

## **Interfaces in the Returnees' Heritage Language: Is the complete (re-)activation possible?**

*Elena Antonova-Unlu*

*Li Wei*

*Didem Kaya-Soykan*

### **Abstract**

**Aims and objectives/purpose/research questions:** The aim of this study is to examine whether the complete (re-)activation of interface domains in the heritage language (HL) is possible or whether interfaces are likely to preserve features typical for the HL even after many years of residing in the country of origin.

**Design/methodology/approach:** We present the group analysis of direct object marking in Turkish, which is a morphology-syntax-pragmatics interface, of Turkish-German returnees, who returned to Turkey after puberty and have been residing in the country for a minimum of 10 and a maximum of 34 years, and compare them with the control group consisting of Turkish speakers who have been living in Turkey all their lives.

**Data and analysis:** The data were collected via using a narrative task, a completion task and a grammaticality judgement task and analyzed both quantitatively and qualitatively.

**Findings/conclusions:** The analysis of the narrative task revealed that the returnee participants used case-marking on direct objects productively depending on the discourse and syntactic position of the direct object in their heritage Turkish. However, their performance on the completion and grammaticality judgement tasks diverged from those of the control group. These findings can be considered as a piece of evidence that interface domains stay obstinate to complete (re-)activation and may preserve features typical for the HL many years after the return to the country of origin.

**Originality:** The study suggests relevance of the Interface Hypothesis to the process of HL (re-)activation.

**Significance/implications:** The study contributes to the research on the HL development of returnees after their return to the country of origin.

**Keywords:** returnees, heritage language, Turkish-German bilingualism, interface, direct object marking in Turkish

## **Introduction**

The aim of the present study is to contribute to the research examining the development of the heritage language (HL) after return to the country of origin. We aim to answer the question whether linguistic traces that are typical for HL speakers are overcome after the speakers move to the country of their HL and live there for a long period of time, or whether the (re-) activation of the HL after return is domain-specific, that is there might be structures in the HL that will preserve features typical for the HL many years after residing in the country of origin.

So far, several studies have examined the HL development after return to the country of origin (Daller & Yıldız, 1995; Kaya-Soykan et.al., 2020; Treffers-Daller, