheme as a default passive marker. However, with the enhancement in their linguistic capacity and in the abundance of counter evidence, with age they manage to use appropriate passive markers. In addition to that, it has been found out that all children's passive use increased with age and in general performed much better in the production of passives in *-mAz* construction compared to passive use in affirmative contexts.

In brief, the present study shows that the acquisition of passives in Turkish is not an error-free process; rather it is a developmental process during which children exploit a number of linguistic and non-linguistic sources.

Tez Özeti

Gülümser Efeoğlu, "Türkçe'de Edilgen Yapının Edinimi"

Bu çalışma Türkçe'de edilgen yapının edinimini araştırmayı ve Türk çocukların değişik yapılarda edilgen yapıyı edinmede izledikleri yola ışık tutmayı hedeflemektedir. Sondan eklemeli bir dil olan Türkçe edilgen yapıyı eklendiği fiilin son sesine göre belirlenen sesdeşleri olan bir son ek olarak yansıtır. Bundan dolayı, çocukların hangi ekin düzenli hangi ekin düzensiz olduğunu belirlemede zorluk yaşayacakları beklenmektedir. Türkçe'de edilgen yapının edinimine odaklanan ilk deneysel çalışma olan bu çalışma Türkçe'de çatı eklerinin üretiminin edinimindeki boşluğu doldurmayı amaçlamaktadır.

Çocukların bu süreçte izlediği yolu bulmak için, deney grubu olarak yaşları 2;2 ve 7;5 arasında değişen 67 tek dilli Türk çocuğa test grubu olarak da 4 Türk tek dilli yetişkine resim anlattırma tekniği ile test uygulanmıştır. Çocuklar dört gelişimsel gruba bölünmüşlerdir. Edilgen kullanımı iki değişik ortamda test edilmiştir. Bunlar olumlu genel kullanımda ve –mAz yapılarının içinde edilgen yapıdır. Çalışma birbirlerinden tek heceli, çok heceli, geçişli ve geçişsiz gibi gruplarda ayrılar farklı 71 fiilin 85 kullanımıyla gerçekleşmiştir.

Çalışmanın sonuçları çocukların edilgen kullanımına oldukça erken başlamalarına rağmen edinimde çeşitli hatalar içeren bir yol izlediklerini göstermektedir. Özellikle 3;10 ve 5;3 yaşları arasındaki çocukların yüksek oranda düzensizleştirme hatası yapmaları onların belirli bir dönemde düzensiz eki düzenli ek olarak kullandıklarını işaret eder. Yine de dil becerilerindeki artışla ve aksi örneklerle karşılaştıkça düzenli ve düzensiz ek arasındaki ayrıma varıp doğru kullanıma erişirler. Buna ek olarak çocukların –mAz testinde olumlu ve genel yapıya kıyasla daha iyi bir performans göstererek daha fazla edilgen yapının kullanıldığı gözlemlenmiştir.

Özetle, Türkçe'de edilgen edinimi hatasız bir süreç değildir. Aksine bu dönem çocukların dilsel ve dilsel olmayan birçok kaynaktan yararlandıkları gelişimsel bir süreçtir.

ACKNOWLEDGEMENTS

To begin with, this was a long, enjoyable, and fruitful journey for me from the beginning to the end. For sure, there were some obstacles that we had to tackle with all along these months. However, thanks to my thesis advisor, Assoc. Prof. Dr. Mine Nakipoğlu-Demiralp to whom I am indebted for the enthusiasm, encouragement, academic and moral support, it was relatively easy to come over these difficulties. I also would like to thank her for spending so much time and energy at the every stage of the study and sharing her invaluable academic background with me.

I also would like to express my deep gratitude to the members of my thesis committee, Assist. Prof. Dr. Balkız Öztürk Başaran and Assoc. Prof. Dr. Mine Güven for their valuable comments and sincere support. In addition to them, Assist. Prof. Dr. Nihan Ketrez was so generous in sharing her comments with me on the development of a truth value judgment task. I also thank Mustafa Uğur Kaya for giving technical support in the data analysis whenever I need it.

I also would like to thank Assist. Prof. Dr. Gülru Yüksel, the head of ELT Department at Yıldız Technical University, for the encouragement and support. She constantly guided me sharing her experiences with me and provided the most productive working environment both physically and psychologically. In addition to her, Assist. Prof. Dr. Celile Eren Argit helped me to keep on studying even at the most difficult times with her motherly love and care. I also thank my colleagues Kaine Gülözer, Ferda İlerten, and Duygu Çandarlı for making my life more enjoyable and for providing constant care and support. I am also greatly indebt to my colleagues in A1027, Elif Kır and Emrah Özcan, for the generous help, patience, and motivation. Elif was always there to solve any problem as the best problem solver ever when I need any kind of help. Similarly, Emrah's sense of humor and friendship have been a source of motivation for me to never give up.

Although it is impossible to express my gratitude for them, I also thank my mother and father Irfet and Rafet Efeoğlu for their love, care, patience, support. Particularly my father has never hesitated about my potential and always supported me in following my dreams. Thus, anything and everything I have achieved so far is the product of this mutual love and respect. Last but not least, I am greatly indebt to my sister Güler Efeoğlu Işık and her husband Mustafa Işık for their support, love, and care. As my best friend, sister, consultant, advisor, flatmate Güler has always been so generous in showing her care, love, and support that I have always enjoyed this affection.

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CHAPTER I INTRODUCTION

Introduction

The question of how languages are acquired by children continues to intrigue researchers. The answer for this inquiry may lie behind the precise definition of the term "acquisition". In broader terms, language acquisition refers to the process of mastering communicative skills and linguistic properties as well as reaching absolute/stable abstractions of these properties. Yet, there is no consensus on the nature of these abstractions.

There are two basic approaches to the origin/formation of abstractions. While generativists mostly claim that abstractions are available at birth and unfold when triggered by a sufficient amount of input over a certain period of time (Borer and Wexler 1987; Guasti 1995; Fox & Grodzinsky 1998) proponents of the usage-based accounts advocate the view that there are no abstractions at birth at all, and that language is acquired in a piecemeal fashion and in accordance with the amount of exposure to the target language such that abstractions are formed gradually (Bates et al. 1987; Tomasello 2000). Although both accounts admit the role of exposure, they differ in their conception of the nature of input. The former regards it as a tool that can only help to unearth the already existing structure when all other conditions are met, whereas the latter accepts it as a keystone in acquisition.

The present study is an attempt to understand how the passive construction is acquired in Turkish. In uncovering the path Turkish-speaking children follow in the acquisition of Turkish passives, this study aims to provide some insight into the discussion of linguistic abstractions during acquisition. Being the first study examining Turkish children's productivity in using passives through an elicitation technique, the present work attempts to find out (i) how Turkish speaking children produce passives,(in particular), (ii) whether they are aware of various allomorphs used in passive formation, and (iii) whether they can use them correctly. Furthermore, if they cannot use the form(s) correctly, what gives rise to morphological and syntactic ill-formedness will be looked into.

This chapter will set out to provide a description of passives in general. It will then turn to a discussion of the passive construction in Turkish. It will briefly review the properties of the passive voice in Turkish, such as passivizability of various types of verbs, the nature of the nontruncated passives, i.e., passives which occur with an overt subject introduced via a by-phrase. It will briefly touch upon the semantic properties of demoted subjects and the syntactic accounts offered to provide a description on the formation of passives in Turkish. The predictions of the current study will be laid out in the last section of this chapter.

Acquisition and the Passive Construction

Cross-linguistically; the basic communicative function of the passive construction has been considered to be to enable a focus shift from agent to patient (Gulzow & Gagarina, 2010). That's why, passives are assumed to be derived from their active counterparts. Even though there seems to be a common ground in the function of passives worldwide, it is difficult to observe this uniformity in the forms through which the passive function is realized. To illustrate, in agglutinative languages like Turkish, Jakarta Indonesian and Sesotho, there are certain morphemes that are attached to verbs for passive formation and they often undergo phonological changes depending on the neighbouring sounds (Gil, 2006; Demuth, 1989). On the other hand, in languages like English and German, passive formation requires the use of an auxiliary verb and a participle marker on the verb. Though the number of languages that have been studied so far with respect to the acquisition of passives does not exceed five, the use of an auxiliary and a specific participle marker on the verbs appear to render it more difficult for children to produce passives as evidenced via data from English and German. In other words; as English and German children have to deal with more complex structures, they are reported to acquire passives much later than children acquiring agglutinative languages (Menuzzi, 2002).

The Passive Construction in Turkish

The passive voice is one of the four voice types in Turkish which differ from the others in how the relationship between the doer and the affected parties is defined. In the active voice, this relation is direct in that the doer is actively and overtly involved in the action or event. In the passive voice, it is indirect such that the affected party is focused; leaving the demoted doer aside. In the reflexive voice, there is an overlap between the doer and the affected party. In the reciprocal voice, all parties take part in the action or the event. In the causative, the initiator and the doer are distinct. Thus, the change in voice enables speakers to signal the role of the doer in the

action/event. These preferences of the parties involved, and their stances are used with a variety of purposes, one of which is focus shifting.

The passive (voice) is claimed to enable speakers to "foreground" the internal argument and to "background" the external argument of a verb (Djurkovic 2006). Thus, when the speaker wants to focus on the event itself not the doer, the passive (voice) is employed.

(1) Ayşe elbise-m-e su dök-tü. (active) dress-POSS&1SG-DAT water spill-PAST.3SG

'Ayşe split water on my dress.'

(2) Elbise-m-e (Ayşe tarafından) su dök-ül-dü. (passive) dress-POSS&1SG-DAT water (Ayşe by) spill-PASS-PAST.3SG

'Water is spilt on my dress by Ayşe.'

In (1), the doer is overtly stated, whereas in (2) the event itself is emphasized rather than the doer.

Tarzi (1983) states that passives are more frequently employed in the written texts in Turkish as the narrator wants to seem more objective and as they have some time to reconstruct their product. However, in the spoken discourse speakers are urged to convey their messeges in a relatively restricted amount of time.¹

Although descriptions of passives in terms of its function in a particular language are also valid for passives crosslinguistically, languages differ in the way the passive is realized. For instance, in a language like Turkish, voice is realized in the form of morphemes attached to verbs.

¹ In data Tarzi presents the percentage of the passive use is 46% of all sentences in the written texts whereas it is 4.7% in the spoken discourse (p. 40). In addition to that, Tarzi found out that passive use in TV programs are mostly restricted to impersonal passives.

In Turkish, the default affix for passivization appears to be {-II} and it exhibits variation with respect to whether the verb that it is attached to verbs ending in a (i) vowel or in the lateral liquid [-1].

Verbs ending in consonants except for the lateral liquid [-1] are attached the default morpheme {-II}. The allomorphs of the passive marker in Turkish are as follows :²

• [-n] is used with verbs ending in a vowel

ye- 'eat' ye-n-di 'It was eaten'

de- 'say' de-n-di 'It was said'

• [-1n], [-in], [-ün], and [-un] are used with verbs ending in a lateral liquid [1]

del- 'drill' del-in-di 'It was drilled'

al- 'buy' al-ın-dı 'It was bought'

gül- 'laugh' gül-ün-dü '(literally) *It was laughed' 'One laughs at it.'

bul- 'find' bul-un-du 'It was found'

• [-1], [-il], [-ul], and [-ül] are used with verbs ending in consonants except for the lateral liquid [-1]

yak- 'burn'	yak-11-d1	'It was burned'
kes- 'cut'	kes-il-di	'It was cut'
öp- 'kiss'	öp-ül-dü	'It was kissed'
soy- 'rob'	soy-ul-du	'It was robbed' ³

It is also significant to note that $\{(-I)n\}$ functions as a reflexive voice marker too.⁴

 $^{^{2}}$ We refer to the passive marker {-II} as the default affix, being the most frequently encountered one, based on the fact that it occurs with consonant ending verbs and the number of consonant-ending verbs is incomparably higher than vowel-ending verbs (cf. Nakipoğlu & Üntak, 2008)

³ In Turkish, there are some constraints on the sequencing of vowels. The preceding vowel determines the upcoming vowel depending on the frontness, height, and rounding features. There are two types of Vowel Harmony: External and Internal V.H. As the name suggests the internal one is concerned with vowels in a (root) morpheme while the external determines the vowel of a suffix added to a word. Thus, as for passives, we are mainly concerned with the external vowel harmony which constrains the vowel in a suffix in terms of its frontness and the backness property in accordance with the vowel of the preceding morpheme.

The crucial difference between the reflexive and the passive voices is the stances of the participants involved in the event described by the predicate. In the reflexive sense, the doer of the action fulfills the event on his own whereas in the passive the thing/person that is affected by the event is focused. In the ensuing sections, when discussing children's performance and productivity in the passive use we will bear the reflexive and passive functions of the affix {-In} in mind. To give an example, if a child produces an utterance such as (3), where, the affix {-In} is used rather than the correct {-II}, we will discuss whether that example can be interpreted as a use of the reflexive affix. The sentence below exemplifies such a case.

i. Ali akademik başarı-sı-ndan dolayı öv-**ül**-dü. (passive) Ali academic achievement-POSS&3SG-ABL because of praise-**PASS**-PAST-3SG

'Ali was praised because of his academic achievement.'

Ali akademik başarı-sı-ndan dolayı öv-ün-dü. (reflexive)
 Ali academic achievement-POSS&3SG-ABL because of praise-REFL-PAST-3SG

'Ali boasted about his academic achievement.'

In (i) the doer of the action, i.e., the praiser is somebody who is not mentioned, hence we have a passive construction while in (ii) the use of the reflexive marker foregrounds the praiser, i.e., Ali. In addition to that, the reflexive interpretation may reveal itself with the use of a reflexive pronoun *kendi* 'self' in Turkish.

iii. Ali akademik başarı-sı-ndan dolayı kendin-i öv-dü. (reflexive) academic achievement-POSS&3SG-ABL because of PRO:REFL|self-ACC praise-PAST-3SG.

'Ali praised himself because of his academic success.'

Even though there is no voice marker on the verb, the reflexive interpretation of Ali's praising himself is provided by the use of reflexive pronoun "kendi" with some verbs. So, the reflexive marker $\{-(I)n\}$ is not a must for a reflexive sense to be conveyed for all verbs although it is a must for some others such as gör- (to see), kız- (to get angry). Some verbs can only convey the reflexive interpretation by the reflexive pronoun, not by the reflexive morpheme.

⁴ In Turkish, compared to the use of the reflexive marker, which is not a must under certain circumstances, the passive morpheme which is determined by the phonological rules of Turkish has no alternative structure. To illustrate, if one wants to convey the message that s/he did something herself/himself, then s/he may use either the appropriate reflexive pronoun in the sentence or the reflexive voice marker [-In]. However, if s/he wants to say that something is done, then there is no other way but to use the passive marker. The distinction between the passive and the reflexive is quite obvious in the following example though it may not be the case for many other examples.

(3) * Ekmek kes-in-ir. bread cut-PASS-AOR.3SG

'The bread is cut.'

As for (3) for instance, we will claim that [-In] cannot be a reflexive marker as there has to be a doer. Moreover, if we interpret this sentence in a reflexive reading, then it would mean that the bread itself performed the event of cutting, which of course is not the case. It is the passive meaning that there is a doer of the event who is not mentioned but implied and the bread is the item affected by the event described. So, we will suggest that such examples can only be interpreted as illustrating children's possible confusion with the variant suffixes involved in passive formation. ⁵

As voice means modifications on the relation of a verb and its arguments, argument structure of a verb may be changed depending on the valency of a verb in Turkish. More explicitly, transitive verbs (with two arguments) get de-transitivized when they are used in passive constructions leaving the internal argument to function as the subject of the sentence. In order to see the effect of passivization on verbs with different argument structures, it is necessary to take a look at each type separately. With this (purpose) in mind, in what follows I will briefly investigate passive formation with transitive/ditransitive and intransitive verbs in Turkish.

Passive Formation with Transitive Verbs

Languages differ with respect to to what extent they allow passivization of transitive/ditrasitive and intransitive verbs. While transitive and ditransitive verbs

⁵ However, there may be ambiguous cases where it is possible to track both the reflexive and the passive readings at the same time. In order to provide more reliable results, we have deliberately avoided including some verbs in the test conducted. Yet, when children used such verbs during the test, those verbs have been excluded.

(can) allow passivization more freely, the passivizability of inransitives is more contrained. Prior to a discussion on the contraints that emerge in the passivization of intranitives, let us look at an example of a ditransitive verb. In (5) below the internal argument *kitap* 'book' of the ditransitive *ver-* 'to give' is foregrounded occupying the subject position of the passivized sentence.

(4) Ayşe kitab-ı öğretmen-e ver-di (active) book-ACC teacher-DAT give-PAST.3SG

'Ayşe gave the book to the teacher.

(5) Kitap (Ayşe tarafından) öğretmen-e ver-il-di (passive) book teacher-DAT give-PASS-PAST.3SG

'A book was given to the teacher by Ayşe.'

As there is no dative movement⁶ in Turkish, not all internal arguments can be

foregrounded but only those functioning as direct objects can be subjects of the

passivized sentence. That's why, when we foreground the indirect object in a passive

construction, it turns out to ungrammatical.

(6) *Öğretmen kitap ver-il-di. teacher book give-PASS-PAST.3SG

'The teacher was given a book.' (Intended reading)

As for the transitive verbs, we see that the internal argument can become the subject

of the passivized sentence; however, it has to lose its accusative case.⁷

⁶ In English, ditransitive verbs, allow the two internal arguments to switch positions, which is referred to as *dative movement*.

⁽iv) Alan gave his book to the teacher. Alan gave the teacher his book. (dative movement)

Thanks to this movement, both of objects can be passivized.

⁽v) His book was given to the teacher.

The teacher was given the book.

⁷ Nominative and accusative cases are structural cases and therefore they are determined by the argument structure of the verbs while cases like dative, locative and ablative are not structural cases. When there is a change in the syntactic structure in cases like passive formation, children are expected to commit errors resulted from this change. However, non-structural cases do not pose any problem in forming a passive sentence.

(7) Ahmet yemeğ-i ye-di. meal-ACC eat-PAST.3SG

'Ahmet ate the meal.'

(8) Yemek (Ahmet tarafından) ye-n-di. meal (Ahmet by) eat-PAST.3SG

'The meal was eaten (by Ahmet).'

Briefly, transitive verbs turn into intransitives when they are passivized allowing their internal argument to function as the subject of the passive sentence

Passive Formation with Intransitive Verb

Intransitive verbs pose certain passivizability restrictions. While the subset of intransitives referred to as "unergatives" can be passivized, "unaccusatives" are more restricted in their behavior. This split behavior of intransitives has been claimed to result from the distinct syntactic configuration of unaccusative and unergative verbs (Perlmutter, 1978). In his Unaccusative Hypothesis, Perlmutter (1978) suggests that unergative verbs are those whose sole argument is the external argument while unaccusative verbs substituting only for an internal argument. However, this internal argument is projected in the subject position in a sentence. Thus, although both groups are alike in their intransitivity with sole arguments, they are highly distinct in terms of the nature of these sole arguments. Here are some examples from Turkish:

(9) Fatma yüz-dü. (unergative) swim-PAST.3SG.

'Fatma swam.'

Subcategorization of verb yüz- : V [[NP]]

(10) Dondurma eridi. (unaccusative) icecream melt-PAST.3SG

'The icecream melted.'

Subcategorization of verb eri-: V [[NP]]

Nakipoğlu-Demiralp (2002) claims that the semantic distribution of unaccusative and unergative verbs stems from the source of instigation. More explicitly, unergative verbs are the ones internally instigated/volitional whereas unaccusatives are externally instigated/non-volitional (Nakipoğlu-Demiralp, 2002).

Before dwelling on details of the agentive and non-agentive distinction, it is vitally significant to note that if we passivize an intransitive verb (which can be passivized) then the valency of an intransitive verb becomes zero. There leaves no explicit reference to an agent. These passive constructions are called impersonal passives.

(11) Ayşe ve ben sahil-de yürü-r-üz. Ayşe and I seashore-LOC walk-AOR-1PL

'Ayşe and I walk in the seashore.'

(12) Sahil-de yaz-ın yürü-n-ür. seashore-LOC summer walk-PASS-AOR.3SG

'It is walked in the seashore in summer'

(12) is an example for the impersonal passive construction since there is no explicit reference to the doer of an action. Moreover; the person agreement marker on the verb is third person singular as it has been assumed that there is a dummy element occupying a subject position in many other languages such as German and English (Nakipoğlu-Demiralp, 2002:148).

Going back to the unaccusative and unergative distinction in Turkish, it has been observed by Nakipoğlu-Demiralp that tense, aspect and modality markers along with the passive marker on the verb determines the referential properties of a passivized verb (2002:131). Namely, unergatives with their sole arguments capable of instigating an event can be accompanied by a past tense marker in impersonal passive constructions while unaccusatives with sole arguments that are non-volitional cannot be suffixed with a past tense marker (Nakipoğlu-Demiralp, 2002:131).

(13) Bütün gece şarkı söyle-n-di all night song sing-PASS-PAST.3SG

'It was sung all the night.'

(14) *Tavandan su damla-n-dı. ceiling-ABL water drip-PASS-PAST-3SG

> ' The water was dripped from the ceiling (by itself).' (Nakipoğlu-Demiralp, 2002:131,133)

Thus, (13) is an example for the passivized unergative verb with a past tense marker while (14) is an ungrammatical sentence involving a passivized unaccusative verb with a past tense marker. In (13), the subject of a sentence is implicit in that we have no idea of the person/people who sang through the night. Yet, we as hearers know that there is a person or a direct referent of the event that is realized. Thus, the use of past tense markers provides a restricted and more vivid picture of the participants. However, this is not the case when we make use of the aorist marker instead of the past tense marker (Nakipoğlu-Demiralp, 2002).

In Turkish, the function of aorist is quite wider when compared to other tense, aspect, and modality (henceforth TAM) markers. Nakipoğlu-Demiralp (2002) claims that impersonal passives with the aorist reveal two interpretations in accordance with two distinct functions of the aorist, namely epistemic modal (with a generic interpretation) and present tense (with an existential sense). More strikingly, some intransitives incompatible with the past tense marker can be passivized with the use of aorist marker functioning both as an epistemic modal with necessity and possibility interpretations and as a present tense marker with the implication that there exists a group of people that have undergone the situation described by the verb. Let us have a look at the following examples.

(15) Bu sıcak-ta bayıl-ın-ır. this heat-LOC faint-PASS-AOR.3SG

'One faints in this heat.'

(Nakipoğlu-Demiralp, 2002:140)

The aorist in (15) functions as an epistemic modal marker conveying the message that it is highly possible for anybody to faint because of the heat yet this event has its referents in the alternative, possible worlds not necessarily in the real world.

(16) Yaz-ın bu bölge-de sıcak-lar-dan sık sık bayıl-ın-ır. summer-GEN this region-LOC heat-PL-ABL frequently faint-PASS-AOR.3SG

'In summer it is frequently fainted of heat in this region'.

(Nakipoğlu-Demiralp, 2002:140)

In (16), an existential reading with the implication that there are some people fainted of heat in the past is reinforced by the use of time adverbials like 'frequently' and 'in summer' referring to a specified temporal domain along with the use of the aorist as a present tense marker.

(17) *Geçen sene sıcak-lar-dan sık sık bayıl-ın-dı. last year heat-PL-ABL frequently faint-PASS-PAST.3SG

'Last year it was frequently fainted of heat.'

(Nakipoğlu-Demiralp, 2002:140)

The use of the past tense marker instead of the aorist results in ungrammaticality although the reverse yields a grammatical sentence with two distinct interpretations, which implies that the past tense marker is not a reliable test to make a distinction between unaccusatives and unergatives. Compatibility of some unaccusative and unergative verbs' with aorist but not the past tense suggests that the aorist marker in Turkish could be accepted as a valid criterion to determine whether an intransitive verb is an unergative or an unaccusative one. Nonetheless, the aorist marker in impersonal passives itself could hardly provide a unified picture since there are both unergative-like and unaccusative-like verbs, which lead Nakipoğlu-Demiralp (2002) to conclude that there is a continuum, endpoints of which are true unergatives and true unaccusatives leaving a space in between for verbs which show a mixed behavior in terms of the interpretations revealed with the use of the aorist.

Animacy of the Argument in Passive Constructions

In this section, there is a discussion of animacy of the argument and its effects in the passive formation process although in the present study none of these effects have been tested as it does not fit the test that designed.

The animacy of internal arguments functioning as subjects has a say on the formation passive constructions in Turkish. Erguvanli-Taylan (2008) claims that verbs without animate subjects in their active counterparts are not allow to form passives. Furthermore, it has been stated that the source of the power is not the function, rather it is only the animacy feature of the argument (Erguvalı-Taylan, 2008:65).

(18) a. Tavuğu fırında unutmuşuz, tavuk yan-mış. chicken-ACC owen-LOC forget-EVI-1PL chicken burn-EVI.3SG

'We forgot the chicken in the owen, so it has been burned.'

b. *Tavuğu fırında unutmuşuz, tavuk yan-ıl-mış. chicken-ACC owen-LOC forget-EVI-1PL chicken burn-EVI.3SG

'We forgot the chicken in the owen, so it has been burned.'

c. Bugün hava çok sıcak dikkat et; böyle havalarda çabuk yan-ıl-ır. today whether very hot be_careful such whether-PL quick burn-PASS-AOR.3SG

'Today it is very hot; be careful it may burn you.'

(Erguvanlı-Taylan, 2008:66)

Yan- (burn) is an unaccusative verb substituting for only an internal argument which is externally instigated. This sole argument 'tavuk' (chicken) is assumed to undertake the event described by the predicate. Thus; an inanimate object, namely 'tavuk', is the thing that is affected by the event with a patient/theme theta role. (18a) is an active unaccusative use while (18b) and (18c) are passives. Of the passives, the former yields ungrammaticality, which may stem from two sources of differences between (18b) and (18c). The first difference is the TAM marker while the second is the implicit reference with the generic interpretation. In order to see the explicit source of ungrammaticality, let us make changes on these two possible sources of ungrammaticality. If it were the TAM marker, namely evidential marker, the following sentence which involves a predicate with the aorist marker must have been a grammatical one.

d. *Tavuğu firinda çok tutarsan tavuk yan-ıl-ır. chicken-ACC owen-LOC very keep-OPT-2SG chicken burn-PASS-AOR.3SG

'If you keep the chicken in the owen for a long time, it burns.' Then, there remains only one difference between (18d) and (18c), which is the animacy feature of the subjects. In (18c), the aorist functions as an epistemic modal (Nakipoğlu-Demiralp, 2002) which conveys generic interpretation that there is a possibility for everyone to get burned if they are exposed too much sun, but there is no particular reference to a group of people. In (18d), the generic interpretation is kept with the aorist marker, yet the sentence is ungrammatical since 'tavuk' in (18d) is inanimate while the implicit argument of (18c) is animate.

Özsoy (2009) makes a distinction between animate subjects in impersonal passives. She (2009) proposes three types of animacy each of which is determined by the verb and its semantic and syntactic distribution. These animacy types are teleological, inherent and inherited animacy (Özsoy, 2009:16). She claims that [-animate] NPs that 'inherit' [+animate] feature of the argument can not be used in impersonal passive constructions.

(19) a. İnce, uzun parmaklı el-ler-i soğuk-ta titr-iyor-du. thin long fingered hand-PL-3POSS cold-LOC shiver-PROG-PAST

'His thin and long fingered hands were shivering.'

b. Soğuk-ta titre-n-iyor-du. cold-LOC shiver-PASS-PROG-PAST

'It was shivered in the cold.'

(Özsoy, 2009:9)

Although shivering is not particular to fingers, in (19a) fingers which are inherently

[-animate] gets agentive feature [+animate] since it is the part of the [+animate]

entity, namely a person. Thus, fingers could receive [+animate] feature in

constructions except for passives. That's why it is impossible to interpret the

implicit reference of (19b) as fingers.

With unaccusative verbs, animacy of the internal argument is vitally

significant since its being [+animate] yields grammaticality while unaccusatives with

[-animate] argument can not be passivized (Özsoy, 2009).

(20) a. Ankara'ya gel-in-di. Ankara-DAT come-PASS-PAST

'It was come to Ankara.'

b. Ardından gene,, genç kız-lar-a gel-iyor-du sıra. after.that again young girl-PL-DAT come-PROG-PAST turn.

'After that the turn was coming to the young girls again.'

c. *Ardından gene,.., genç kız-lar-a gel-in-iyor-du sıra. after.that again young girl-PL-DAT come-PASS-PROG-PAST turn

'After that it was come to the young girls again.'

(Özsoy, 2009: 11)

Gel- is a directional unaccusative verb which can be used with [+animate] arguments. There is no problem when it is passivized as it is clear with the (20a). Semantically the verb *gel-* involves the movement of an entity forward. So, any other argument that shares this semantic background will have similar "teleological capability". With this capability [-animate] arguments such as 'turn' can be used with an unaccusative verb in the active form since 'turn' is not something stable and it is in a constant movement and shares certain semantic features with the event coming. However, this teleological capability does not help [-animate] arguments to be used in passive constructions (Özsoy, 2009:13). The passive marker in (20c) is ungrammatical since the argument of the same verb [-animate]. Therefore, Özsoy (2009) claims that these examples made it explicit that different types of animacy of the argument in impersonal passives grammaticalized.

Syntactic Accounts of Passive Formation

Passive and active sentences in all languages are semantically are quite similar, but they are diverse in the word order that they produce, which lead people to believe that passives are derived versions of active sentences. Initially, both involve the same verb and the same internal argument with patient/theme theta role. Yet the external argument is excluded in the passive even though it is possible to make use of it in the sentence through a "by-phrase". That's why; we have two different argument structures for active and passive sentences. Semantically identical verbs in active and passive differ in their subcategorization. For instance; a verb like *oku*- 'read' subcategorizes for two arguments: the external argument with an agent theta role and the internal argument bearing a theme theta role. When it is passivized, the verb

okun- 'be read' subcategorizes only for the internal argument the thing that is read bearing a theme theta role. Then, the question is whether there is a derivation of passive though making changes on the active form?

Carnie (2007) claims that passive sentences are base-generated hence are not derived versions of the active forms. He proposes that the internal argument of a verb is generated as a complement to the V head in the same way as it is generated in an active sentence. However, because of reasons related to case assignment and the EPP (Extended Projection Principle), the internal argument moves up to the specifier position of tense/inflectional phrase (T/IP). Thus, it is claimed that there exists NP movement in Passive Formation.

As for the question related to the derivation of the passive by simply deleting the external argument in the active form and changing the role of the internal argument into the external one, Carnie (2007) proposes that such a claim would be highly misleading since there is some counter evidence.

(21) a. Wilma considers [Fredrick to be foolish].

b. Fredrick*i* is considered *ti* to be foolish.

(Carnie, 2007:295)

In (21a), Wilma is the subject of the sentence bearing the experiencer theta role assigned by the verb "consider" while Fredrick is assigned its external theta role by the predicate "be foolish". In (21b), Fredrick is not an argument of the verb *consider*; thus, it does not receive its theta role by the verb '*consider*' but by '*be foolish*'. Still, it is possible for an argument to raise to [Spec, TP] position. This means that passives are not pure modifications of active sentences. If this were the case, we would expect

the internal argument of the verb, which is CP [Fredrick to be foolish], to occupy the external argument position ([Spec, TP])⁸.

(21) c. *Fredrick to be foolish is considered.

In brief, passive constructions are not just transformed versions of active sentences. There are some reasons for arguments to move up to a certain position or to be generated at particular nodes in a projection.

Within the generativist framework, there have been two proposals for the syntactic formation of a passive sentence in Turkish. While Özsoy (1990) bases her arguments on the movement of the internal argument for case and EPP reasons, Öztürk (2004) claims that internal argument stays in its base position letting V head to move up to T head with its all case and referentiality features. Let us go over each respectively.

Özsoy (1990) claims that the passive morpheme [-II] that is attached to the verb absorbs the accusative case on the internal argument.⁹ Since Case Filter requires every NP in a sentence to be case-assigned, this NP has to move up to an empty case position, which is the subject position ([Spec, TP]) in that case. That there is no argument in the subject position violates EPP. Furthermore, for the internal argument to be case assigned and the subject to be filled by an argument, the internal argument is claimed to move up to the [Spec, TP] position. Below you can find the passive formation process as described by Özsoy (1990). As the tree diagram in Fig.1

⁸ As is clear with (21c), passive does not mechanically require the internal argument of the active form to be changed into the external argument. There is a reason for particular arguments to move to particular landing sites. In (21b), Fredrick moves up to [Spec, TP] because when the passive morphology is at work, [Spec, TP] position stays unfilled violating EPP. So, in order for this sentence not to clash, an argument is needed to move up to [Spec, TP].

⁹ Crosslinguistically, it has been claimed that if a verb cannot assign an external theta role, it will not be able to assign accusative case either; and this is known as Burzio's Generalization (Burzio, 1986).

reveals, the NP generated in the VP internal position moves up to get the nominative case and fills the subject position leaving a trace in its base position.

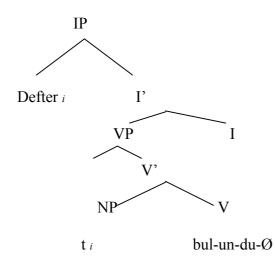


Fig.1 Tree Diagram for Özsoy's Syntactic Account on Passives

(22) Defter bul-un-du. notebook find-PASS-PAST.3SG

'A notebook was found.'

Another account of the passive formation for Turkish has been proposed by Öztürk (2004). In that model, it has been claimed that the passive marker absorbs the case feature of the agent phrase (the external argument) and the verb raises to the tense head carrying all features of arguments with which it has had some spec-head relation. Thus, its being in a c-command relationship with each specifier position enables the internal argument to be assigned the nominative case. Briefly, there is no movement of NP to [Spec, TP] position. Instead, V head raises to T head position with all its features allowing the internal argument to get nominative case. The tree diagram below illustrates the formation process.

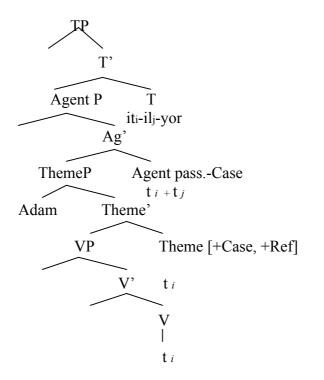


Fig.2 Tree Diagram for Öztürk's Syntactic Account on Passives

The use of Agent Phrase in Passives

In Turkish, although the agent is backgrounded, it is still possible to use it in a sentence. Similar to English, the agent can be expressed with a phrase, i.e., the so-called *taraf-in-dan* 'by-GEN-ABL' phrase. Additionally, when the agent phrase refers to a formal group or an institution, the suffix –CA suffix is used.

(23)a. Ezgi yeşil balon-u patla-t-tı. green balloon-ACC explode-CAUS-PAST.3SG

'Ezgi made the green balloon explode/burst.'

b. Yeşil balon Ezgi tarafından patla-t-1l-dı. green balloon Ezgi by explode-CAUS-PASS-PAST.3SG

'The green balloon was exploded by Ezgi.'

Although the information coded in these two sentences are quite alike, focus and the pragmatic force behind these two sentences are different. In the first one, focus is on

the agent while in the second it is on the theme. However, in Turkish, with the change in the stress pattern of a sentence we may have different interpretations of the sentences above.

(24)a. Bakanlık tüm sınıf-lar-a akıllı tahta gönder-di. ministry all classroom-PL-DAT smart board send-PAST.3SG

'The ministry sent smart boards to all classes.

 b. Bakanlık-ça / Bakanlık tarafından tüm sınıflara akıllı tahta gönder-il-di. ministry-CA / ministry by all classroom-PL-DAT smart board send-PASS-PAST.3SG.

'Smart boars were sent to all classes by the ministry'.

In (24b) the use of the -CA suffix is perfectly okay as well as the use of 'tarafindan

phrase' since both reveal the meaning that the ministry initiated or carried out the

event described by the verb and its arguments. Briefly, we can use both -CA and the

'tarafından phrase' interchangeably when the external argument appears in a formal

context.¹⁰

Göksel and Kerslake (2005:150) claim that -CA and 'tarafından' phrase are

employed when there is an animate agent that is suppressed by the passive marker.

However; if the agent is inanimate, then some case markers such as the ablative and

the locative may be used.¹¹

(vii)a. Ayışığı keten-i parçala-r-mış. moonlight-NC linen-ACC destroy-AOR-EV-3SG

'Apparently moonlight fragments linen.'

- b. Keten ayışığ-ın-**da/dan** parçala-n-ır-mış linen moonlight-NC-LOC/ABL destroy-PASS-AOR-EV-3SG
- 'Apparently linen gets fragmented by moonlight.'

¹⁰ However, the use of -CA in all other settings except for a formal one will yield ungrammaticality.
(vi). *Yeşil balon Ezgi-ce patla-t-ıl-dı.

green balloon Ezgi-CA explode-CAUS-PASS-PAST.3SG

^{&#}x27;The green balloon was exploded by Ezgi.'

¹¹ Göksel and Kerslake (2005) have provided clear examples in order to illustrate this distribution.

⁽viii)a. Fırtına bütün evleri yıktı.

In addition to the role of case markers that can be used instead of by phrases

in Turkish, the instrumental case 'ile' can also be employed in some restricted

contexts when the speaker wants to emphasize that it is through X that something can

be done (Erguvanli-Taylan, 2008).

(25)a. Matkap duvar-lar-1 del-er. drill wall-PL-ACC drill-AOR.3SG

'A drill drills walls.'

b. Duvarlar matkap ile del-in-ir. wall-PL drill INS|with drill-PASS-AOR.3SG

'Walls are drilled with drills.'

c. ??Duvarlar matkap tarafından del-in-ir. wall-PL drill with drill-PASS-AOR.3SG

'Walls are drilled by drills.'

storm all house-PL-ACC destroy-PAST.3SG

'The storm destroyed all the houses.' b. Fırtına-**da** bütün evler yık-ıl-dı.

storm-LOC all house-PL destroy-PASS-PAST.3SG

'All the houses were destroyed in the storm.'

(Göksel and Kerslake, 2005:150)

In (vii) and (viii), the sentences are perfectly okay while with the use of case markers, the meaning is slightly modified because of the specific references of these case markers. For instance, locative case markers define a certain period with its predetermined beginnings and endings. In (viii b), if we prefer the locative case marker to the ablative, then it is emphasized that the linen is destroyed only when there is moonlight, neither before nor after the moonlight. The period of destruction is confined to the very specific point of moonlight's presence. For the same example, if we take the ablative case into consideration, then the interpretation would mean that moonlight is the reason; it's the departure point, and the source for the destruction rather that a particular time/location reference. Ablative case in general signals the source and the departure point. So, depending on the speakers' intentions, the two case markers each may be used to reveal different interpretations of the same event. Following the same line of thought, the example below would mean that it is the storm that caused all the houses to be destroyed.

(ix) c. Fırtına-**dan** bütün evler yık-ıl-dı. storm-ABL all house-PL destroy-PASS-PAST-3SG

'All the houses were destroyed due to the storm.'

As is clear with (25b) and (25c), in passive formation the instrumental case is more appropriate for inanimate tools to be used in comparison with the 'by phrase' which involves some sort of agency.

Double Passives in Turkish

In Turkish, some verbs such as *ye*- 'eat' and *de*- 'say' get two passive suffixes simultaneously, which have been regarded as irregular cases by Göksel and Kerslake (2005). Nevertheless, the use of double passive markers with particularly these minimal (minimal in the sense that they involve only two phonemes) verbs has been explained by level ordering and the economy principles in the Lexical Phonology. ¹²

In addition to that, there are also some other monosyllabic verbs that can be used with the double passive marker. With respect to (26) Göksel and Kerslake (2005:152) claim that the first passive has detransitivizing function while the second has no syntactic function.

(26) yap-1l-abil-in-ir do-PASS-POS-PASS-AOR-3SG.

The use of second passive suffix on the verb may also be signaling the speaker's intention to focus on the event's being realized. Thus, it may be used to contribute to the effect that the utterance creates on the hearer.

In this section, up to this point I have provided a broad description of passives in Turkish from phonological, morphological, syntactic, semantic and pragmatic

^{&#}x27;It can be done'

¹² Inkelas & Orgun (1995) claim that there are restricted sound patterns and some levels among morphemes which are subject to changes resulted from the transition among these levels. In a way, morphemes are put in an order regulating the relations and interractions of these morphemes.

points of view. As each discussion has revealed, children acquiring Turkish have to tackle with a number of intervening factors in their use of the passive. The current study is mainly concerned with children's production of passives and the visible effects of these intervening factors in their passive use. Nevertheless, certain questions/issues that are brought forth in the discussion of passive formation will not be examined in this study as unpacking the path children follow in the production of passives restricts the scope of this study. In particular, as will be laid out in the next chapter, the production of passives can only be studied in certain contexts such as generic contexts in the center of which there are daily, seasonal routines or tool use and the -mAz construction. That is we have not had opportunity of testing children on whether they differentiate between unergative and unaccusative verbs and their passivizability or whether and how they use the 'tarafından' phrase, -CA phrase or the role the semantic role of animacy may play in the passivizability of a certain verb, etc. Thus, the scope of this study has been limited to morphological well-formedness in passive use, in particular in generic contexts.

With these in mind, in what follows I will turn to the predictions of this study with respect to the difficulties that Turkish children may experience in the acquisition of passives.

Predictions of the study

i. To start with, as passive is more challenging than active voice since it involves a functional change in the argument structure of a verb and a decision to be made on the appropriate passive marker depending on the phonological environment, we conjecture that children will produce active sentences instead of passive ones at the initial stages of their acquisition process. However, as they grow older and derive some accurate generalizations based on the amount and type of exposure to the target language, we expect children's abstractions with respect to passives to change respectively leading them to form passive sentences more competently.

ii. The second prediction of this study is related to the decision to be made on the appropriate passive marker. As stated earlier three distinct phonological environments lead to the use of three distinct morphemes for passive formation in Turkish. These are [-In], [-n], and [-II]. The default passive marker is determined based on its frequency of occurrence with a wide range of verbs. In Turkish, there are around 5700 verbs and 1200 of these verbs end in a vowel (Nakipoğlu & Üntak 2006). If the verbs ending in a consonant are more frequent than the ones ending in a vowel as stated by Nakipoğlu & Üntak (2006), then the default passive marker for the passive would be [-II] which is used with verbs ending in consonants except for the lateral liquid [-I]. Hence, [-II] is predicted to function as the default morpheme in Turkish for passives.

Furthermore, because of the variant passive forms, i.e. the three passive allomorphs, children are expected to have difficulty in the correct choice of the affix which further would lead them to err in passive production. In particular, verbs ending in a sonorant would pose a problem since verbs ending in a lateral liquid [-1], which is sonorant too, is passivized with the allomorph [-In] while those ending in other sonorants such as [-r] and [-n] are passivized with the allomorph [-II]. In a way, children are expected to irregularize the regular/default passive form [-II] to [-In] when there is a verb ending in a sonorant. For instance, children may produce errors such as (27a) and (27b).

(27)a. *(Uçurtma) uç-*ur-un*-ur for uç-ur-*ul*-ur.

kite fly-CAUS-PASS-AOR.3SG

'One flies a kite' ((A) kite is flown)

b. *(At-a) *bin-in-*ir. for horse-DAT ride-PASS-AOR.3SG

bin-*il*-ir.

'One mounts a horse'

The possible reason for this sort of an error pattern may be children's misleading generalization that all sonorant-ending verbs are passivized with [-In] while the obstruents are passivized with [-11]. However, in the presence of negative evidence it is highly probable that children sort out the split behavior of [1]-ending verbs and abandon the use of [-In], i.e. the irregular from of passive, with the sonorant ending verbs except for [1]-ending ones. Thus, we predict that children may predominantly make irregularization errors. Furthermore if passivized forms are rote-learned at the outset Turkish speaking children may even exhibit a U-shaped developmental path in the production of irregularization errors. More precisely, while they may not produce erroneous forms at an early age, they may get challenged with variant forms later on and start producing irregularized forms. In addition to the irregularization errors with sonorant ending verbs, it is also possible that children may commit errors with obstruent ending verbs. In the presence of variant forms for passive formation, the abstraction process of passive involving three distinct morphemes is very likely to lead to different sorts of irregularization errors such as (32a) and (b).

'Bread is sliced.'

'One kisses the hand.'

Following the same reasoning, it is highly possible that children will use the default form of the passive when they are expected to use the non-default form. More explicitly, children may use [-II] with verbs which should in fact surface with [-In] or [-n].

(29a) exemplifies an overregularization error with a vowel ending verb while (29b) is an overregularization error with a verb ending in a lateral liquid.

As potentially children would tend to use the active voice instead of the passive in wider contexts, it has been extremely challenging to come up with a particular context which would force children to use the passive voice *per se*. One such context in Turkish is the -mAz... (*ki*) construction which is a fused form involving a negative sense (i.e. the negation marker), a generic interpretation (i.e. the aorist) and some sense of necessity/obligation as in (30).

(30) Yatakta zıpla-n-maz ki bed-LOC jump-PASS-maz ki

'One should not jump/hop on a bed. ' (lit. It is not hopped on a bed) We predict that if children are provided with generic contexts in which the negative event needs to be focused, by use of the –mAz construction, they will produce passive sentences. Moreover, production of passives in this particular context may exceed that of the passives in an affirmative context. If this turns out to be the case we would get to see the effect of a construction on the production of passives. In particular, children may display a tendency to consider the construction as Verb+PASSIVE+mAz; hence, may show patterns of having learned the structure as a chunk. If Turkish children are observed to show such effects, this tendency may give rise to a less challenging learning experience for passives, hence may result in fewer errors. If on the other hand, constructions do not have a role in acquisition, then we would not observe any difference between children's use of passives in the regular affirmative context and the -mAz... (*ki*) context.

Last but not least, it is highly probable that the change in the argument structure of a verb will pose problems for children, which has been first brought to attention by Ketrez (2000) where she noted that in children's passive use some errors resulted from children's use of the passive marker with an inappropriate agreement marker (i.e. *elle-n-mi-yo-m). Such errors have been claimed to be an indication that passive morphology develops earlier that the syntactic aspect of the passive formation process, as the passive marker was used more confidently despite the incorrect agreement marker attachment to the verb.

In addition to this type of error, it is highly probable that children will have difficulty in the functional change between the subject and the object of an active sentence. If, for instance, children hypothesize that a passive sentence such as (31b) is derived from (31a) where *biçak* 'knife' is the subject and *ekmeğ-i* is the Accmarked object, they would fail to drop the accusative case marker on the internal argument, yielding ungrammaticality.

(31)a. Bıçak ekmeğ-i kes-er. knife bread-ACC cut-AOR.3SG

'A knife slices the bread.'

b. *Bıçak-la ekmeğ-i kes-il-ir. knife-INS bread-ACC cut-PASS-AOR.3SG c. Bıçak-la ekmek kes-il-ir. knife-INS bread cut-PASS-AOR.3SG

'Bread is sliced with a knife.'

(31b) exemplifies a possible error in which the accusative marker on the object may be used in the passive construction. This type of an error may occur since children have to tackle with two very similar structures, namely the active and the passive with some syntactic constraints in their formation. Except for the voice i.e. parties involved in the event described by the verb, the passive and active sentences are alike in that the same semantic concept is expressed with a different pragmatic force which also changes the syntactic structure. More explicitly, speakers employ the same verb with a different purpose, which can only be reflected with the change on the argument structure.

Conclusion

In this chapter, I have laid out phonological, morphological, syntactic, and pragmatic properties of passive constructions in Turkish. The significance of this part in terms of the current study is that Turkish speaking children may be challenged by the regular and irregular passive markers and that the choice of correct morphemes cannot be an easy task for them.

In particular, this chapter focuses on the reasons that force us to employ passive constructions as well as explaining how one can form a passive sentence in Turkish by referring to suffixes that are used in passive constructions and their distribution, syntactic models of passive formation in Turkish, double passive uses with underlying reasons, *tarafindan* phrase, animacy features of the internal

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arguments etc. Then, predictions of the present study have been listed in relation to the descriptions of Turkish passive constructions.

In Chapter 2, an overview of literature on the acquisition of passive will be provided. As cross linguistic studies on the acquisition of passives are believed to provide valuable insight to the current study, various studies in a number of languages conducted with different methods of will be discussed. Particularly, passive studies in languages that display linguistic similarities will be compared and contrasted with Turkish.

CHAPTER II

LITERATURE REVIEW

Introduction

Unlike acquisition of relative clauses (Brandt, Silke, Diessel, Tomasello 2008; Guasti & Shlonsky 1995; Slobin 1986 among others), question formation (Valin 1998; Rowland 2007), or particular affixes, acquisition of passive formation apparently has not attracted much attention among practioners leading to the study of the construction only in a few languages. This fact may partly have to do with the fact that eliciting passives is an overwhelming job. Furthermore passive use crosslinguistically is restricted to peculiar cases, i.e., passives do not appear to be used freely and active voice can easily be preferred over passive.

This chapter presents a brief review of literature on studies on the acquisition of passives. It will first focus on studies on English. Then it will move on to a discussion of acquisition studies on Jakarta Indonesian, Sesotho and Serbian. It will also present a discussion of acquisition studies on Turkish passives.

Acquisition of Passives in English

Acquisition of passive formation in English has been dealt with in a number of studies (Baldie 1976; Fox and Grodzisnky 1998; Meints 1999; Israel et al 2000; Crain Thorton and Murasugi 2009). Each of these studies is distinct from others with its focus on the particular property of passives, the procedure employed and with its stance concerning language acquisition. Prior to giving an overview of these studies, I will provide a brief summary of the observations made about the acquisition of English below. Needless to say, these studies all provide invaluable reflections on the acquisition process of passives in general. The major observations made about the acquisition of English have been:

 Comprehension of passives precedes production in the acquisition process (Baldie 1976).

ii. Some passive constructions such as truncated passives (Fox and Grodzinsky, 1998), adjectival passives (Israel at al 2000) are acquired earlier than the others.

iii. In the acquisition of passives, children exploit a number of sources such as semantic distribution (Israel at al 2000), pragmatic function, etc.

 iv. Representations on passives (either available at birth or formed via input frequency) are subject to a constant change at certain periods, which has been made clearer with the errors children committed (Baldie 1976).

Let us go over each observation:

i. Comprehension of passives precedes production in the acquisition process (Baldie 1976).

Baldie (1976) observed that comprehension of passives precedes production. There were three tests which differed with respect to ability that they wanted to test. The comprehension test, for example, included picture verification tasks in which children were shown some pictures and asked to point to the picture matching with the sentence uttered. As for production, children were shown pictures and asked prompt questions that would elicit passive sentences. In the imitation section, children were simply asked to repeat the passive sentence they heard. Participants were 100 children aged between 3;0 and 8;0. In the end, it was found out that

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imitation precedes comprehension, which is followed by production. Baldie (1976) implimented four constructions in the experiment: reversible passives, non-reversible passives, agentless passive and reversible actives. All these constructions were utilized in three distinct procedures: comprehension, production, and imitation. Children were engaged in these three sections at random orders. Prior to the comprehension section, concept inventories administered in order to eliminate meaning-based difficulties. After it made sure that children have no problem with concepts used in the tests, they were asked to point to the picture that matchs with the sentence told. In the production part, children were expected to answer comprehension questions related to the pictures shown. This study revealed that imitation of passives is the first to be acquired, then comes comprehension and production respectively.

ii. Some passive constructions such as agentless passives (Baldie 1976), truncated passives (Fox and Grodzinsky 1998), and adjectival passives (Israel at al 2000) are acquired earlier than the others.

Baldie (1976) presents evidence indicating that agentless passives are acquired earlier than non-reversible and reversible passives. Furthermore, as there is no need for children to deal with the animacy of arguments in a nonreversible construction, non-reversible passives are observed to be acquired earlier when compared to reversible passives which consists of two animate arguments. Another study that discusses passive types and acquisition is Crain, Thorton and Murasugi (2009) where they test the acquisition of different types of passives in English; namely truncated and nontruncated passives making use of a variety of research techniques such as elicited production, act-out, picture verification, and truth value judgment test. . Unlike some studies that claim that truncated passives are acquired earlier than

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nontruncated ones, Crain et al (2009) claim that all linguistic properties are available at birth, but the late production of some passive types is related to nonlinguistic properties of human mind such as maturation of working memory or other cognitive skills. ¹³ To support this idea Crain et al (2009) conducts two experiments. In the first experiment, the aim is to show that full passive constructions are produced by children if they are forced to circumstances in which they have no other choice but to use the passive. For this purpose, the elicited production method was used. Children were told that they would help one of the researchers to learn English. Another researcher acted out various stories with toys. Children were required to ask the "non-native" researcher, questions to check his understanding of English. 29 of the 35 children produced full passives at the end of this experiment. Then, two comprehension tasks, act-out and picture verification tasks were given to the same group. While the results with picture verification task were quite similar to the ones obtained in the elicited production (children's passive use ratio in this test was 90.9%), results of act-out turned out to be underestimating children's passive usage (70%). Although children's passive use appears to be high in elicited production test and in picture verification test, their performance in act-out test is not in accordance with them.

For the second experiment, a truth value judgment task was conducted with Kermit the Frog. There were ten children (average age 4;7) tested with reversible passive construction. Half of the items were correct while the rest was wrong. Children accepted correct cases in 93% of cases whereas they said no for the wrong

¹³ Crain et al (2009) state that research advocating a piecemeal fashion of acquisition is often misleading because of their methodology preferences. More explicitly, they claim that "*act out- toy manipulation paradigm*", "*children's spontaneous productions*", and "*children's descriptions of pictures*" force children to dwell on "nonsyntactic factors" such as "the formation of an action plan" (p.125).

cases in 77% of cases. So, these results confirm children's proficiency in the passive constructions.

Based on these results, Crain et al. (2009) claim that children are capable of using passives at early stages of their lives. Their no use of passive is related to the scarce use of the passive in general. They further claim that the same process applies to adults. It is quite rare to see full passive use in adult speech although this is not interpreted as their being incapable of producing passives. It is important to test appropriate pragmatic, semantic and syntactic cases of passives. Furthermore, it is claimed that picture verification and truth value judgment tasks are the most suitable ways of testing the acquisition of the passive while act-out and elicited production fall short of reflecting subjects' capabilities.

Another study on acquisition of passives in English is conducted by Fox and Grodzinsky (1998). In their study, they made use of different passive constructions such as non truncated actional be-passives, non-truncated non-actional *be*-passives, truncated actional *be*-passives and truncated non-actional *be*-passive and lastly *get*-passives.¹⁴ They oppose the idea that children have difficulty in passives because they are in the process of A-chain maturation as has been claimed by Borer and Wexler (1987). In the experiments, truth value judgment tests were used. In the first experiment, the aim was to find out whether children would make a distinction between actional and non-actional verbs with different forms. In the end, it has been found out that children's difficulty does not stem from the verb type (particularly nontruncated nonactional passives). Instead, the reason was the use of *by*-phrase

¹⁴ The rock star is being chased by the koala bear. (non truncated actional be passive) The boy is getting touched by the magician. (non truncated actional get passive) The boy is seen by the hourse. (non truncated non actional be passive)

The bear is seen. (truncated non actional be passive) (Fox & Grodzinsky 1998:317)

formed by theta role transformation in passives. In the second experiment, *by*-phrases were excluded in order to see whether it is really the source of the problem. In the end, it turned out that children have no difficulty with truncated passives. Rather, the distinction among the types of by-phrase, namely affector having limited thematic role distribution and non-affector being determined by the external argument of a verb stand as an obstacle for children because non-affector role can not be assigned through theta transmission by children. That's why, affector theta role is assumed to be assigned leading the semantic confusion in children's interpretation of nonactional nontruncated passives. Briefly, Fox and Grodzinsky (1998) claim that by-phrase and the theta role transmission are challenging tasks for children and they state that children are capable of processing A-chain movement from the very beginning (p.330).

A further study on acquisition of passives is by, Israel et al (2000) where it has been claimed that passive participles are acquired earlier than other voice markers in a step by step fashion. The major claim of the paper is that acquisition of passive participles in English can be explained by Constructional Grounding Hypothesis which proposes that children rely on more salient functions of constructions at earlier stages and then by making use of bridging interpretations of the same constructions they acquire other readings of different passive constructions. (1)a. The child is scared.

b. The child will get scared.

c. The child got scared by the loud music. (p. 107) In the above examples, (1a) is a clear stative participle referring to a final state of an event while (1c) is a clear eventive participle. (1b) shows overlap of two pragmatic functions. It has been claimed that children first acquire a stative participle. Upon

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hearing (1b), children are supposed to reanalyze the same structure and discover the existing (1c) meaning. In the end, they build broader form and meaning associations. In short, it has been observed that children acquire eventive passives with the help of equivocal uses which provides a common ground for both types (eventives and statives).

iii. Sources children exploit in the acquisition of passives

In Meints (1999), semantic categorization has been presented as an explanatory concept to the acquisition of passives in English. Meints (1999) has claimed that a prototypical approach that is used in categorization could shed some light on the acquisition of passives in English in that certain passive constructions are more typical examples of passives while some are not. Baldie (1976) identifies the "typical passive construction" as consisting of affected, focused, animate or inanimate patient; action involving high degree of action, direct physical contact, punctuality; and defocused and animate agent. Based on this description, two tests (a comprehension task requiring children to act out sentences produced by researchers and a production task eliciting answers by asking patient-oriented questions) were administered to 35 English-speaking children. The study has revealed that younger children are successful only in the comprehension and production of typical passives although there is a developmental pattern in the acquisition of passives in line with age. Typical passives were the least difficult constructions for all children in both comprehension and production tasks confirming the predictions of Prototype Theory that some exemplars are typical members of a category and therefore are acquired earlier (Meints, 1999). Lastly, similar to many other studies, it has been found out that children's comprehension of passives were far better at quite early ages than their production of passives in English.

So far, we have dealt with a number of studies on the acquisition of passives in English. Each study is distinct from others with its focus on the particular property of passives, with its stance concerning language acquisition and procedures employed. Let us now turn to a discussion of representations and passives.

iv. Passives and representations in the acquisition process

(In his article), Tomasello (2000) questions the acquisition process in terms of the abstraction of language in general. The main question is whether formal rules of a language are innate or not. Generativists (Borer & Wexler 1987) claim that babies are born with abstract rules of a language and they unfold in time as they develop physically and cognitively. And based on this assumption, they claim that children have adult-like language skills from early birth, which is named as "The continuity hypothesis". Proponents of the usage-based approach, on the other hand, propose that children rely more on so the called "external factors". More significantly, they argue that there are no abstract schemata at birth; children undergo an abstraction process of language. Tomasello (2000) states that there are two reliable ways of gathering first language acquisition data. The first one is observing a child's language development by keeping language diaries. This method is defective in that it is highly difficult to control the language items that the child is exposed to. So, he proposes the second method which is experimental study teaching a child a novel lexical item in order to see child's manipulation of this item in different structures. According to the results of a variety of studies, younger children (below 3;0) can produce utterances with novel lexical items only in the structures they have been presented before. Older kids have almost no difficulty using a novel item in different constructions. Tomasello (2000) argues that these findings support his claim that children's abstraction of language is a process (which is also affected by some other

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factors like intention reading, cultural learning, and structure mapping). Children's abstraction of language happens in a piecemeal fashion. Moreover, he (2000) claims that the major problem of innate competence is the linking rules that connect key syntactic categories to key experiential categories (p. 233). In the usage based account there is no linking problem since children are assumed to acquire languages starting with verb islands. In time, these islands enhance with exposure and children start to derive more abstract rules for their languages. In conclusion, Tomasello (2000) proposes an approach that attaches importance to item-based learning disagreeing with the innate abstraction of a language.

Interim Summary

So far, I have provided a summary of studies on the acquisition of passives in English. Although they differ with respect to their stances on the nature of the acquisition process, they have provided us with valuable insights. For instance, the difference among distinct types of passive construction had its reflections on the pace of (children's language) acquisition. The discussion will continue with a number of acquisition studies on passive constructions.

Sesotho

Demuth (1989) has worked on the acquisition of passives in Sesotho, a southern Bantu language and has reported that children can comprehend and produce full passives of certain groups of verbs as early as 2;2 in Sesotho, which is quite peculiar when compared to children's production of passives in languages such as English and German. Demuth (1989) puts forward that this early production is the reflection of a typological difference, whereby the passive use fulfills a vital discourse function in Sesotho. Subject position in Sesotho is allowed to be occupied only by "*old, given, or topical information*" (p. 4). Moreover, this position can only be questioned in the passive form.¹⁵

(2) * Mang o-o-shap-il-e? Who sm-obj-lash-prf-m

'Who lashed you ?'

(3) O-shap-il-o-e ke mang? Sm-lash-prf-PASS-m by who

"You were lashed by who?" (p. 4)

That's why, the use of passives in Sesotho is quite frequent. When recordings of four children were examined, it has been observed that children were quite competent in both comprehending and producing passive forms of fully reversible action verbs. Briefly, it has been found out that difference in typology may give rise to different paths and outcomes in the acquisition of different languages.

Jakarta Indonesian

Another study shedding light on the issue is the one on Jakarta Indonesian by Gill (2006). It is a language with quite flexible word order and rich voice morphology. Particularly, active and passive voices are marked with the prefixes *di-* and *N-* respectively. Gill (2006) argues that these prefixes diverge from other voice markers

¹⁵ In addition to that, Sesotho is a pro-drop language allowing subject drop as it is marked on the verb in the form of an agreement marker (Demuth, 1989).

of other languages in that they are not subject to restrictions on their theta role assignment. For instance, when a verb is prefixed with a passive marker di-, there is no need for it to be preceded by an NP bearing a patient theta role as it is the case in English or many other languages. It may well be preceded by almost any other theta role assigned argument in addition to the patient theta role. In that respect, *di*- does not function as a voice marker. Rather, it seems to signal the existence of a patient in a sentence. Similarly, N- signals the existence of an agent contributing to the information structure of a sentence. That's why, Gill (2006) calls di- as a "weak" passive marker (p. 205). For the purpose of finding out how passives are comprehended and produced, 8 children's longitudinal recordings were analyzed (Gill, 2006). It has been found out that out of 11661 words produced by children aged between 1;6-1;11, 0.26% (30) was marked with a weak passive marker while 0,09% (11) was marked with a strong active marker (Gill, 2006, p.209). Additionally, Gill claims that findings with *di*- confirm children's productive use since for most of the time children use the same prefix with different verbs. Moreover, it has been revealed that the use of *di*- is correlated with age (Gill, 2006). Gill (2006) has proposed two possible reasons for this: The first one is the structural ease of the passive marker when compared to English requiring the use of an auxiliary and past participle form of a verb. The second may be the input frequency that children are exposed to in the acquisition process. In order to validate the latter, Gill has gone through an immense corpus finding no significant correlation between the weak passive marker and its use in adult speech. Hence, only the former seems to have considerable explanatory power highlighting straightforward morphological form of di-. In brief, Gill (2006) has put forth that structural simplicity of a passive marker helps children to acquire passives in Jakarta Indonesian quite early.

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(4)	Pasang fasten	Dipasang di-fasten	(Rizka, 1;11)	
		perimenter set the can g it up. Setting it up.	nera up on the tripod]	(p. 210)
(5)	Mbuka N-open		(Timo, 2;1)	
	[Asking moth Take it off.	er to take his shirt of	ſ]	(p.

212)

As it is clear with examples, *di*- being the weak passive marker was produced earlier than N- passive prefix which has allomorphms making it structurally more complex than *di*-. Thus, although they are both acquired earlier, the one that is easy to handle with as there is only one prefix is structurally less challenging.

Serbian

Similarly, Djurkovic (2007) studies on the acquisition of passive and passive-like constructions in Serbian. Djurkovic describes three passive forms: regular passive forms which require subjects to be "*backgrounded*" while objects to be "*foregrounded*" (p. 242). The others are impersonal constructions that are used with transitives and intransitives respectively. He claims that although it seems as if the latter group functions as passive since there is no use of overt definite subject, there is an implied indefinite subject as *one* or *people* (p. 247). Moreover, another feature divergent from regular passives is that impersonals do not entail any change in the argument structure. Briefly, Djurkovic (2007) tries to figure out children's comprehension of these two structures via picture matching task and frequency

analysis of a database which was used to see the impact of frequency of these two constructions. In the end, it turned out that there is no direct correlation between impersonals and passive in the acquisition process. It has been found out that children can comprehend impersonals much earlier than passives although both structures are scarce in the adult use. Therefore, there must be some other mechanism that is responsible for the early comprehension of impersonals other than frequency effects. Djurkovic (2007) claims that the reason lies behind the different types of interactions among levels of representation. He defines two basic levels: the argument structure of a verb and grammatical functions. Impersonals do not require a change on any of these levels, which makes them as simple as active sentences in comprehension and processing, while passives entail a strict syntactic modification, making it more complex. Briefly, Djurkovich (2007) concludes that passive's structural complexity that children have to deal with in their representation formation process gives rise to the structure's late acquisition (by children) (p. 262).

Turkish

Lastly, even though in many studies Turkish it is possible to find some descriptive and explanatory sections on the passives (Savaşır 1983; Tarzi 1983; Nakipoğlu-Demiralp 2001; Kurtoğlu 2006; Öztürk 2006; Özsoy 2009; Yumrutaş 2009) there is only one study on the acquisition of Turkish passives, which is Ketrez (2000). Ketrez (2000) analyses utterances of three children's longitudinal data focusing on their passive uses. Based on the data, she classifies three categories of passive constructions employed by children. These are middle passives, in which agent is unnecessary, passives used with the generic, habitual context, and lastly passives

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with direct references. It has been observed that children do not have difficulty in the formation and production of middle passives. Below is the example for the middle passive use.

(6) Deniz: ad-1:-d1 [aç-1l-d1]
$$(1;8,14)$$
 open-PASS-PAST

In addition to middle passives, passive utterences related to habitual events and generic events were observed to pose no problem for children.

(7) Mine: Minik Kuş okku. (1;11,23) Little Bird read.

'read Little Bird.'

Mother: şimdi Minik Kuş oku-n-maz now Little Bird read-PASS-NEG-AOR

'We cannot read Little Bird now.' (Little Bird is not read now.)

Mine: oku-n-u:r read-PASS-AOR

'It is read.' (p. 285)

Yet, the group of errors named as "others" was reported as the challenging part for children. Upon detailed investigation of these errors, it has been found out that although children do not have serious problems in attaching the correct passive marker to the verb, they fail in fulfilling the syntactic requirements of the passive constructions.

(8) Mine:	*de:d-e [deniz-e] gir-il-di-k sea-DAT enter-PASS-PAST-1PL	(2;8)	
	'* we are gone into water.'		
(9) Mine:	*O, anne, o-nu elle-n-mi-yce-m İt mother it-ACC touch-PASS-NEG-FUT-1S	(1;11,23)	
	'*it, mother, I will not be touched it.'		

(adapted from Ketrez 2000: 287)

Although the child succeeds in attaching the accurate passive suffix to the verb, she fails to fulfill the syntactic requirements of the test. Thus, incorrect person agreement marker choice on the verb is an indication of the child's confusion related to the structural change. (As it has been pointed out with the example), morphological properties of passive constructions have been claimed to be acquired earlier than the syntactic ones (Ketrez 2000).

Conclusion

In this chapter, we have covered a variety of research on the acquisition of passives from English to Turkish. In the next chapter, methodology of the study, participants, test items, and possible ways of analyzing the data, will be discussed.

CHAPTER III

METHODOLOGY

Introduction

The present study aims at eliciting passive constructions in Turkish in two contexts: affirmative sentences and the so-called -mAz... (*ki*) construction through an elicited production test which involves pictures describing a variety of events. The experimental group of this study consists of 67 children (age range: 2;2 to 7;5), while 4 adult Turkish native speakers are included in the control group. This chapter will focus on the test design, test items, and the participants of the study.

Design

As is well known, passive use is an option across most languages and there are few contexts which may force the use of passive. The picture is not much different in Turkish, either. The availability and the high frequency of active use in child directed speech, children's books, tv programs etc. appear to hinder passive use hence present major challenges for child language researchers who attempt to uncover the path followed in its acquisition.¹⁶

¹⁶ In order to see how often children encounter passive constructions in their daily life, samples from different contexts have been examined. To illustrate; in CHILDES database, only 13 passive utterances have been found among 2081 utterances of child directed speech in the randomly selected Turkish data. In addition to that, in order to see the passive use in the written materials that are appropriate for children, nine best seller story books have been examined and 19 passive verbs have been detected among 984 sentences. Lastly, random sections of three popular cartoons (Caillou: 07:51 minutes, Üçüzler: 05:28 minutes, Hayatı Keşfetmek İsteyen Penguen: 03:44) have been watched and only 4 passive verbs have been noted. All these show the infrequent use of passive constructions in daily life in Turkish.

The fact that acquisition of passives is only studied in four languages so far (English, Jakarta Indonesian, Serbian, Sesotho) compared to other voice constructions such as causatives suggests that it is very difficult to come up with a context which would force children to use passive voice but not the active. For the purposes of this study we have investigated the particular constructions that would force a passive use in Turkish and have decided to resort to generic contexts as they prove to provide the most productive environment for the passive production.¹⁷ In Turkish, verbal stems have to be inflected with at least one TAM marker, followed by a person agreement marker in order to form a grammatical predicate in a sentence. For the purposes of this study, we have restricted ourselves with one of the TAM markers, the aorist, and the person agreement that appears with the aorist is by default the 3rd person.¹⁸ The Turkish aorist, in particular its potential to function as a habitual aspect marker gives rise to generic contexts and it is this idea of generic context that we would like to exploit in the present study for the production of passives. Accordingly, themes selected for the test material that could be used to elicit passive use have been restricted to this specific content.

In addition to passive use in the affirmative sense, the construction Verb-Passive –mAz... (ki) (henceforth referred to as *-mAz construction*) is considered to

¹⁷ In that respect we share the insight of Nakipoğlu-Demiralp (2002) where it is claimed that unlike most other languages, in Turkish, some unaccusatives can only be passivized when the verb appears with the aorist marker. It is the habitual aspect function of the aorist that makes the passivizability of the unaccusatives possible rendering a generic context and an arbitrary reading of the referents.

¹⁸ There are two reasons for 3rd person agreement marker attachment as mentioned by Nakipoğlu-Demiralp (2001): First of all, most of the verbs that we employed in the test are intransitives which would yield impersonal passive constructions when they are passivized. Impersonal passive constructions are devoid of an agent as the name suggests and involve only a predicate. Yet since EPP suggests that every sentence should have its subject, most probably there is a covert dummy subject which is 3rd (singular) in Turkish as it is the case in many other languages. Secondly, when we passivize transitive verbs, the object of the active sentence becomes the subject of the passive sentence. Thus, the person agreement on the verb has to be 3rd person as we are talking about objects third parties taking part in the event described by the verb.

provide a fertile construct in which passive use is predicted to be in abundance. With this in mind, we have devised our test to involve two sections: Part I involved test items for which children were required to produce the passivized forms in affirmative sentences within a generic context and Part II involved questions which forced children to use the *-mAz construction*.

Test Materials

Contexts which require the use of passive in affirmative sentences in this study have constituted four themes. These are:

A. *Seasonal Routines*: The four seasons, weather, and natural events that characterize the seasons have constituted the first theme of Part I. Some examples which characterize the routines and which can potentially serve as a context for the test items for each season are provided below. The details of how the test has been implemented will be given shortly.

(1) Yaz-ın deniz-de yüz-ül-ür. summer-GEN sea-LOC swim-PASS-AOR.3SG

'In summer one/people swims/swim in the sea.' (literally It is swum in the

sea.)¹⁹

(2) Sonbahar-da çizme giy-il-ir. autumn-LOC boot wear-PASS-AOR.3SG

'In autumn people wear boots.' (literally *Boots are worn in autumn*)

(3) Kış-ın kar top-u oyna-n-ır. winter-GEN snow ball play-PASS-AOR.3SG

¹⁹ As English does not have impersonal passives, the sentences provided here cannot be translated into English in such a way which would reflect the presence of passives. Hence the literal sense of each sentence will be provided in parentheses.

'In winter people/one play/plays snowballs.' (lit. Snowballs are played in

winter)

(4) İlkbahar-da çiçek topla-n-ır. spring-LOC flower pick-PASS-AOR.3SG

'In spring people pick flowers.' (lit. *Flowers are picked in spring*)

B. Special Days: Routines of special days such as birthdays and the New Year's Eve,

religious holidays are used as they allow us to employ a variety of verbs in passive

voice.

(5) Doğum gün-ü-nde pasta-nın mum-lar-ı üfle-n-ir. birth day-CM-LOC cake-GEN candle-PL-POSS&3SG blow-PASS-AOR.3SG

'On birthdays, people blow the candles of their birthday cake.' (lit. The

candles of the birthday cake are blown on birthdays.)

(6) Yeni yıl-da parti şapka-sı tak-ıl-ır. New year-LOC party hat-POSS&3SG wear-PASS-AOR.3SG.

'The New Year's Eve people wear party hats.' (lit. *Hats are worn the New Year's Eve.*)

(7) Şeker Bayram-ı-nda baklava ye-n-ir. Candy festival-POSS&3SG-LOC baklava eat-PASS-AOR.3SG.

'In Ramadan Festival, people eat baklava.' (lit. Baklava is eaten in Ramadan Festival)

C. Objects and their functions: If there is involvement of an agent, it gets far more

difficult to elicit passive utterances from children since children have a tendency to

immediately form active sentences where the agent acts on the object. Hence, in this

study, impersonal passives in which there is no direct reference to the agent are

employed predominantly. Objects and their functions provide a fruitful environment

for such uses of passives as there is no direct involvement by or reference to the doer.

Some examples of instrument use which are attempted to be elicited via the question

of "X ile ne yapılır?" "What is done with X/ What does one do with X?" are provided below.

(8) Kürek-le toprak kaz-ıl-ır. shovel-INS soil dig-PASS-AOR.3SG

'One digs soil with a shovel.' (lit. With a shovel soil is dug.)

(9) Koltuk-ta otur-ul-ur. armchair-LOC sit-PASS-AOR.3SG

'People sit on armchairs.' (lit. Armchairs are sat on.)

(10) Kalem-le yazı yaz-ıl-ır. pen-INS writing write-PASS-AOR.3SG

'One writes with a pen' (lit. *Writing/It is written with a pen.*)

(11) Davul çal-ın-ır. drum play-PASS-AOR.3SG

'One plays the drum.'

D. Daily Routines: The last theme focuses on the possible daily routines of a child's

life.

(12) Sabah diş-ler fırçala-n-ır. morning tooth-PL brush-PASS-AOR.3SG

'In the morning, people brush their teeth.' (lit. *Teeth are brushed in the morning*.)

(13) Okul-a gid-il-ir. school-DAT go-PASS-AOR.3SG

'One goes to school.' (lit. It is gone to school.)

(14) Okul-da ders çalış-ıl-ır. school-LOC lesson study-PASS-AOR.3SG

'One studies at school.' (Lit. It is studied at school.)

(15) Uyu-n-ur. sleep-PASS-AOR.3SG

'One sleeps.' (Lit. *It is slept*.)

In what follows, I will turn to a discussion of the second task used (in this study) to elicit passives.

The –mAz construction

This construction is predicted to provide one of the most productive contexts in terms of passive use. In this part of the test, children are asked to respond to how the parents of naughty children would react to their children's dangerous/inappropriate acts. The children tested have been encouraged to react to the behavior of the children in the pictures by stating what should/shouldn't be done. For instance, suppose that a child is swinging on a swing in an upright position. As this poses a certain danger to the child, a parent can react to the child by stating that "One does not swing on the swing on foot." This particular sentence in Turkish would require the use of passive in the *-mAz construction*. Here is how the scenario unfolds:

What would a parent say...

i. To a child swinging on foot:

(16) Salıncak-ta ayak-ta sallan-ıl-maz (der-di). swing-LOC foot-LOC swing-PASS-NEG&AOR.3SG say-AOR-PAST.3SG

'(S/he would say) people should not stand on foot on the swing.' (lit. S/he would say that it is not stood on foot on the swing.)

ii. To a child shouting at home:

(17) Ev-in iç-i-nde bağır-ıl-maz (de-r-di) house-GEN inside-POSS&3SG-LOC scream-PASS-NEG&AOR.3SG say- AOR-PAST.3SG

'S/he would say) people should not scream inside the house.' (lit. *S/he would say that it is not screamed inside the house.*)

iii. To a child painting the sofa:

(18) Koltuk-lar boya-n-maz de-r-di. armchair-PL color-PASS-NEG&AOR.3SG say- AOR-PAST.3SG

'(She would say) armchairs should not be painted/colored.' (lit. *S/he would say that armchairs are not painted/colored.*)

Method

Participants

The experimental group of the current study includes 67 Turkish monolingual children (33 girls and 34 boys) from two kindergartens in Istanbul, Boğaziçi University Preschool and Yıldız Technical University Davutpaşa Nursery School and one elementary school Atatürk Primary School in Esenkent. The age range for the group is 2;2–7;5. The control group consists of four monolingual Turkish adults from Boğaziçi University with a mean age of 23.

On the basis of their performance on the test administered, the experimental group has been divided into four age groups. The table below illustrates each group with the mean age, age range, and the number of children included in the group. Table1. Participants

Group	Number	Age Range	Mean Age
G1	19	2;2-3;9	3;1
G2	20	3;10-5;2	4;5
G3	19	5;3-6;7	6;1
G4	9	6;8 – 7;5	7;1
Adults	4	21 – 26	23

Test Items

In Part I of the test, there are 51 verbs and 65 tokens, which signals that participants are expected to use some verbs more than once because of the semantic requirements of the themes. In Part II (-mAz constructions), there are 20 verbs all of which are used only once. In order to prevent any priming, tests items for Part I and II, 71 types and 85 tokens have been mixed and ordered randomly and presented to the children via a powerpoint slide show.

Selection of the verbs to be used in the test are based on two variables:

a) The final sound of the verb to be passivized (sonorant vs. non-sonorant ending)

b) Syllable count of the verb to be passivized (monosyllabic vs. multisyllabic) In Table 2 below, verbs attempted to be elicited in the test are categorized with respect to their final sounds as this affects the passive marker attached to the verb. As is stated in the predictions of the study in Chapter II, children may entertain the hypothesis that the passive marker [-In] is used with all sonorant ending verbs, which would lead them to commit irregularization errors as [-In] is only used with verbs ending with the lateral liquid [1], but not with sonorants like [r] and [n].²⁰ Thus, Table 1 below illustrates the target verbs used in the experiment highlighting the distribution of [r], [n] and [1] ending verbs.²¹

²⁰ Nakipoğlu & Ketrez (2005) claim that Turkish children entertain the same hypothesis with the sonorant ending verbs in their choice of aorist marker, which is a challenging task for children as there are regular and irregular markers for it.
²¹ The table indicating the distribution of the verbs is tentative although most of the children are

²¹ The table indicating the distribution of the verbs is tentative although most of the children are predicted to use the target verb which is implied by the picture on the slide. As children are free to make use of some other verbs which are associated with the images displayed, it is possible for them to employ different verbs.

Table2: The verbs targeted in the experiment

Final Sound of a verb	r ending verbs	l ending verbs	n ending verbs	Vowel ending verbs	others
Accurate passive form	[r]+[-I1]	[1]+[-In]	[n]+[-I1]	[A]+[-n]	[non r/l]+[-Il]
1.	Doldur-	Al-	Kullan-	Ye-	Git-
2.	Yerleştir-	Del-	Tırman-	Oyna-	Aç-
3.	Uçur-	Sil-	Dokun-	Topla-	Kapat-
4.	Otur-	Gül-	İn-	Uyu-	Yüz-
5.	Sür-	Kal-	Taşın-	Zıpla-	Giy-
6.	Tutuştur-	Çal-	Bin-	Doğra-	Tak-
7.	Ver-	Gel-	Ban-	Sula-	Yap-
8.	Tükür-		Güneşlen-	Taşı-	Geç-
9.	Bağır-		Uyan-	üfle-	Yaz-
10.	Dil çıkar-			Süsle-	Kaz-
11.	Çıkar-			İzle-	Yak-
12.	Kır-			Ağla-	Kes-
13.	Ver-			Boya-	İç-
14.				Kapa-	Ziyaret et-
15.				Elle-	Dök-
16.				Topla-	Öp-
17.				Fırçala-	Soy-
18.				De-	At-
19.				Hazırla-	Kavga et-
20.					Sallan-
21.					Kahvaltı et-
22.					Calış-
23.					Yat-

Procedure

In the experiment, participants have been tested individually in a quiet room of their schools. They were shown pictures of different themes via a power point presentation. With each picture presented to the child, one passivized verb was attempted to be elicited. In some instances, in order to make the event/schema described more transparent to the participants two pictures describing the same event were shown to the children on the same slide. In addition to that, as they may easily

switch from passive to active use in the presence of an agent in the pictures, pictures involving no agent were preferred as much as possible.

During the experiment, participants were shown a power point presentation including 110 slides. Although the pace of each individual in the test has differed due to reasons such as age differences and attention span, the test lasted approximately 15 minutes. At the end of the test participants were given stickers as an award.

In the test, children were told that they were expected to describe what happens in the picture taking into consideration the theme explained by the researcher. For instance, the experimenter informed participants about the theme of the forthcoming picture before they see the event.²²After the picture was described by providing the participants necessary vocabulary items, the prompt question which would elicit passive sentences was asked. The prompt question was mostly in the passive form.²³ In order to provide a more vivid image of the test, the reader is provided below a sample protocol.

Sample Protocol used with the passive voice in affirmative sentences
 Context: The image on the computer screen includes a pink scarf and a pair of gloves.

²² After they saw the image on the screen, the researcher described it aiming at providing sufficient lexical items which would be used in passive form. Children were given words because this would help us to eliminate other intervening factors which hinder the use of passive.

²³ However, in some cases in order to see participants' reaction to the active form, the prompt question was formed in the active. As predicted, when the question was asked in the active form, in no way the answer has been given in passive. However, when the question was asked in the passive form, there were two ways to go. If the participant knows how to form a passive sentence, the sentence was often in passive whereas if participants have some problems with passive -for instance, they do not decide on which morpheme to add to the verb root since there are a number of morphemes- they replied in an active form with which they are much more competent. More detailed discussion of active and passive uses will be provided in the discussion section.

Description:

Bu resimde kış mevsiminde neler yaparız bunlardan bahsedeceğiz. Bak

burada pembe bir atkı ve bir çift eldiven var.

'In this picture, we will talk about what we usually do in winters. In this

picture there is a scarf and a pair of gloves.'

Prompt Question:

Kışın atkı ve eldivenler ne yapılır? Winter-GEN scarf and glove-PL what do-PASS-AOR.3SG?

'In winter, what do we do with a scarf and a pair of gloves? /What is done with...?'

Target Response:

Atkı takılır ve eldiven-ler giy-il-ir. scarf wear-PASS-AOR.3SG and glove-PL wear-PASS-AOR.3SG.

'In winter, people wear a scarf and a pair of gloves.' (lit. *In winter a scarf and a pair of gloves are worn.*)

As for the passive use with -mAz constructions, the prompt question was modified and participants were directed with a description of a negative event. In the same setting, within the same slide show children were told that they would see images of naughty/mischievous children. Then, they were asked to react to these pictures by commenting on what the parents of these naughty children would say in each case. Consider the sample protocol below:

(1) Sample Protocol used with passive use in -mAz constructions

Context: There is a picture on the slide showing a group of children jumping on a

bed.

Description:

Bu resimde yatağın üzerinde zıplayan yaramaz çocuklar var. Bu çocuklar bu şekilde zıplamaya devam ederlerse yataktan düşüp bir yerlerini incitebilirler. 'In this picture there is a group of naughty children jumping on a bed. If they

continue to do so, they may fall out of the bed and hurt themselves.'

Prompt Question: Anne-ler-i bu çocukları görse ne yapılmaz derdi? mother these child-PL-ACC see-CON what do-PASS-maz say-PAST.3SG

'What would their mother say if she had seen these kids?' *Target Response* :

Anne-si bu çocuk-lar-ı görse yatağ-ın üzeri-nde zıpla-n-maz de-r-di mother these child-PL-ACC see-CON bed-GEN on-LOC jump-PASS-AOR.3SG say-AOR-PAST.3SG

'Their mother would say that Don't jump on the bed.' (lit. *S/he would say that it is not jumped on the bed.*)

These two protocols were randomly ordered in order to avoid a parroting effect

where children just repeat the structure employed previously without really paying

attention to the formation process.²⁴

All these responses obtained from the children were audio-recorded with the

consent of their parents.

Scoring and Coding

The audio recordings were transcribed on a word document. Within the responses children provided, apart from the expected passivized form, various other forms were encountered. The forms which are deviant from the target form are sorted out according to the source of deviation and coded accordingly. 14 codes were used

²⁴ When a participant has difficulty, initially the question is repeated. Then, if there is still no use of the passive, participants are encouraged to talk by providing the initial lexical item that may help them. If this does not work either, then the present slide is skipped and the test continues with the following image. At the end of the each response, participants are praised. When the test ended all participants were given stickers.

referring to 14 types of deviation. In what follows, I will present and discuss the various responses obtained from the children.²⁵

1. *Correct Answer*: A correct answer is an answer where a participant either uses the target verb or a related verb with its appropriate passive marker. (19a) and (19b) are examples for correct responses for passive use in affirmative context and the –maz construction.

(19)a. Target Response: Deniz-de yüz-ül-ür sea-LOC swim-PASS-AOR.3SG

'People swim in the sea' (lit. It is swum in the sea.)

Elicited Response: Deniz-de yüz-ül-ür sea-LOC swim-PASS-AOR.3SG

'People swim in the sea'

b. Target Response: Agac-a çık-ıl-maz tree-DAT climb-PASS-AOR&NEG&3SG

'People should not climb trees.' (lit. It is not climbed a tree.)

Elicited Response: Agac-a çık-ıl-maz tree-DAT climb-PASS-AOR&NEG&3SG

'People should not climb trees.'

Because of a variety of reasons such as age, insufficient vocabulary etc. children have

employed a verb that is different from the target one which is also accepted as a correct use

if it is passivized correctly. For instance, there is a picture of a tomato which is sliced with a

knife. Thus, the expected answer is the following.

(20) *Expected answer*: Domates biçak-la kes-il-ir tomato knife-INS cut-PASS-AOR.3SG

'People slice tomatoes with a knife.' (lit. A tomato is sliced with a knife)

Possible outcome: Domates bıçak-la doğra-n-ır tomato knife-INS cut-PASS-AOR.3SG

²⁵ A number or an icon was assigned to each error in order to make coding of these errors on a spreadsheet far easier. To illustrate, number 1 was assigned to the correct answer when the appropriate passive marker is used with the target verb.

'People chop tomatoes with a knife.' (lit. A tomato is chopped with a knife)

As is clear with the example, even if participants are shown exactly the same picture,

it is highly probable to encounter the use of passive with a different verb. In those

cases, if the sentence is grammatical, the answer is accepted as a valid use of passive.

(21)a. Context: There is a picture of a man sunbathing on the beach.

Target Response: Sahil-de güneşlen-il-ir seashore-LOC sunbath-PASS-AOR.3SG

'People sunbath on the seashore.' (lit. It is sunbathed on the seashore.)

Elicited Response: Sahil-de uyu-n-ur seashore-LOC sleep-PASS-AOR.3SG

'People sleep on the seashore.'

b.

Context: There is a picture of a boy dipping the bread into the soup.

Target Response: Çorba-ya ekmek batır-ıl-maz soup-DAT bread dip-PASS-AOR&NEG&3SG

'You should not dip the bread into the soup.' (lit. *It is not dipped into the soup.*)

Elicited Response: El-le yemek ye-n-mez hand-INS meal eat-PASS-AOR.3SG

'You should not eat with your hands.'

The deviant forms children have produced are grouped on the basis of the deviance they exhibit and classified as follows:

a) Responses with no use of overt passive marker

b) Accurate use of the target verb in active form (This is different from (a) in

that children use the target verb but not in passive voice while with the former it has

been meant that children intend to use the target verb in the passive. Another

difference is this type's being ungrammatical while the formers are grammatical.).

c) Responses with an incorrect passive marker

i. irregularization errors

ii. overregularization errors

d) Overuse of double passives

e) Morphosyntactic errors

f) Other errors (Phonological errors, errors resulted from the use of causative

markers and the overuse of the negation marker have been included in this group.)

In what follows I will discuss each error form listed above.

a. *No use of overt passive marker*: This section consists of utterances that are intended to be in the passive voice. But, somehow children fail to add the passive marker to the verb, ending up with an ungrammatical sentence in the active voice.

(22) Target response: Yürüyen merdiven-den in-il-ir. walking stair-ABL go_down-PASS-AOR.3SG

'People go down with moving staircase.' (lit. *It is gone down from moving stairs.*)

Elicited response: *Yürüyen merdiven-den in-ir. walking stair-ABL go_down –AOR.3SG

'People go down with moving staircase.'

(23) Target Response: Valiz doldur-ul-ur. suitcase fill-CAUS-PASS-AOR.3SG

> Elicited Response: *doldur-ur. fill-CAUS-AOR.3SG

(24) Target Response: Yatak-ta zıpla-n-maz bed-LOC jump-PASS-AOR&NEG&3SG

'People should not jump on a bed.' (Lit. It is not jumped on a bed.)

Elicited Response: *Yatak-ta zıpla-maz bed-LOC jump-AOR&NEG&3SG

'People should not jump over a bed.'

Although we are not sure why children have not used any passive marker, the

absence of it may not be interpreted as indicating that children are actually forming

active sentences because these sentences are all ungrammatical as they have been

given as responses to passive questions. Thus, these errors are coded as cases where there is no overt passive marker but the intention is mostly to form a passive sentence. However, it is also possible to accept some of these errors like (22) as phonological errors.

b. *Accurate use of the same verb in active form*: Participants sometimes used the target verb in the active sentence. This is one of the key types of responses as it will shed light on the passive vs. active discussion.

(25) Target Response: Araba sür-ül-ür car drive-PASS-AOR.3SG

'Peo ple drive cars.' (lit. Cars are driven)

Elicited Response: Araba sür-er-ler car drive-AOR.3SG

'People drive cars.'

(26) Target Response: Ağac-a çık-ıl-maz tree-DAT climb-PASS-AOR&NEG&3SG

'People should not climb up a tree.' (lit. *It is not climbed up a tree*.)

Elicited Response: Ağac-a çık-ma-yın tree-DAT climb-NEG-IMP-2PL

'(You) Do not climb up a tree.'

c. Responses with an incorrect passive marker:

i. *Irregularization Errors*: These are errors committed when children try to irregularize the default/regular form of the passive marker. Thus, children exploit a wrong hypothesis on the formation of a rule, which yields irregularization errors. More explicitly, the default passive marker in Turkish is [-II] as it is more frequently employed as a passive voice marker due to its being attached to verbs ending in a consonant except for a lateral liquid [1]. So, the regular form for passive marker is [-II] while the irregular form that is needed for vowels and lateral liquid ending verbs is [-(I)n]. However children may prefer to employ the irregular form [-(I)n] where

they are supposed to use the regular form [-II].

(27) Target Response: Valiz doldur-ul-ur suitcase pack-PASS-AOR.3SG

'People pack their suitcases.' (lit. Suitcases are packed.)

Elicited Response: *Valiz doldur-*un*-ur suitcase pack-PASS-AOR.3SG

'People pack their suitcases.'

(28) Target Response: Salıncağ-a iki kişi bin-il-mez swing-DAT two person sit-PASS-AOR&NEG&3SG

'Two people should not sit on the same swing.' (Iit. *It is not swung on the same swing*.)

Elicited Response: *Salıncağ-a iki kişi bin-in-mez Swing-DAT two person V|sit-PASS-AOR&NEG&3SG

'Two people should not sit on the same swing.'

ii. Overregularization Errors: These are the errors that are committed when children

try to regularize the irregular form. Children make use of the default passive marker

[-II] instead of the irregular form [-(I)n].

(29) Target Response: Yatak-ta uyu-n-ur bed-LOC sleep-PASS-AOR.3SG

'People sleep on the bed.' (lit. It is slept on a bed.)

Elicited Response: * Yatak-ta uyu-*l*-ur bed-LOC sleep-PASS-AOR.3SG

'People sleep on the bed.'

(30) Target Response: El-ler-le pasta ye-n-mez. hand-PL-INS cake eat-PASS-AOR&NEG&3SG

'People should not eat cakes with their hands.' (lit. Cake is not eaten with hands.)

Elicited Response: *El-ler-le pasta yi-y-*il*-mez²⁶.

²⁶ In (32) there is also phonological problem in addition to the overregularization error. In such cases, both errors are indicated on the same verb.

hand-PL-INS cake eat-PASS-AOR&NEG&3SG

'People should not eat cakes with their hands.'

d. The use of Double Passive: It is the case that participants use a passive marker

more than once on the same verb. There may be many underlying reasons for this.

For further discussion see Chapter 1.

(31) Target Response: Yağmur-da şemsiye tut-ul-ur rain-LOC umbrella hold-PASS-AOR.3SG.

'In the rain, people holds an umbrella.' (lit. *An umberella is hold in the rain.*)

Elicited Response: ??Yağmur-da şemsiye tut-*ul*-un-ur. rain-LOC umbrella hold-PASS-PASS-AOR.3SG.

'In the rain, people holds an umbrella.'

(32) Target Response: El-ler-le pasta ye-n-mez. hand-PL-INS cake eat-PASS-AOR&NEG&3SG

'People should not eat cakes with their hands.' (lit. Cake is not eaten with hands.)

Elicited Response: El-ler-le pasta ye-n-il-mez. hand-PL-INS cake eat-PASS-PASS-AOR&NEG&3SG

'People should not eat cakes with their hands.'

e. Case Marking Error with a correct passive use: These are the morphosyntactic

errors resulted from the case marking errors on the internal argument. In these errors

children fail to leave the case marker on the internal argument in the active sentence.

(33) Target Response: Domates-ler kes-il-ir tomato-PL chop-PASS-AOR.3SG

'Tomatoes are chopped'

Elicited Response: *Domates-ler-i kes-il-ir tomato-PL-ACC chop-PASS-AOR.3SG

'Tomatoes are chopped'

(34) Target Response: El-ler yemeğ-e sok-ul-maz hand-PL meal-DAT dip-PASS-AOR&NEG&3SG 'People should not dip their hands into the meal.' (lit. *Hands are not dipped into the meal.*)

Elicited Response: *El-ler-i-ni yemeğ-e sok-ul-maz hand-PL-POSS&3SG-ACC meal-DAT dip-PASS-AOR&NEG&3SG

'People should not dip their hands into the meal.'

f. Other Errors

i. Double Negation with Passive: Although there is no example of this sort in passive

produced in the affirmative context with the -mAz construction, we have observed

that children committed some double negation errors. This may have resulted from

children's perception of *-mAz* as a chunk without taking negation into consideration.

(35) Target Response: Kırmızı ışık-ta karşı-dan karşı-ya geç-il-mez. red light-LOC opposite-ABL opposite-DAT cross-PASS-AOR&NEG&3SG.

'People should not cross the road when the red light is on.' (lit. *It is not crossed when the...*)

Elicited Response: *Kırmızı ışık-ta karşı-dan karşı-ya geç-il-me-mez.²⁷ red light-LOC opposite-ABL opposite-DAT cross-PASS-NEG-AOR&NEG&3SG.

'People should not cross the road when the red light is on.'

ii. Phonological Error on the correct passive form: Some phonological errors were

detected in children's passive use. However, it is really difficult to make a

generalization of this sort of errors since they may in fact item-specific. Nevertheless

we have decided to make note them.

(36) Target response: Dondurma ye-n-ir icecream eat-PASS-AOR.3SG

'People eat icecream' (lit. *Icecream is eaten*)

Elicited Response: Dondurma yi-n-ir Icecream eat-PASS-AOR.3SG

'People eat icecream'

²⁷ The stress is placed on the second morpheme following the pattern that negation suffix is always unstressed and the stress shifts to the preceding syllable of the negation suffix in Turkish . (ge,ÇİL.me.mez).

(37) Target Response: El-ler-le pasta ye-n-mez. hand-PL-INS cake eat-PASS-AOR&NEG&3SG

'People should not eat cakes with their hands' (Lit. *Cake is not eaten with hands*.)

Elicited Response: El-ler-le pasta yi-n-mez hand-PL-INS cake eat-PASS-AOR&NEG&3SG

'People should not eat cakes with their hands'

(38) Target Response: Tatil-e gid-il-ir vacation-DAT go-PASS-AOR&3SG

'People go on a vacation.'

Elicited Response: gid-el-ir go-PASS-AOR&3SG

'People go on a vacation.'

(39) Target Response: Silgi-yle sil-in-ir. eraser-INS erase-PASS-AOR&3SG

'People erase with an eraser.' (lit. It is erased with an eraser.)

Elicited Response: *sin-in-ir erase-PASS-AOR&3SG

'People erase with an eraser.' (lit. It is erased with an eraser.)

Even though these codes represent a vivid lay-out of children's possible errors, the number of errors will determine the significance of the type of errors and will give us some idea of how children acquire Turkish passives.

Data Analysis

In order to figure out any path in children's acquisition and to see if our predictions are borne out or not, we need a statistical analysis of these results. Thus, errors coded in numbers and signs have been gathered on a spreadsheet. Then the ratio of the each type of error has been calculated for individual groups. Then, these results have been compared to the results gathered from other groups. Afterwards, a statistical analysis (SPSS 16.0) has been run so as to see if the difference is statistically significant. Lastly, within and between subjects analysis have been made in order to figure out a developmental pattern if any.

Conclusion

So far, we have introduced the study, the parties involved, and the test items. In a way this chapter reveals answers for the questions of "What did we do?", "Who are the participants?", "How did we conduct the study?" In the next section, results of the study will be presented in accordance with the error types listed in this chapter by providing sample of different passive uses and by supporting all these with a statistical analysis.

CHAPTER IV

RESULTS

Introduction

This chapter presents the results of the study. In order to provide a thorough layout of passives in two distinct structures; i.e. passives in affirmative sentences and the -mAz... (*ki*) construction, how children performed in each structure will be discussed individually in respective sections. For each structure at issue, there will be a discussion on the following four aspects which were noted to be significant in the analysis:

- i. Correct Passive Use
- ii. Use of active voice in contexts requiring a passive voice
- iii. Choice of the default passive marker
- a. irregularization errors
- b. overregularization errors
- iv. Morphosyntactic Errors
- v. Double Passive Use

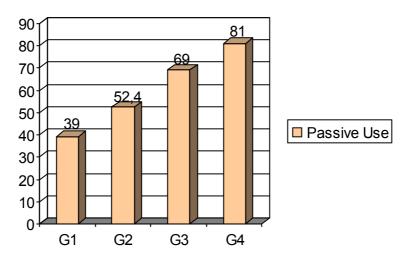
Passive Use in Affirmative Sentences

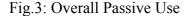
The results obtained in the study have shown that passive use is significantly less in younger children compared to older groups. As Figure 3 illustrates, starting with the youngest group a successive increase in passive use has been observed. While G1

displayed a passive use of almost 40%, the passive use of the oldest group G4 doubled that of the youngest with a ratio of 81%.

This means that passive use of younger and older children differs to a great extent signalling a high correlation between age and passive use.

In addition to children's accurate uses of passive voice, utterances involving a passive marker but are deviant from the accurate uses in terms of phonological, morphological and syntactic properties have also been included in children's passive uses.





As the figure above clearly illustrates, passive use increased with age.

A Pearson correlation coefficient was computed to assess the relationship between the age and the passive use for each test item. There was a positive correlation between two variables, r = 0.599, n = 67, p < 0.01. A scatterplot summerizes the results (Figure 4). Overall, there was a medium positive correlation between age and children's passive use.

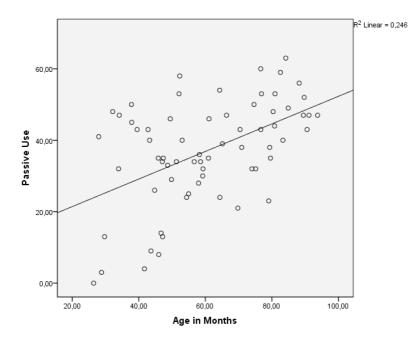


Fig.4 Passive Use

One interesting observation that can be made at this point has to do with the passive use of our control group. The control study consisting of 4 adults had a passive use of 80% in the same test. This fact brings forth two conclusions: First of all, even adults, in all forced conditions, may prefer not to use the passive voice at all times, which strikingly shows how difficult it is to elicit passives in Turkish. Secondly, the behavior of the oldest group, G4, strongly resembles the tendency of the control group in passive use with rates of 80% and 81%, respectively.

Use of Active Voice in Contexts Requiring Passive Voice

We have observed that children, in particular the younger ones, displayed a tendency to not always use passives in contexts requiring passives, in much higher proportions compared to older ones. However, results obtained from a (simple) linear regression comparing the relation between two variables such as age and active voice use show that the difference among groups in terms of their active voice employment is not significant, r = 0.162, n = 67, p =.191. In short, younger and older children do not differ in their active voice employment.

As the examples below indicate, children employed the expected verbs but not in passive structure. (1) and (2) below exemplify the issue.

(1) Context: The child is shown the picture of a child swimming and asked the question 'What does one do in summer? (lit. What is done in summer?)Yazın ne yapılır?

Target Item: Deniz-de yüz-ül-ür. sea-LOC swim-PASS-AOR.3SG

'People swim in the sea.' (lit. It is swum in the sea.)

i.Response: yüz-er swim-AOR.3SG (Child#2, 2;3)

'He swims.'

ii.Response: yüz-er-iz swim-AOR-2PL (Child#4, 2;5)

'We swim.'

iii.Response: yüz-er-ler swim-AOR-3PL (Child#12, 3;6)

'They swim.'

(2) Context: The child is shown the picture of a child blowing candles of a birthday cake and asked the question "What does one do on his birthday? (lit.) What is done with candles on a birthday?"

Target Item: Doğum gün-ün-de pasta-nın mum-la-rı üfle-n-ir. birthday-CM-LOC cake-GEN candle-POSS&3PL blow-PASS-AOR.3SG.

One/People blows/blow the candles of a birthday cake on a birthday. (lit. Candles are blown on a birthday.

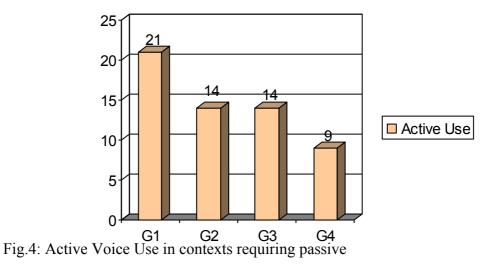
i. Response: üfle blow-IMP&3SG	(Child#1, 2;2)
'Blow!'	
ii. Response: üflü-yo(r)-lar blow-PROG-3PL	(Child#12, 3;6)
'They blow off candles.'	
iii. Response: üfle-r-ler blow-AOR-3PL	(Child#15, 3;8)
'They blow off candles.'	
iv. Response: üfle-r-sin blow-AOR-2SG	(Child#19, 3;10)

'You blow off candles.'

As the examples reveal, the prompt question asked in the passive does not suffice to elicit a passive use especially by younger children.

Group 1 (G1) preferred the active voice use instead of the passive in 21% of all uses while the active use in Group 4 (G4) is 9%. On the other hand, Group 2 (G2) and Group 3 (G3) with a rate of 14% each had an identical performance with respect to the use of active voice. As the rates clearly show, younger children's active voice use is far more than older one's active use. However, G2 and G3 did not differ significantly with respect to active preferences, which may be interpreted as they are in the similar developmental process.

When we investigated the proportion of non-passive use among age groups we have observed that there is a significant increase in the use of passive structures between G1 & G4. Figure 2 below illustrates passive use among groups.



Choice of the Default Passive Marker

In Turkish, there are two markers for the passive voice. These are [-II] and [-(I)n]. The former is used with verbs ending in consonants except for a lateral liquid while the latter is used with vowel and [I] ending verbs. Since consonant-ending verbs are far more frequent than vowel ending verbs in Turkish (cf. Nakipoğlu & Üntak (2008), due to its frequency of occurrence [-II] is more likely to be considered as the default passive marker in Turkish. Hence, {-(I)n} is considered as the irregular passive marker attached to the verbs ending in a vowel and a lateral liquid. On the basis of the above discussion, we expect children to experience difficulty in determining the passive marker. Children may entertain hypotheses regarding the choice of the passive marker and this may give rise to certain errors in acquisition. In particular, as {-II} morpheme has a wider distribution, we predict that it should be

considered as the default, i.e. the regular form, hence any attempt by the children whereby non-Il taking forms are produced by {–Il} would be considered as cases of overregularization. A child's tendency to extend the use of the less frequent form, -In in this case to other forms, on the other hand, would be considered as a case of irregularization. In what follows, I will turn to a discussion of errors on the choice of the passive marker.

Irregularization Errors

The present study has revealed that Turkish children acquiring the passive structure experience a hard time in disassociating between the passive markers [-II] and [-In] and produce both overregularization and irregularization errors. In this section, some examples of irregularization errors that children committed and possible reasons for such errors will be discussed.

As stated earlier, these errors appear to have resulted from children's incorrect assumption that the default passive marker is {-In} instead of {-Il}. G1 committed irregularization errors in 4,64% of all their passive use. Although it seems that younger children have erred less compared to G1, this low percentage of errors may have resulted from their scarce use of the passive. Since they are so incompetent in using passives, it is highly difficult to find errors of any sort. On the other hand, G2 committed errors of this type in 21% of all passive uses, which signals a significant increase. G3 erred considerably less (8%) than G2 while G4 committed almost no errors of this type (1,5%).

Furthermore, to examine the relation between age and irregularization error, we calculated the Pearson correlation coefficient, r = 0.39, n = 66, p = .759. Note that

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this correlation coefficient did not reach significance, implying that there is no correlation between age and irregularization errors directly.

On the other hand, one of the participants had to be excluded from the analysis as z score of her irregularization errors was 4,33 (M= 3.38, SD = 5.22) implying that her errors were highly above the possible range of errors. However, the idea that performances of each group may significantly differ lead us to run 1-way ANOVA in order to see tendencies of various groups on irregularization errors. At the end of the analysis, irregularization errors differed significantly across the age groups , F(2,63) = 10.1, p < .0.

Post-hoc comparisons between age groups showed that G2 differed significantly from others (M = 1.31, 95% CI [.35, 2.98]) p < 0.01.

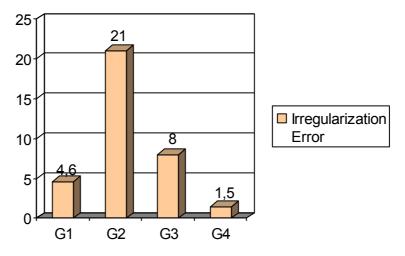


Fig.5 Irregularization Errors

As the results reveal, at a certain period of their development, in particular around 3,5 years of age Turkish children seem to get confused with respect to the default passive marker and tend to employ [–In] instead of [–II]. An 8% error rate in G3 shows a significant decrease in irregularization errors compared to the performance of children in G2. The results from the oldest group tested, however, clearly suggest that they have reached adultlike abstractions of passives in Turkish. To illustrate the

nature of irregularization errors, various errors children produced have been presented in (3).

(3)a. Target Item: Tatile gid-il-ir. holiday-DAT go-PASS-AOR-3SG

'People go on vacation.' (lit. It is gone on vacation)

Response (Child#7, 2;9): *Tatile gid-*in*-ir.

b. Target Item: Valiz doldur-ul-ur. suitcase fill-CAUS-PASS-AOR-3SG

'People pack their suitcases.' (lit. Suitcases are filled.)

Response (Child#35, 4;10): *Valiz doldur-un-ur.

c. Target Item: Koltuk-ta otur-ul-ur. armchair-LOC sit-PASS-AOR.3SG

'People sit (on an armchair).' (lit. It is sat on an armchair.)

Response (Child#21, 3;10): *Koltuk-ta otur-un-ur.

d. Prompt Question: Bıçak-la ekmek ne yap-ıl-ır? knife-INS bread what do-PASS-AOR.3SG?

What do we do with bread and a knife? (lit. What is bread done

with a knife ?)

Target Item: Kes-il-ir. cut-PASS-AOR.3SG

' It is cut.'

Response (Child#30, 4;5): *Kes-in-ir.

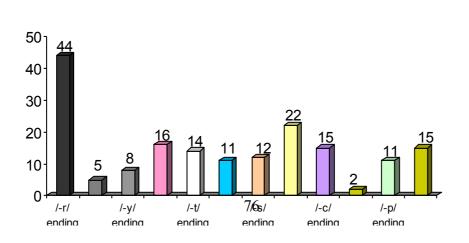
e. Prompt Question: Bayram-da ne yap-1l-1r? what do-PASS-AOR-3SG?

What do we do in Ramadan Festival? (lit. *What is done in Ramadan Festival*?)

Target Item: El öp-ül-ür hand kiss-PASS-AOR.3SG 'People kiss hands.' (lit. Hands are kissed.)

Response (Child#42, 5;5): *Öp-ün-ür

In order to see if there is a particular pattern in children's errors, final sounds of the verbs erred were examined. It has been found out that children produced irregularization errors mostly with verbs ending in [-r] (24% of all irregularization errors), which is a sound highly similar to [-l] in its being an alveolar liquid. Thus, it is highly probable that children, in the absence of counter evidence, think that similar to [l] ending verbs [r] ending ones are suffixed with [-In] instead of [-II] for passive. Yet, as they grow older, they sort out the split behavior of [l] ending verbs. In addition to the errors with [r] ending verbs, children have been observed to err with verbs ending in [z] with a rate 13%, [k] with (9%), [ç] with (9%), [t] (8%), [s] (7%), [p] (6%), [d] (6%), [y] (5%), [n] (3%) and verbs ending in some other consonants with a rate of 9%.



■ /-r/ ending ■ /-n/ ending ■ /-y/ ending ■ /-k/ ending □ /-t/ ending ■ /-d/ ending

Fig.6: Distribution of errors with respect to final sounds of verbs

Although it is far easier to understand the children's reasoning mechanism with respect to errors committed with [r] ending verbs, it is quite challenging to find a pattern in children's errors with verbs ending in a variety of consonants. Still, it is significant to note that children try different hypotheses before they reach adultlike proficiency, which results in a high number of irregularization errors.

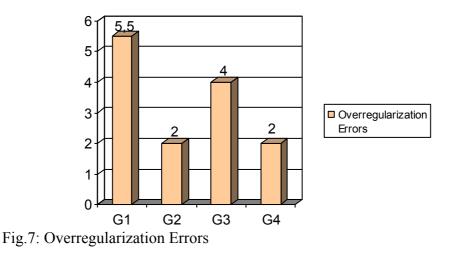
In addition to errors with [-r] ending verbs, errors with other sonorants such as [n] and [y] may be interpreted along the lines that children hypothesize that the affix [-In] is used after all sonorant ending verbs. The percentage for irregularization errors with sonorant ending verbs is 33%, which suggests that children are confused about the passive marker that is to be attached to sonorant ending verbs.

Furthermore, children's tendency to use the irregular form with a variety of verbs requiring the regular passive marker may be interpreted as children consider the irregular form to be the default/regular form of passive voice. It is highly probable that later in their acquisition process, they sort out the regular and the irregular forms precisely in the abundance of counter examples they have encountered. Thus, there seems to be a process that children commit so many errors in trying to figure out what are the regular and the irregular markers for the passive voice in Turkish.

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Overregularization Errors

In contrast to the irregularization errors children produced, overregularization errors were significantly few in number. These errors appear to have resulted from children's tendency to use the default passive marker where they are expected to use the so-called irregular form, i.e. the {-In} form. As Figure 7 illustrates, G1 committed overregularization errors with a rate of 5,5% while other groups (G2, G3, and G4) erred less (2%, 4%, 2% respectively). With such low error rates, we cannot talk about any statistically significant difference among groups.



There are two environments that may give rise to overregularization errors in Turkish. The first one is the group of verbs ending in a vowel and the other is the group of verbs ending in the lateral liquid [1]. In Turkish, the passive marker [-(I)n] is employed in those environments.

With the error rates given above, it is rather difficult to claim that children have problems with verbs ending in a vowel. Furthermore, as there are not many vowel ending verbs in Turkish when compared to consonant ending ones, children are not expected to commit many overregularization errors. Similarly, /l/ ending verbs are quite scarce when they are compared with verbs ending in all other sonorants. Our prediction that children will experience less difficulty with [l] ending and vowel ending verbs is therefore borne out with our findings. In (4) below some examples for overregularization errors are given.

(4)a. Target Item: Davul çal-ın-ır. drum play-PASS-AOR.3SG

' A drum is played.'

Response (Child#30, 4;5): *Davul çal-*ıl*-ır.

b. Target Item: Yatak-ta uyu-n-ur. bed-LOC sleep-PASS-AOR.3SG

'People sleep on a bed.' (lit It is slept on a bed.)

Response (Child#5, 2;7): *Yatakta uyu-*l*-ur.

c. Target Item: Matkap-la duvar del-in-ir. drill-INS wall drill-PASS-AOR.3SG

' A wall is drilled with a drill.'

Response (Child#44, 5;9): *Matkapla duvar del-il-ir.

d. Prompt Question: Doğum gününde pastanın mumları ne yapılır? birth day-CM-LOC cake-GEN candle-POSS&3PL what do-PASS-AOR-3SG?

What do we do with candles on a birthday cake on a birthday?

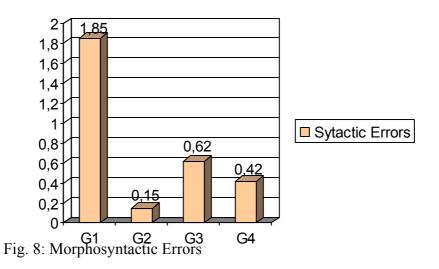
Target Item: Üfle-n-ir. blow-PASS-AOR-3SG

'(Candles) are blown.'

Response (Child#3, 2;4): *Üfle-*l*-ir.

Morphosyntactic Errors

Contrary to our expectations and the findings in Ketrez (2000), the percentage of syntactic errors in children's all passive use is quite low for all groups and there is no significant difference among groups signalling a developmental pattern. Morphosyntactic errors committed in all groups do not exceed 2%. Furhermore, the difference among groups is not statistically significant according to a linear regression comparing the relation between two variables namely age and morphosyntactic errors r = 0.180, n = 67, p =.144. Figure 8 below illustrates the properties of morphosyntactic errors.



As stated earlier, all morphosyntactic errors have been observed in children's incorrect case preferences for the subject of a passive sentence. The major difficulty the Turkish child appears to experience in passive structures had to do with dropping the accusative case marker on the subject of the passive sentence. What is interesting is the absence of any other case marker on the subject of the passive sentence. Children did not prefer any other case markers like dative, locative and ablative; but instead they constantly employed accusative case in the passive sentence, which is predicted to stem from the case marker on the object in the active sentence. More explicitly, as children are claimed to derive passive sentences from the active ones,

they somehow fail to drop the accusative case on the internal argument in the passive form. Thus, most of the morphosyntactic errors resulted from inaccurate case marker

use involving the accusative case marker in the passive sentence.

Some examples illustrating morphosyntactic errors are as follows:²⁸

(5)a. Target Item: Diş-ler fırçala-n-ır tooth-PL brush-PASS-AOR.3SG

'People brush their teeth.' (lit. Teeth are brushed.)

Response (Child#5, 2;7): *Diş-ler-imiz-i fırçala-n-ır. tooth-PL-POSS&2PL-ACC brush-PASS-AOR.3SG

'People brush their teeth.' (lit. Teeth are brushed.)

b. Target Item: Televizyon izle-n-ir. television watch-PASS-AOR.3SG

'People watch TV.' (lit. TV is watched.)

Response (Child#9, 3;2): Yaramaz bebekler-i seyred-il-ir naughty baby-PL-ACC watch-PASS-AOR.3SG.

'People watch naughty babies.' (lit. Naughty babies are

watched.)

c. Prompt Question: Kürekle ne yap-ıl-ır? scull-INS what do-PASS-AOR.3SG?

'What do we do with a scull?'

Target Item: Toprak kaz-ıl-ır soil dig-PASS-AOR

'People dig soil.' (lit. Soil is dug.)

Response (Child#10, 3;3): *Toprağ-ı kazılır.

d. Prompt Question: Yazın tatile çıkmadan önce valiz ne yap-ıl-ır? summer-GEN holiday-DAT leave-CN-ABL before suitcase what do-PASS-AOR.3SG?

²⁸ None of the morphosyntactic errors are false-starts. Rather these utterences were produced at once as responses to the prompt question. So, it is not possible for these errors to result from memory failure.

What do we do with a suitcase before we go on a holiday?

Target Item: Valiz doldur-ul-ur/hazırla-n-ır. suitcase fill-PASS-AOR-3SG/ prepare-PASS-AOR-3SG

People prepare suitcases. (lit. Suitcases are

filled/prepared.)

Response (Child#16, 3;9): *Telefonu koy-ul-ur phone-ACC put-PASS-AOR.3SG

People take their telephones with them. (lit. Phone is put.)

e.Target Item: Yatak hazırla-n-ır. bed prepare-PASS-AOR.3SG

'People prepare their beds.' (lit. A bed is prepared.)

Response (Child#42, 5;5): *Yatak-lar-1 düzenle-n-ir. bed-PL-ACC lay_out-PASS-AOR.3SG

'Beds are laid out.'

f. Target Item: Duvar-lar del-in-ir. wall-PL drill-PASS-AOR.3SG

'Walls are drilled.'

Response (Child#44, 5;9): *Duvar-lar-1 del-in-ir.

Contrary to the account provided above, the morpheme -I on the subjects of the

passive sentences may be interpreted as 3rd person possessive marker, rendering the

sentences above grammatical.

(5e) is repeated below:

e. Target Item: Yatak hazırla-n-ır. bed prepare-PASS-AOR.3SG

'People prepare their beds.' (lit. A bed is prepared.)

Response (Child#42, 5;5): *Yatak-lar-1 düzenle-n-ir. bed-PL-ACC lay_out-PASS-AOR.3SG ' Beds are laid out.'

Intended meaning: (Onlar-ın) yatak-ları düzenlenir. they-GEN bed-POSS&3PL prepare-PASS-AOR-3SG.

' Their beds are prepared.'

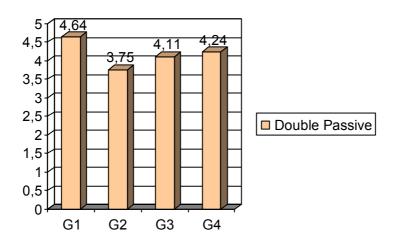
In that case, it is highly probable that children refer to "people in general" when they are asked what people do in the morning. Moreover, beds of the group of people may be referred to by children with the use of possessive marker. Besides, in Turkish possessive pronouns may be dropped as the person and number are overtly stated on the noun with markers. So, there is no need for children to use possessive pronouns explicitly.

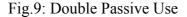
Although this explanation may change the status of one example from ungrammatical to grammatical in the example above, it is almost impossible to think that children added –I to the subject as a possessive marker in all other contexts since the examples do not entail a possessor and possessed relation. For instance, children were shown a picture of a scull and asked what people do with it and in that picture there is no person, which would trigger a possessor and possessed relation. Moreover, in order for a pronoun to be dropped, the information coded in that item should be explicit to both the speaker and the hearer. It should be accessible at some point in the discourse of the speakers. If not, there would appear an information gap, which may result in a communication failure. Thus, if children wanted to use a possessive pronoun, they would use it in order for their message to be as clear as possible. Yet if they do not, then it may be interpreted as they do not mean it. Hence, we claim that errors above are in fact true syntactic errors.

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Double Passives

We have observed that though few in number children tested have produced double passive errors in contexts, and examples which do not require double passivization at all. Figure 9 below presents the error rates where all four groups appear to have used almost the same number of double passives.





The rates of the double passive use are so close to each other for each group that it is highly difficult to claim that there is a developmental pattern. A simple linear regression comparing the relationship between double passive use and age highlights that all groups are statistically highly similar in their double passive employment r = 0.134, n = 67, p =.280. Still, children's insistent use of the double passive in each group lead us to focus on the verbs and the phonological properties of these particular verbs. We have observed that of all double passive use, 66% has emerged in the use of the verb ye- (to eat), i.e., ye-n-il. Children's double passive use may be

reflecting the adult pattern, of course. We do not know the frequency of double passive use in adult discourse, in particular with the verbs *ye*- and *de*-, we predict it to be quite high.

As for multisyllabic vowel ending verbs, [-n] may not be used as a passive marker but rather it seems as if it were used for phonological reasons. Particularly 6a. seems to be an example of such a case where the child employed three passive voice markers at the same time.

Some other examples have been listed below:

(6)a. Target Item: Valiz dol-dur-ul-ur. suitcase fill-CAUS-PASS-AOR.3SG

'A suitcase is filled.'

Response (Child#39; 5;3): ?? Valiz topla-*n-ıl-ın*-ır. suitcase pick-PASS-PASS-AOR.3SG

b. Prompt Question: Kış-ın ne yap-ıl-ır? winter-GEN what do-PASS-AOR.3SG?

'What do people do in winter?'

Target Item: Kartopu oyna-n-ır. snowball play-PASS-AOR.3SG

'People throw snowballs at other people.' (lit. *Snowball is played*.)

Response (Child#42; 5;5): Kartopu yap-*ıl-ın*-ır. snowball do-PASS-PASS-AOR.3SG

'Snowballs are made.'

Response (Child#59; 6;1): Kartopu oyna-*n-ıl*-ır. snowball play-PASS-PASS-AOR.3SG

'People throw snowballs at other people.' (lit. Snowball is

played.)

c. Target Item: (Çiçekler) topla-n-ır. (flower-PL) pick-PASS-AOR-3SG

'Flowers are picked.'

Response (Child#39; 5;3): *Kopar-t-*in-in-*ir. pluck-CAUS-PASS-AOR.3SG

' They are plucked.'

Response (Child#10; 3;3): Topla-*n-ıl*-ır. pick-PASS-PASS-AOR.3SG

'Flowers are picked.'

d. Target Item: Uyan-1l-1r. wake_up-PASS-AOR.3SG

'People wake up in the morning.' (lit. It is woken up.)

Response (Child#15; 3;8): Kalk-*ıl-ın*-ır. get-up-PASS-PASS-AOR.3SG

'People get up in the morning.' (lit. It is got up.)

e. Target Item: Üfle-n-ir blow-PASS-AOR.3SG

'People blow candles of a cake.' (Lit. It is blown.)

Response (Child#7; 2;9): Üfle-n-il-ir.

f. Target Item: (dişler) fırçala-n-ır (teeth) brush-PASS-AOR.3SG

'People brush their teeth.'

Response (Child#23; 4;0): fırçala-*n-ıl*-ır.

g. Target Item: (Televizyon) izle-n-ir. (Television) watch-PASS-AOR.3SG

'People watch TV.' (Lit. Television is watched.)

Response (Child#41; 5;4): İzle-*n-il-*ir.

h. Prompt Question: Yağmur yağınca şemsiye ne yap-ıl-ır? rain rain-CON umbrella what do-PASS-AOR-3SG?

' What do people do when it rains?'

Target Item: Aç-1l-1r. open-PASS-AOR-3SG

'People unfurl an umbrella.' (lit. *It is opened*.)

Response (Child#48; 6;1): * kapa-*l-ıl*-ır. close-PASS-PASS-AOR-3SG

'People furl an umbrella.' (lit. It is closed.)

As it is obvious with examples above, it is far easier to explain children's employment of two markers at the same time with verbs involving relatively minimal number of sounds than to explain double passive use with multisyllabic verbs such as *firçala-* 'to brush' and *topla-* 'pick'. In such cases, it is also possible that one of the passive markers employed, namely [-n], may be used as a reflexive marker or even an agreement marker. However, we have no further evidence indicating that the reflexive marker interferes with the passive markers in double passive use. Still, it is highly plausible that children make use of two passive markers at the same time in order to emphasize that the event mentioned is focused.

In Section 2 below I will turn to the discussion of children's passive use in the second construction tested in this study.

Children's Passive Use in -mAz Constructions

Recall that passive use with this particular construction predicted to be significantly more than that of its use in affirmative sentences since the use of passive is almost indispensable in the *-mAz* constructions. Thus, it has been predicted that children would commit fewer errors in passive use. Let us continue with the results for each type (one by one).

Correct Passive Use

As expected, passive use with the -mAz construction is highly frequent. While G1 used passivized verbs in 47% of all their use with the -mAz construction, children in G2 made use of passives significantly more, i.e. in 71% of their uses. Passive use in G3 and G4 are found to be 80% and 95% respectively. According to statistical analysis gathered through test assessing the relation between age and passive use, there is a significant difference among groups r = 0.607, n = 67, p =.000. The graphic below indicates the variation among groups.

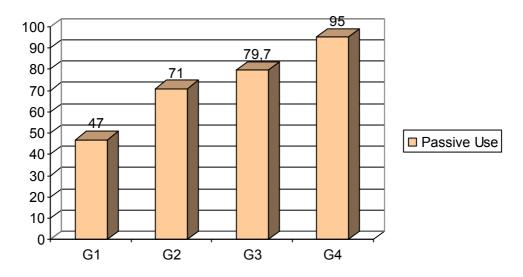


Fig. 10: Passive Voice Use in -mAz constructions

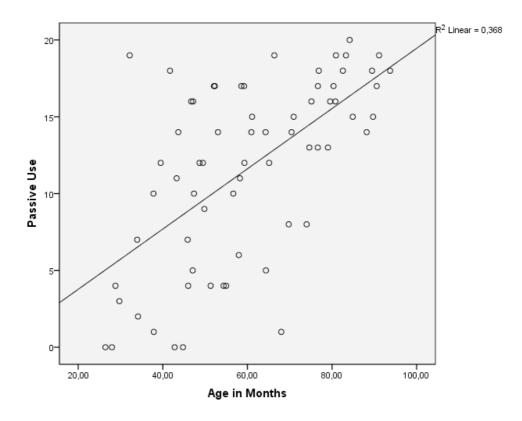


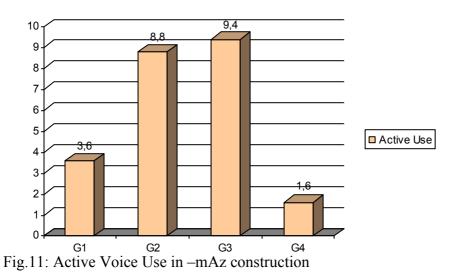
Fig.11 Passive Use - Linear Regression

The most significant result with respect to passive use is that children are more confident in using passive with the -mAz construction than they are when using passives in affirmative sentences. Moreover, the performance of G4 is almost adultlike, more precisely; G4 children answered almost each item with a passivized verb.

Use of Active Voice in contexts requiring Passive Voice

Active voice use in contexts requiring passive use is comparatively low for all age groups when compared to active voice use in affirmative sentences. G1 used active sentences with a rate of 4%, in G2 and G3 the rates are not above 10%, i.e. 8,8% and 9,4% respectively. The rate of active voice use in G4 dropped down to 1,6% which strikingly shows how the particular construction triggers the use of passive by older

children. ²⁹ According to results of a simple linear regression age children did not differ significantly in their active use as they get older r = 0.009, n = 67, p = .941.



Below are some examples for children's active voice use in -mAz constructions.

(7)a. Target Item: Yerde uyu-n-maz floor-LOC sleep-PASS-mAz

'You should not sleep on the floor.' (Lit. It is not slept on the floor.)

Response (Child#8; 3;10): Yerde uyu-ma-sın floor-LOC sleep-NEG-IMP-3SG

'S/he must not sleep on the floor.'

b. Prompt Question: Yatağın üzerinde zıplayan bir çocuk var. Annesi onu görse ne yapılmaz derdi? bed-GEN on-POSS&3SG-LOC jump-NMLZ a child exist. Mother-POSS&3SG him/her see-COND what do-PASS-mAz say-AOR-PAST

'There you see a child jumping on a bed. What would his/her mother say if she saw him/her?'

Target Item: zıpla-n-maz jump-PASS-mAz

 $^{^{29}}$ We conjecture that G1's scarce use of active verbs has resulted from their being at the very initial stages of the language acquisition process. So, for most of the time they haven't responded to prompt questions and pictures. Similarly, when they spoke, they made use of some other verbs and sometimes it was impossible to follow/decipher their speech. In short, what gives rise to the increase in active voice use between G1 and G2 may have resulted from children's growing lexicon and from their linguistic maturation in acquisition.

'You must not jump.' (Lit. It is not jumped.)

Response (Child#18; 3;9): zıpla-ma jump-NEG-IMP

'Do not jump.'

c. Target Item: tırman-ıl-maz climb-PASS-mAz

'You must not jump.' (Lit. *It is not climbed*.)

Response (Child#34; 4;10): tırman-ma-yın climb-NEG-IMP-2PL

'Do not climb up a tree.'

d. Target Item: El-ler-le yemek ye-n-mez hand-PL-INS food eat-PASS-mAz

'You must not eat anything with your hands.' (Lit. *It is not eaten with hands.*)

Response (Child#40; 5;4): El-in-le ye-me, çatal-la ye. hand-POSS&3SG-INS eat-NEG-IMP fork-INS eat-IMP

'Do not eat with your hands; eat with a fork.'

e. Target Item: Sallan-1l-maz swing-PASS-mAz

'You must not swing.' (Lit. It is not swung.)

Response (Child#46; 5;0): Ayak-ta sallan-ma diy-er-di foot-LOC swing-NEG-IMP say-AOR-PAST.3SG

'She would say "Do not swing standing".'

As it is clear with examples, when they do not use passive in -mAz constructions, children employed active imperative forms predominantly, which may have resulted from the pragmatic force behind the event represented with pictures. More explicitly, children are asked to answer questions as if they were mothers of naughty children shown in the pictures. Although they have used -mAz constructions mostly, another

most frequently employed structure is the imperative as it is one of the most frequently employed form in child directed speech.

Choice of the default passive marker

Irregularization Errors

Contrary to what we have observed in affirmative sentences, the rates of the irregularization errors in passive forms in the -mAz construction are quite low and does not display a significant developmental pattern. Still, it is obvious that the oldest group has less confusion with regard to regular and irregular passive markers. The graphic below indicates the distribution of errors with respect to groups.

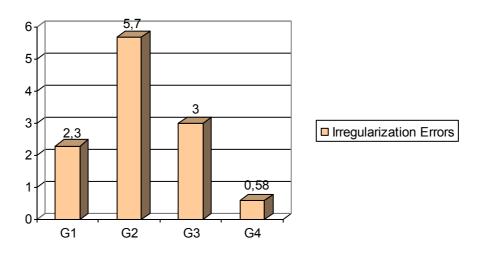


Fig.12: Irregularization Errors in -mAz constructions

Some examples for irregularization errors have been listed below.

(8)a. Target Item: çık-ıl-maz climb-PASS-mAz 'You must not climb up a tree.' (lit. *It is not climbed up a tree*.)

Response (Child#38; 5;3): *Ağac-a çık-*ın*-maz maymun-lar çık-ar de-r-di tree-DAT climb-PASS-mAz monkey-PL climb-AOR say-AOR-PAST-3SG

'She would say that you must not climb up a tree, monkeys climb up a tree. '

b. Target Item: sok-ul-maz thrust_into-PASS-mAz

'You must not thrust your hands into a plug.' (lit. It is not thrust

into.)

Response (Child#32; 4;9): *koy-un-maz put-PASS-mAz

'You must not put your hands into a plug.' (lit. It is not put.)

c. Target Item: yak-ıl-maz burn-PASS-mAz

'You must not set a fire.' (lit. It is not burned.)

Response (Child#20; 3;10): *yak-*in*-maz

d. Target Item: koş-ul-maz run-PASS-mAz

'You must not run.' (lit. It is not run.)

Response (Child#33; 4;9): *in-*in*-mez climb_down-PASS-mAz

'You must not climb down.' (lit. It is not climbed down.)

As there are not many errors, it is highly demanding to drive sound conclusions with respect to the underlying reasons of these errors. Yet among 29 irregularization errors, 13 of them have been committed with sonorant ending verbs such as *in*-'climb down', *bağır*- 'scream', and *bin*- 'ride'. According to the statistical analysis gathered by a simple linear regression, age, and irregularization errors are not closely related r = 0.013, n = 67, p = .918. Even though there is not a statistically significant number of irregularization errors, the ones committed with sonorant ending verbs constitute the biggest portion of errors. Briefly, as children seem to be highly competent in passive use with -mAz, they do not commit many errors.

Overregularization Errors

We have encountered only three overregularization errors among children's more than 900 passive uses (in the –mAz construction). This may suggest that children code the Passive-maz unit as a chunk and do not necessarily decompose the form as consisting of a passive marker. Hence these forms may be rote learned to some extent.

Errors encountered are listed below.

(9)a. Target Item: uyu-n-maz sleep-PASS-mAz

> 'You must not sleep on the floor.' (lit. *It is not slept on the floor*.) Response (Child#56; 6;9): *uyu-l-maz

b. Target Item: ye-n-mez eat-PASS-mAz

'You must not eat X.' (lit. It is not eaten.)

Response (Child#45; 5;0): *yi-y-il-mez

c. Target Item: boy-an-maz paint-PASS-mAz

'It is not painted.'

Response (Child#31; 4;7): *boy-ıl-maz

Morphosyntactic Errors

Although morphosyntactic errors with -mAz are more than morphosyntactic errors in affirmative sentences, there is no statistically significant difference among groups with -mAz constructions. These errors once again appear to have resulted from the case marker on the subject. Also, in -mAz test children are expected to form longer sentences when compared to the former test in affirmative contexts. This may have led children to fail to drop the case marker of the subject in passive form. Percentages for each group are indicated in the graphic below.

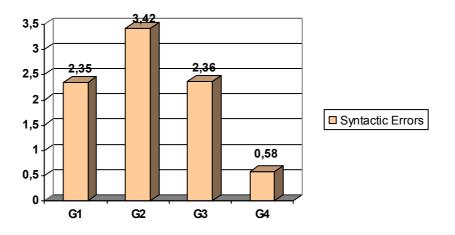


Fig.13: Morphosyntactic Errors in the *-mAz* construction

As the graphic illustrates, error rates are pretty much the same across all groups.

Let us see some examples.

(10)a. Target Item: sok-ul-maz thrust-PASS-mAz

'You must not thrust your hands into a plug.' (lit. It is not thrust into.)

Response (Child#8; 3;10): *El-ler-i sok-ul-maz

Response (Child#26; 4;3): *Priz-e elle-n-mez plug-DAT tamper-PASS-mAz

'You must not thrust your hands into a plug.' (lit. It is not tampered into.)

Response (Child#31; 4;6): *Elektriğ-e parmağ-ı sok-un-maz electricity-DAT finger-ACC thrust-PASS-mAz

'You must not thrust your hands into a plug.' (lit. It is not thrust

into.)

Response (Child#41; 5;5): *El-ler tehlikeli yer-ler-de sok-ul-maz hand-PL dangerous place-PL-LOC thrust-PASS-mAz

'You must not thrust your hands into a plug.' (lit. It is not

thrust into.)

b. Target Item: tırman-ıl-maz climb-PASS-maz

'You must not climb up a tree.' (lit. It is not climbed.)

Response (Child#23; 3,11): *Ağac-a kopar-ıl-maz. tree-DAT pluck-PASS-mAz

'You must not pluck a tree.' (Lit. *It is not plucked*.)

Response (Child#31; 4,6): *Ağac-a tut-ul-maz tree-DAT hold_off-PASS-mAz

'You must not hold off a tree.' (lit. It is not held.)

c. Target Item: Top-la cadde-de oyna-n-maz ball-INS street-LOC play-PASS-mAz

'You must not play with a ball on the street. ' (lit. *It is not played with a ball on the street.*)

Response (Child#41; 5;5): *Top-u asla ev-e yakın yer-ler-de oyna-n-maz ball-ACC never house-DAT close place-PL-LOC play-PASS-mAz

'You must not play with a ball places that are close to home.' (lit. *It is not played with a ball.*)

Although errors are not consistent in the sense that children employed different case markers such as dative and locative, most of them have resulted from the incorrect case marker use on the subject. This may have resulted from memory failures which lead children to start with an active sentence but then to continue with a passive one hence yielding ungrammaticality. The fact that these are quite longer utterences when compared to the ones in the affirmative context can also be considered as a factor contributing to the production of errors encountered.

Double Passives

Turkish children are observed to use double passives with the –mAz construction as well. Furthermore, the double passive use rate does not show any remarkable difference across age groups (see Figure 12) according to the results of a simple linear regression r = 0.254, n = 67, p = .655. Moreover, in both constructions where the passive use is tested, the double passive use rates do not show any remarkable difference and do not exceed 7%.

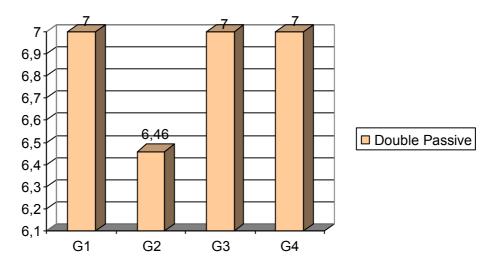


Fig.14: Double Passive in -mAz construction

Some examples of double passive use in the -mAz construction are given below.

(11)a. Target Item: zıpla-n-maz jump-PASS-mAz

'You must not jump.' (lit. It is not jumped.)

Response (Child#59; 7;2): zıpla-n-ıl-maz

b. Target Item: oyna-n-maz play-PASS-mAz

'You must not play .' (Lit. It is not played.)

Response (Child#2; 2;4): oyna-n-1l-maz

c. Target Item: ye-n-mez eat-PASS-mAz

'You must not eat.' (Lit. It is not eaten.)

Response (Child#55; 6;8): ye-n-il-mez

d. Target Item: yak-11-maz burn-PASS-mAz

'You must not burn.' (Lit. It is not burned.)

Response (Child#59; 7;2): yak-1l-1n-maz

e. Target Item: boya-n-maz paint-PASS-mAz

'You must not paint.' (Lit. It is not painted.)

Response (Child#18; 3;9): boya-n-1l-maz

Conclusion

To conclude, children's responses, which have been presented with ample amount of sample, have been laid out in two categories: passives in affirmative context and passives in -mAz. For each of these categories, different types of errors have been classified based on their shared linguistic properties. With those, it has appeared that passive voice use increases as children get older. Moreover, it has become obvious that children, at a certain period of their development, have difficulty in sorting out the appropriate passive marker, which leads them to commit irregularization errors. Overregularization and morphosyntactic errors have been far from presenting

significant changes though they indicate that children have some problems at certain periods. As for the -mAz construction, children have proven to be highly competent in using passive within the -mAz construction. As it has been only observed with the -mAz construction but not with verbs in affirmative context, it may be concluded that children process -mAz as a frozen unit involving the passive marker in it. In addition to that, as children have obviously less difficulty with -mAz, they committed fewer errors of all sorts. In brief, passive use in affirmative and -mAz constructions differed statistically from each other signaling distinct tendencies in each group for each type of error.

CHAPTER V

DISCUSSION AND CONCLUSION

Introduction

In this chapter, implications of the results obtained in the present study with respect to the acquisition of Turkish passives will be presented. Being the first study on the production of passives by Turkish-speaking children, the present work has revealed the Turkish children's take on the Turkish passives. In what follows we summarize the major findings of the thesis.

We have examined the production of passives in two different contexts, where one of the contexts, the so-called -mAz contruction, was in demand of passive use more forcefully compared to other context which attempted to trigger passive use through genericity/habitual acts and events. Children's performances on the test suggests that Turkish children are relatively more confident in passive use with -mAzconstructions while they have had much more difficulty in using passives in affirmative contexts.

Figure 15 below illustrates passive use in the two contexts studied and clearly shows how the use of passive construction has increased with age. Furthermore, though performance of G1 in two tests does not display variation, G2, G3, and G4 differed at least 10% for each group signaling more confident employment of passive in –maz constructions. Though this appears to be the tendency we are well aware of the fact that we have to back this observation up with further data.

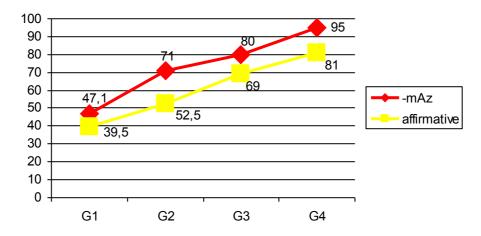


Fig.15 Passive Use

What may have given rise to this tendency, and the discrepancy observed in the use of the forms, may be tightly correlated with children's frequent exposure to passives in -mAz constructions. Though we do not have any evidence from Child-Directed Speech (CDS), showing the amount of exposure to passive constructions in different contexts, we think that children born into a Turkish-speaking environment are highly likely to get exposed to VERB-PASS–mAz construction in Turkish since particularly Turkish mothers tend to give advice and/or teach how to become well-mannered via use of the VERB-PASS–mAz form.³⁰

In order to have some idea of what children really hear related to passive constructions, random pieces of Turkish data on CHILDES database have been examined.³¹ In the transcripts examined we have encountered only 16 utterances with passived verbs among 2183 child directed utterances which correspond only to 0.73% of the data scanned, hence extremely scarce. There were no passive uses in

 $^{^{30}}$ It urges for an explaination for possible reasons of children's split reaction to these two distinct constructions. As mentioned earlier one possible reason is the frequency that children hear –mAz constructions. Unfortunately, data examined on CHILDES are not so helpful in that sense because of two reasons. First of all, there are few transcriptions in Turkish and secondly they are mostly thematic, meaning that dialogues were constructed on predetermined themes making them unnatural.

³¹ Those transcriptions were randomly selected pieces of Feyza Turkay's uploads to the database in April 2011, from Çukurova Üniversitesi. Not all of them were included, but 13 pieces were chosen randomly.

VERB-PASS-mAz form, which may have resulted from those transcriptions being thematic recordings.

This scarce use of passives in CDS, though it cannot conclusively inform us about children's exposure to passive forms, suggests one thing which is Turkish children do not get to hear passive forms to a great extent hence we cannot expect children to produce passives so confidently even when they are quite close to adult-like proficiency. This is in fact what we have found with passives in the affirmative/ habitual context. The oldest group's passive use does not exceed 81% in the affirmative context. In contrast to this, the same group of children used passives with a rate of 95% in -mAz test, which suggests that they are quite proficient in the passive use.

Children's better performance in the -mAz test leads us to focus on the linguistic properties of the construction itself. As mentioned in Chapter 1, in Turkish negation of the aorist is distinct in its form from other TAM markers in that the negative marker -mA in a way is fused with the [z] sound. Except for the first person singular and plural which involve only the negative marker -mA and the person agreement [-m] and [-(y)Iz], [-mAz] is inserted inbetween the stem and the person agreement in other forms. As extensively discussed in Yıldız and Nakipoğlu (to appear), Turkish children have a tendency to consider -mAz as a nondecomposable unit. The findings of this study adds further to the discussion of the status of -mAz, where -mAz not only appears to be treated as a chunk but also triggers passive use, hence functions as a construction. Since Goldberg (2006) the role that constructions play in acquisition is being widely discussed. This study, follows Yıldız & Nakipoğlu (to appear) in treating mAz as a construction and it further hopes to extend the discussion to the constructional status of Verb-PASS-mAz. The results obtained are also in line with some recent findings reported in Abbot-Smith (2006) where it has been claimed that passive and future constructions in German which involve the auxialiary *sein* (to be) has been acquired far earlier when compared to same constructions involving a verb with *werden* 'to become' since the auxiliary *sein* is acquired much earlier.³² The auxiliary facilitates the acquisition of passive and future constructions, which is not the case with verbs involving *werden*. Though further evidence is needed for a more conclusive claim, it seems that in Turkish – *mAz* has the potential to trigger the passive use hence can be claimed to facilitate the passive use during acquisition.

In brief, with children's relatively confident passive use in -mAz construction, it may be claimed that children acquire passives with -mAz constructions in the forms of frozen chunks without really paying much attention to the passive formation process, which is not the case with passives in the affirmative context.³³

³² Abbot-Smith (2010) mentions about the acquisition of German passive and future constructions. In those constructions, some verbs are used with the auxiliary sein (to be) while some others are used with werden (to become). After analyzing recordings of a German boy between 2;0 and 5;0 it has appeared that verbs with the auxiliary *sein* have been acquired earlier than verbs with *werden*. She further proposes that this discrepancy is the result children's former experiences with the auxiliary sein while passives with verbs involving werden pose some problems as there is another construction which is semantically highly similar to those.

³³ The examples given below provide support for this claim. In the examples below, there are responses of two different children to different questions targeting passive responses one in -mAzconstruction whereas the other in affirmative context. What is surprising is that the younger child uses exactly the same verb in passive with -mAz construction accurately while the older one commits an irregularization error with the same verb. Although we would expect the younger one to have difficulty in employing the passive marker, the older one fails to passivize the same verb in affirmative context. It would of course be more reliable if we had had examples of the same child erring in affirmative context but having no problem with -mAz test.

x. a) *Prompt Question*: Bak burada makasla oynayan çocuk var. Annesi görse bu çocuğa ne yapılmaz derdi?

[&]quot;Look! There is a child playing with scissors. What would her mother say to her if she saw him?"

Target Item: Makas-la oyna-n-maz. scissors-INS play-PASS-NEG&AOR

Repsonse (Child#39; 5;3): *Makas birbiri-ni kes-il-mez

We believe the findings of this study would contribute to the literature on the acquisition of passive constructions, since this is the first study examining passive formation in an agglutinative language. Furthermore, with its sample size (67 children, which we aim to enlarge in future work) this work stands out since it is highly difficult to find any study on the acquisition of passives in a language except for English with a similar sample size.

Though we have to support this finding with further tests run on younger children our findings show that Turkish children produce the passive marker quite early (at age 2;3 Child#2, 2;4 Child#3, 2;5 Child#4,) and on average is productive around 3 years of age. This observation signals quite an early productivity when compared to languages like English.

Another major finding of this study has been that children differed significantly in their passive marker choice, particularly around three years of age, employing the irregular passive marker [-(I)n] as if it were the default one, which has yielded a high number of irregularization errors. More explicitly, irregularization errors committed especially by G2 in both –maz and passives in affirmative tests

scissors each_other-ACC cut-PASS-NEG&AOR

'You should not cut anybody with scissors. ' (lit. Each other cannot be cut with scissors.)

b) *Prompt Question*: Domates ne yapılır? What do we do with a tomato?

Target Item: Doğra-n-ır /Kes-il-ir chop-PASS-AOR cut-PASS-AOR

It is chopped / cut.

Response (Child#66; 7;5): *kes-in-ir.

Although it is possible to attribute this difference between children to individual differences in their linguistic development, it is evident that the older one has failed in the choice of the passive while the younger having committed a morphosyntactic error has succeeded in attaching the appropriate passive marker to the verb. reveal that children undergo a critical process in which they have severe difficulty in distinguishing between what is nondefault/irregular and what is the default/regular marker for Turkish passive constructions. Apart from regularization errors, there were also morphosyntactic and phonological errors observed which are quite restricted when compared to the former. Morphosyntactic errors have all resulted from employment of incorrect case marker on the subject of the passivized sentence while phonological errors stem from verb-specific problems such as *ye-* 'to eat'. What is more, overall older children performed much better than the younger displaying there is a developmental. In the next section, we will briefly go through the predictions of the study.

Predictions and Conclusions

Let us start the discussion of the results by going back to the root of the problem posed by the passives in Turkish: allomorphy. There are more than one morpheme serving for a single purpose being to enable the change in voice, which is one of probable obstacles in forming passive in Turkish. How this obstacle is handled in the form of representations has been debated for years among researchers and there are three models that provide sound explanations for this question. These are the Single Mechanism Model /Connectionist Account (Rumelhardt and McClelland 1986), the Dual Mechanism Model (Marcus et al. 1992; Pinker and Prasada 1993), and Rules and Competetion Model (Bates & Whinney 1987; Yang 2002; Bybee 2003). The first two models are regarded as the reflections of the Connectionist and Generativist accounts respectively. Stocall (2004) summarizes the crucial difference among these two models as follows:

"....connectionist models ... treat all morphological relatedness as similarity, and dual mechanism models argue that regular allomorphy and irregular allomorphy involves root activation and composition."

(p.3)

The Single Mechanism Model proposes that there is only one mechanism that handles both regular and irregular forms and that mechanism works in close collaboration with frequency of items. On the other hand, in the Dual Mechanism Model, there are supposedly two mechanisms one responsible for irregular forms and the other for regularly attached forms. Irregular ones are assumed to be listed and rote learned while regular ones are decomposed and computed with a rule. In addition to these two models, the Rules and Competition Model proposed by Yang (2002), or other competition models (Bybee 2006), Bates and McWhinney (1987) rely on the idea of a single mechanism that can compute both regular and irregular morphemes as well as rules that are derived in the course of acquisition. According to this model, morphemes compete with each other in a single mechanism.

These models have been discussed in terms of their explanatory power in Nakipoğlu & Yumrutaş (2009) and Nakipoğlu & Ketrez (2006) for acquisition of two structures, namely clitics and the aorist in Turkish. What is common in these studies is that both include competing default and nondefault morphemes which are claimed to be determined by the frequency of items. To illustrate, in Nakipoglu & Ketrez (2006) which focuses on the acquisition of the Turkish aorist, --the affix -Ar has been accepted to be the default/regular marker for monosyllabic verbs as it is used with the majority of verbs. Following the same reasoning, we predict that [–11] is the default passive marker whereas [–In] the nondefault one. Let us continue with the discussion of the predictions based on the results.

The results of this study has confirmed one of our major predictions related to children's confusion with the default passive marker. As we have observed Turkish children especially, (G2:3;10-5;3) appear to be challenged with the distribution of the variant forms and have difficulty in sorting out the regular and the irregular passive markers. Recall that although children erred mostly with sonorant ending verbs, the significant number of errors committed with nonsonorant ending verbs indicates that children experience a serious difficulty in dissociating between the allomorphs and in deciding what form is used where. Gradually, they acquire adultlike proficiency committing significantly less errors. Strikingly, younger kids (G1:2;2-3;3) commit less overregularization and irregularization errors, however their accurate use of passive is comparatively low when compared to older groups.

On the other hand, overregularization errors which stem from children's tendency to use the regular marker when they are expected to use the irregular one have been observed to be restricted to a small group of verbs ending in a vowel mostly. Although that there is no significant difference among groups prevents us from deriving a generalizations. We would like to suggest that children may experience certain problems with vowel-ending verbs at different periods of their linguistic development. Although that there is no significant difference among groups prevents us from deriving generalizations. We would like to suggest that children there is no significant difference among groups prevents us from deriving generalizations. We would like to suggest that children there is no significant difference among groups prevents us from deriving generalizations. We would like to suggest that children may experience certain problems with vowel-ending verbs at difference among groups prevents us from deriving generalizations. We would like to suggest that children may experience certain problems with vowel-ending verbs at different periods of their linguistic development.

Recall that we had further expected children's active voice use to decrease in time while their accurate passive voice use would increase with age. This is what has been observed for English (Crain et al. 2009), for instance, particularly for some

types of passives. We think our findings also suggest a clear developmental pattern for Turkish speaking children.

As for the morphosyntactic errors we have observed such as (1) below, we would like to argue that they support Ketrez's (2000) claim that passive morphology is acquired earlier than its syntactic component in Turkish.

```
(1) Repsonse (Child#39; 5;3): *Makas birbiri-ni kes-il-mez
scissors each_other-ACC cut-PASS-NEG&AOR
```

'You should not cut anybody with scissors.' (lit. Each other can not be cut with scissors.)

In (1) the child commits a morphosyntactic error by not dropping the accusative case on the subject of the passive sentence even though there is no problem with the passive marker attached to the verb.³⁴ What needs to be noted here is that the kinds of morphosyntactic errors, i.e., agreement errors that Ketrez (1998) has observed with data collected in a natural setting have not been observed in this work. Rather all morphosyntactic errors observed, have been restricted to the inappropriate use of case markers on the subject of the passive sentence. Herein, let us focus on the implications of morphosyntactic errors that we have observed in this study for models proposed for passive formation in Turkish. In Chapter 1, we have presented two approaches in Turkish for passive formation (Özsoy 1990; Öztürk 2004) which differ from each other in the element that moves up (caseless NP in the former, the V head in the latter). With only a handful of morphosyntactic errors it is not quite possible to claim that any of these models has more explanatory power. Still, the

 $^{^{34}}$ The use of the reciprocal pronoun "birbirleri" is also deficient in (1a) as it violates the binding principle A stating that anaphors must be bound in their binding domain (Carnie, 2007). More explicitly, there is no reference for the reciprocal pronoun employed, which turns the passive sentence into a nonsensical one.

discussion of the errors in these models would give us an idea of the possible obstacles that children encounter in forming a passive sentence.

With respect to Özsoy's model (1990), if we are talking about the derivation of the passive sentence from the active form, children are expected to start with a verb which is attached to the passive marker absorbing the case marker on the internal argument. To illustrate, let us go over the example below.

(2) Response (Child#44- 5;9): *Duvar-lar-1 del-in-ir." wall-PL-ACC drill-PASS-AOR.3SG

'Walls are drilled.'

According to Özsoy (1990) [-in] absorbs [-i] on the internal argument, which is the stage that the child fails. Afterwards, supposedly caseless internal argument has to move up in a position where it can receive its case in order to satisfy Case Filter requiring every NP in a sentence to be case assigned. However, in the example above (2) as the internal argument is not caseless, it doesn't have to/ cannot move up to any position. But there is another motivation for the internal argument to move up to [Spec IP] position, namely EPP requiring every sentence to have a subject. At that point there are two ways to go: Children would not move the internal argument to [Spec IP] position relying on the Case Filter. Or they would move it in order to satisfy EPP. Thus, it is totally vague which way children would follow and why they would prefer one over the other. In the Minimalist Program (Chomsky 1995) which has reduced all operations in syntax into Copy and Merge the sentence would clash at the very initial stage where the passive marker fails to absorbe the case marker because clauses are claimed to be built by small units/derivations which are sent to logical form (LF) checking for the meaning of the merged unit at intervals. All we can say for the example above is that when the internal argument and the verb

merged and are sent to LF, the unit would clash. Below following Özsoy's (1990) model, a tree diagram for (2) is provided.

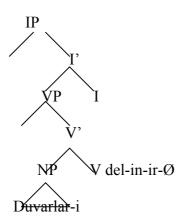


Fig.16 Keeping the Internal Argument in its base position relying on Case Filter

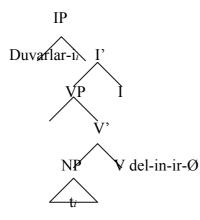


Fig.17 Moving the Internal Argument up to [Spec IP] in order to satisfy EPP

In Özturk's model (2004) it has been claimed that there is no reason for Turkish internal arguments to move up to [Spec TP] position for passives since it has been proposed that internal arguments remain in situ where it is base generated, in unaccusatives, transitives and other raising constructions which are constructions that have been previously claimed to involve movement just like passives (Öztürk, 2004:9). More significantly, she further claims that evidence for such an explanation resides in the impersonal passive constructions which involve no expletives that are employed for EPP. As there is no need for the internal argument to move to [Spec

TP], there is no expletive in the sentence. In a way, EPP rule is invalid in such a case. Then, it has been claimed that accusative case can only be available in a clause if there is nominative case in it, which makes it more significant than other cases. Going back to the example above, as there is no nominative case in the passive sentence, accusative case could not have been realized. But it has been produced resulting in an ungrammatical sentence. So, the example satisfies the requirement that the agent phrase is suppressed leaving the internal argument as the only available candidate for the nominative case. But, for some reason children fail in suppressing the accusative case on the internal argument at the morphological level. In that sense, it is also possible to claim that children simlpy leave the accusative case marked NP in its base generated position. Then, the source of ungrammaticality resides in children's leaving the internal argument in situ, which displays the same pattern with impersonal passives.

In brief, both of these models provide us important insights with respect to the syntactic process that children undergo. In the former which proposes the movement of the internal argument to [Spec TP] for case and EPP, the problem resides in the movement of the external argument, while in the latter favoring the internal argument staying in situ errors stem from the emergence of the accusative case at the phonological level. Yet, in this study, morphosyntactic errors do not provide any clear evidence that would support one over the other.

Another prediction was that the animacy feature of the internal argument may stand as an intervening factor in the passive formation. As the test design allows children to reply to the prompt question with only a passivized verb, we have very scarce number of full passive sentences hindering us from seeing children's reactions to the agency of the internal argument. More explicitly, the information gap in

prompt questions leads children to provide only the passivized verb, which has been our fundamental goal. Also, it is highly difficult to make children to produce passive utterances and this was the most productive method in which we were able to that many of passive utterances.

Finally one of the interesting findings of this study has been the use of double passive by children. It has appeared that children used double passives predominantly with specific verbs particularly with ye- (to eat). Discussed in Chapter 1, there appear to be different reasons for children to add one more passive marker to the passivized verb. We have observed that groups did not differ in their double passive use significantly, which suggests that there is no developmental pattern rather the use mostly appeared with particular verbs.³⁵

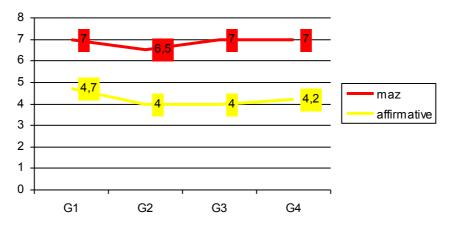


Fig.18. Comparison of Double Passive use

Below there is a table indicating all double passive errors.

³⁵ It is also significant to note that most of the double passive uses are in -(I)n- ιl sequence, which may be futher invastigated to see the underlying reason behind it.

Affirmative passives (2343 passive use)		-mAz constructions (873 passive use)	
Doğra-nılır	1	ağla-nılmaz	1
Teşekkur ed-inilir	1	geç-inilmez	1
Fırçala-nılır	1	gül-ünülmez	1
Gez-inilir	1	kes-inilmez	1
giy-inilir	8	kır-ınılmaz	1
İzle-nilir	1	oyna-nılmaz	9
Kapa-nılır	5	ye-nilmez	28
Oyna-nılır	2	zıpla-nılmaz	8
Soy-unulur	1		
Topla-nılınır	3		
Tut-unulur	2		
Üfle-nilir	2		
Ye-nilir	53		
Yüz-ünülür	1		

Table3. Double Passives

Acquisition of Turkish Passives and Theories of Language Acquisition

As is widely discussed in the past two decades, acquisition process involves different components, one of which is input provided in the target language. Theories of language acquisition mainly differ in their stances to the input agreeing on the significance of many other elements involved in the acquisition process. One of these approaches proposes that children are equipped with an innate capacity to acquire a language but they need some time in order for this capacity to mature during which they would also rely on the language they are exposed to (Borer and Wexler 1987; Fox and Grodzinsky 1998 among many others). Contrary to this account, there is a usage-based account suggesting that children do not have any innate support but

vitally rely on the input and the frequency effect in their acquisition process (Bybee, Perkins & Paglucia 1994; Tomasello 2000; Goldberg 2006; Lieven et al. 2003; Lieven & Tomasello 2008; among many others). At the same time, children are not accepted as unintelligible machines solely counting the words that they have encountered. Rather, what is proposed is that children exploit any available source that would make their life easier in their linguistic development. Going back to the acquisition of passives, generativists relying on the innate help suggest that acquisition of passives depends on A-Chain maturation suggesting that children's capability of moving up the internal argument to the subject position matures in time during which children commit a variety of errors. Not surprisingly, this account fits well with a language like English which is morphologically impoverished. English children have to deal with the by-phrases and the "be + participle" formula, but the main challenge for them has been considered to be movement.

However, for languages like Turkish with rich morphology, the story is quite different. Children have to pay attention to specific morphemes and their allomorphs as well the syntactic and morphological change on the internal argument. Thus, although generativist accounts shed some light on the syntactic component of the acquisition of passives, they are incapable of explaining how Turkish children would tackle a number of passive morphemes simultaneously deciding on the appropriate one and attaching it to an accurate verb stem. On the other hand, usage based accounts may help us in understanding children's employment of different passive markers. More explicitly, children aged between 3;10 and 5;3 appear to have thought that [-In] may be the deafault passive marker attaching to all sonorant ending verbs -- a pure generalization derived by children based on the frequent [1]- ending monosyllabic verbs requiring the use of [-In]. Furthermore, both of the accounts

agree on children's different reactions to the different types of the same structure. As for the present study, children's split behavior with respect to -mAz constructions and passives in affirmative contexts is therefore expected. However, how could we account for the children's being so competent with -mAz constructions in passives but not with passives in the affirmative test? Usage based accounts would consider these constructions as frozen chunks if they repeatedly occur in child directed speech. As for generativists, this competent passive use must stand as an obstacle because they would rely on the syntactic operations unfolding over time. That's, the only difference between the passives in affirmatives and -mAz constructions is the negation involved in the latter. Thus; syntactically, these two structures are highly tied in terms of the processes involved in the passive formation. Then, what is the source of this discrepancy? At that point, we cannot say anything conclusive, we however, believe that . the present study shows urgent need in Turkish for a detailed compilation of corpora for Child Directed Speech, or any other type of data that children may be exposed to during acquisition.

Concluding Remarks

This study is the first production study testing children's passives use in Turkish in an experimental setting. As the passive use even in adult speech is restricted to certain pragmatic functions, it has been challenging to form an experimental setting that would force children to produce passives but not the others. Although it is impossible to hinder their active voice use or use of some other constructions in Turkish, the test has been designed with ultimate care targeting maximum passive voice production. In terms of the methodology employed this study is distinct in that

there is no other study on the acquisition of passives conducted using an elicitation techique.

Moreover this study fills the gap in the acquisition of Turkish passives literature by providing important data for children's tendencies in the production of passives. Furthermore, this study has several overlaps with the previous language production tests carried out on the acquisition of structures that involve irregular morphemes such as the Turkish aorist or the negative of the aorist, Turkish clitics, suggesting that in Turkish children undergo certain processes during which they get challenged with incoming data and experience problems in sorting out the distribution of affixes

We believe that on a universal basis, this study is significant as research on the acquisition of passives is restricted to only a handful of languages, Findings from the current study signaling the quite early emergence of passive constructions in Turkish constitutes a major challenge for previous findings on the issue.

Limitations of the Study and Suggestions for Further Research

At first glance, one of the most significant limitations of this study is its being confined to the generic context and the –maz construction, which have restricted the class of verbs that we included in the test and thus hindered us from studying the distinction among verb types. In relation to that, we were not able to make children produce verbs that we want them to produce.

Furthermore because of the test design, children's possible take on the "tarafından/by phrase" has not been tested. Similarly, we had to stick to the aorist as the TAM morpheme as devising a test to make children produce passives with other

TAM morphemes proves to be extremely difficult. As a further step in the study of the acquisition of passives we attempt to devise tests to elicit passives in other TAM contexts.

Furthermore, we have attempted to test younger children's comprehension of Turkish passives via Truth Value Judgement Test (henceforth TVJT) designed in accordance with the TVJT employed in the acquisition literature so far. A pilot study involving 7 transitive verbs has been conducted with 4 children. However, due to time limitations, we have not been able to complete testing children, hence cannot report any results at the moment. We will, however attempt to extend the discussion on the acquisition of passives with results from TVJT and also the pool of children included in this study will be enlarged so as to capture more reliable differences among age groups. If TVJT proves to be difficult to implement, we will attempt to design a Picture Verification Test along the lines as suggested in Crain et al (2009) where young children will be asked to choose the correct representation.

A further issue that we would like to pursue with respect to the acquisition of passives is to check the real productivity of children in passive use by employing nonce verbs. Several studies carried out in particular within a usage-based framework (Tomasello 2000, Diesel 2007) have proven to provide important insights into productivity. Designing a test where the experimenter initially acquaints children with a nonce verb in a transitive or intransitive context for instance, for several weeks and then asks for the use of the verb in a context requiring passive is quite demanding and laborious hence we have not been able to fulfill our initial objective of testing nonce verbs. However, a nonce-test is what we have in mind as an extension of this study.

APPENDICES

APPENDIX A: ERRORS

i. Affirmative Test

Irregularization Errors	Overregularization Errors		Double Passive	
A ç- ınır: 8 (to open)	çal-ılır:2	(to play)	Doğra-nılır: 1 (to chop)	
At-inir:1 (to throw)	del-ilir: 1	(to drill)	Yardım ed-inilir: 1 (to help)	
Ayr-inir: 1 (to tear)	hazırla-lır: 1 (t	to prepare)	Fırçala-nılır: 1 (to brush)	
Bi n -inir: 3 (to ride)	Kapa-lır: 6	(to close)	Gez-inilir:1 (to wander)	
Çak-ınır: 1(to burn)	Oyna-lır:1	(to play)	giy-inilir: 8 (to wear)	
Çıkar-ınır: 1(to remove)	uyu-lur: 12	(to sleep)	İzle-nilir: 1 (to watch)	
Çık art -ınır:1 (to take off)	yi-yilir: 16	(to eat)	Kapa-lılır: 1 (to close)	
Çiz-inir: 1 (to draw)			Kapa-nılır: 4 (to close)	
Çöz-ünür: 1 (to solve)			Kullan-ininir:1 (to use)	
Değiş-inir: 1(to change)			Oyna-nılır: 2 (to play)	
Ders ya p -ınır: 3 (to study)			Soyun-ulur: 1 (to undress)	
Doldu r -unur: 7 (to fill)			topla-nılınır: 3 (to tidy up)	
Dö k -ünür: 6 (to pour)			Tut-unulur: 2 (to hold)	
Firlat-inir: 1 (to throw)			Üfle-nilir: 2 (to blow)	
Gi d -inir:7 (to go)			Ye-nilir: 53 (to eat)	
Giyi n -inir: 3 (to wear)			Ye-ninir: 4 (to eat)	
Giy-inir: 38 (to wear)			Yüz-ünülür: 1 (to swim)	
İ ç- inir: 7 (to drink)				
İn-inir: 1 (to step down)				
Kahvaltı ed-inir: 1 (to				
have a breakfast)				
Kalk-ınır:4 (to wake up)				
Kapa t -ınır: 1 (to turn off)				
Kaz-ınır: 7 (to dig)				
Kes-inir: 12 (to cut)				
Kopar-ınır: 1 (to pick)				
Kopart-ininir:1(to pick)				
Koş-unur: 1 (to run)				
Koy-unur: 5 (to put)				
Kur-unur: 2 (to set up)				

Otur-unur: 9 (to sit)
Ö p -ünür: 3 (to kiss)
Soy-unur: 1 (to undress)
Sür-ünür: 10 (to creep)
Tak-inir: 3 (to wear)
Teşekkür e d -inir: 1 (to thank)
Tut-unur: 1 (to hold)
U ç -unur: 3 (to fly)
Uçur-unur: 2 (to let fly)
Ver-inir: 10 (to give)
Vur-unur: 1 (to shoot)
Yak-ınır: 1 (to burn)
Yap-inir: 3 (to do)
Yat-inir: 4 (to recline)
Yaz-inir: 6 (to write)
Yemek ya p -ınır: 1 (to cook)
Ye-ninir: 3 (to eat)
Yüz-ünür: 7 (to swim)

ii. -mAz Test

Irregularization	Overregulari	zation		
Errors	Errors		Double Passive	
bağı r- ınmaz:1	boy-1lmaz:1			
(to scream)	(to dye)		ağla-nılmaz:1	(to cry)
bak-ınır: 1				
(to look)	uyu-lur:1	(to sleep)	geç-inilmez: 1	(to cross)
bi n -inmez:1	yi-yilmez: 6			
(to ride)	(to eat)		gül-ünülmez:1	(to laugh)
geç-inmez: 4				
(to cross)			kes-inilmez: 1	(to cut)
i n -inmez:1				
(to get off)			kır-ınılmaz:1	(to break)
kes-inilmez:1				
(to cut)			oyna-nılmaz: 9	(to play)
kı r- ınılmaz:1				
(to break)			ye-nilmez:28	(to eat)
koy-unmaz:3				
(to put)			zıpla-nılmaz: 8	(to jump)
sok-unmaz: 2				
(to insert)				
tırma n -ınmaz:3				

(to climb)	
yak-ınmaz:1 (to burn)	
yap-ınmaz:1 (to do)	

iii. Morphosyntactic Errors

a. Affirmative Test

Child	Age	Error
Child#5	2;7	*Dişlerimiz-i fırçalanır.
Child#9	3;2	*Yaramaz bebekler-i seyredilir.
Child#10	3;3	*Toprağ-ı kazılır.
Child#16	3;9	*Telefon-u koyulur.
Child#42	5;5	*Yataklar-ı düzenlenir.
		*Dişlerimiz-i fırçalanır.
Child#44	5;9	*Duvarlar-1 delinir.

b. -mAz Test

Child	Age	Error
Child#20	3;10	*Eller-i sokulmaz.
Child#22	3;11	*Ellerin-i yemeğe sokulmaz derdi.
Child#23	4;0	*Ağac-a koparılmaz.
Child#26	4;3	*Priz-e ellenmez.
		*Ellerin-i yemeğe sokulmaz derdi.
Child#28	4;4	*Ellerin-i sokulmaz yemeğe derdi.
Child#31	4;6	*Ağac-a tutulmaz.
		*Elektriğe parmağ-1 sokunmaz.
Child#39	5;3	*Makas birbirin-i kesilmez.
Child#40	5;3	*Ateş dokunmaz.
Child#42	5;5	*Eller tehlikeli yerler-de sokulmaz.
		*Top-u asla eve yakın yerlerde oynanmaz.
		*Kafan-ı çamaşır makinesinin içine sokulmaz.
Child#44	5;9	*Ellerin-i yemeğe batırmaz derdi.

APPENDIX B: Test Items Used in the Experiment

Slide 1



Slide 2



Prompt Question: Yaz mevsiminde ne yapılır? 'What do people do in summer?'

Slide 3



Target Response: Okullar kapa-n-ır. 'Schools are closed.'



Slide 5



Target Response: Valiz doldur-ul-ur. 'Suitcases are prepared.'

Slide 6



Target Response: Valiz kapat-ıl-ır. 'Suitcases are zipped.'



Target Response: Valizler arabaya yerleştir il-ir.

'Suitcases are put into the car.'

Slide 8



Target Response: Tatile gid-il-ir 'People go on a holiday.'

Slide 9



Target Response: Sahilde güneşle-n-il-ir. 'People sunbath on the seashore.'



Target Response: Denizde yüz-ül-ür. 'People swim in the sea.'

Slide 11



Target Response: Dondurma ye-n-ir. 'People eat iceream.'

Slide 12





Target Response: Okullar açıl-ır. 'Schools are open.'

Slide 14



Target Response: Okula gid-il-ir? 'Children go to the school.'

Slide 15



Prompt Questions: Çizmeler ne yapılır? Target Response: Giy-il-ir. 'They are worn.'



Target Response: Şemsiye tut-ul-ur. 'Umbrellas are used when it rains.'

Slide 17



Prompt Question: Annesi görse bu bebeğe ne yapılmaz derdi? Target Response: Yerde uyu-n-maz derdi. 'She would say that she should not sleep on the floor.'

Slide 18



Target Response: Yatak-ta uyu-n-ur. 'It is slept on a bed.'



Target Response: Yatakta zıpla-n-maz 'Children should not jump on a bed.'

Slide 20



Target Response: Araba gelirken karşıya geç-il-mez. 'People must not cross the road when there is a car coming.'

Slide 21



Target Response: Ağaca tırman-ıl-maz. 'Children should not climb up a tree.'



Slide 23



Target Response: Eldiven tak-ıl-ır. ' Gloves are worn.'

Slide 24



Target Response: Kartopu yap-ıl-ır. 'Snowballs are made.'



Target Response: Kartopu at-1l-1r. 'People throw snowballs to each other.'

Slide 26



Target Response: Kardanadam yap-ıl-ır. 'People built a snowman.'

Slide 27





Target Response: Uçurtma uçur-ul-ur. 'Kites are flied.'

Slide 29



Target Response: Piknik yap-ıl-ır. 'People go on a picnic.'

Slide 30



Target Response: Çiçek topla-n-ır. 'People pick up flowers.'

Slide 31



Target Response: Ata bin-il-ir. 'People ride a horse.'

Slide 32



Target Response: Eller prize sok-ul-maz. 'Do not touch to the plug.'

Slide 33



Target Response: Ellerle pasta yenmez. 'People should not eat cakes with their hands.'



Target Response: Evin içinde top oyna-nmaz.

'People should not play with a ball inside the house.'

Slide 35

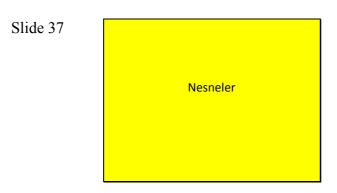


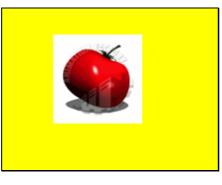
Target Response: Çamasır makinesinin içine kafa sok-ul-maz. 'People should not put their heads into the washing machine.'

Slide 36



Target Response: Kavga edilmez. 'Do not fight.'



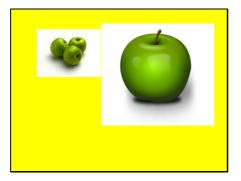


Prompt Question: Domates ne yapılır? 'What do people do with tomatoes?'

Slide 39



Target Response: Domates doğra-n-ır. 'Tomatoes are chopped.'



Slide 41



Target Response: Elma soy-ul-ur. 'An apple is peeled.'

Slide 42





Target response: Yazı yaz-ıl-ır. 'It is written on a notebook.'

Slide 44



Target Response: Çadır kur-ul-ur. 'Tents are set.'

Slide 45



Target Response: Davul çal-ın-ır. 'Drums are played.'



Target Response: Çiçekler sula-n-ır. 'Flowers are watered.'

Slide 47



Target Response: Koltukta otur-ul-ur. 'People sit on an armchair.'

Slide 48



Target Response: Araba sür-ül-ür. 'People drive cars.'



Target Response: Çatalla yemek ye-n-ir. 'People eat things with a fork.'

Slide 50



Slide 51



Target Response: Bıçakla ekmek kes-il-ir. 'People slice bread with a knife.'



Target Response: Yatakta uyu-n-ur. 'People sleep on a bed.'

Slide 53



Target Response: Kamyonla X taş-ın-ır. 'People carry things with a trum.'





Target Response: Kürekle toprak kaz-ın-ır. 'A scull is used to dig ground.'

Slide 56



Slide 57



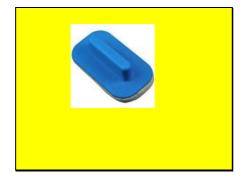
Target Response: Odunla ateş yak-ıl-ır. 'Firewood is used to make a fire.'



Slide 59



Target Response: Matkapla duvar del-in-ir. 'A drill is used to drill walls.'



Slide 61



Target Response: Silgiyle tahta sil-in-ir. 'An eraser is used to clean the board.'

Slide 62



Slide 63



Target Response: Yürüyen merdivenden aşağı in-il-ir. 'People go down with moving stairs.'



Target Response: Aşağıya tükür-ül-mez. 'Children should not spit out.'

Slide 65



Target Response: Ağla-n-maz. 'Do not cry.'

Slide 66



Target Response: Makasla oyna-n-maz 'Children should not play with scissors.'



Target Response: Ateş yak-ıl-maz. 'Children should not make a fire.'

Slide 68



Target Response: Dil çıkar-ıl-maz. 'Do not stick out tongue.'





Slide 71



Target Response: Pastanın mumları üfle-nir. 'Candles are blown.'

Slide 72



Target Response: Pasta kes-il-ir. 'Cake is sliced.'



Target Response: Meyve suyu iç-il-ir. 'People drink fruit juice.'

Slide 74



Target Response: Hediye al-ın-ır. 'Presents are given.'





Target Response: Çam ağacı süsle-n-ir. 'Trees are decorated.'

Slide 77



Target Response: Televizyon izle-n-ir. 'People watch TV.'

Slide 78



Target Response: Kuruyemiş ye-n-ir. 'People eat nuts.'



Target Response: Şapka tak-ıl-ır. 'Hats are worn.'

Slide 80



Slide 81



Target Response: Akrabalar ziyaret ed-il-ir. 'People visit their relatives.'



Target Response: El öp-ül-ür. 'People kiss hands.'

Slide 83



Target Response: Kolonya dök-ül-ür. 'Cologne is served.'

Slide 84

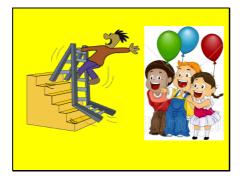


Target Response: Baklava ye-n-ir. 'People eat baklava.'

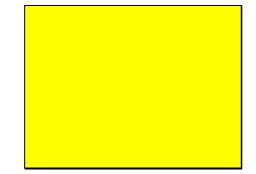


Target Response: Boy-an-maz. 'Children should not paint.'

Slide 86



Target Response: Gül-ün-mez. 'Children should not laugh at people in danger.'





Target Response: bağır-ıl-maz. 'Do not shout.'

Slide 89



Slide 90

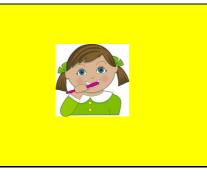


Target Response: Uyan-ıl-ır. 'People wake up.'



Target Response: Yatak düzenle-n-ir. 'People tidy up their beds.'

Slide 92



Target Response: Dişler fırçala-n-ır. 'People brush their theeth.'

Slide 93



Target Response: Günaydın de-n-ir. 'People say god morning to each other.'



Target Response: Kahvaltı ed-il-ir. 'People have their breakfast.'

Slide 95

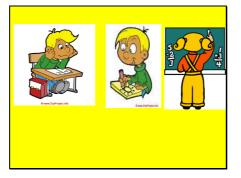


Target Response: Anne-baba öp-ül-ür. 'Children kiss their parents.'

Slide 96



Target Response: Okula gid-il-ir. 'People go to school.'



Target Response: Ders çalış-ıl-ır. 'Children study at school.'

Slide 98



Target Response: Yemek ye-n-ir. 'People have lunch.'

Slide 99



Target Response: Oyun oyna-n-ır. 'Children play games.'



Target Response: Okuldan çık-ıl-ır. 'Children leave the school.'

Slide 101



Target Response: Eve gel-in-ir. 'Children come home.'

Slide 102



Target Response: Kıyafetler değiştir-il-ir. 'People change their clothes.'



Target Response: Yemek ye-n-ir. 'People have their supper.'

Slide 104



Target Response: Televizyon izle-n-ir. 'People watch TV.'

Slide 105



Target Response: İyi geceler de-n-ir. 'People say good night.'



Target Response: Yatak hazırla-n-ır. 'People prepare their beds.'

Slide 107



Target Resonse: Uyu-n-ur. 'People sleep.'

Slide 108



Target Response: Yemeğe ban-ıl-maz. 'Do not dip your fingers into meal.'



Target Response: Salıncakta ayakta sallanıl-maz.

'People should not swing on foot.'

Slide 110



Target Response: Topun arkasından koş-ulmaz.

'People should not run after a ball into a street.'

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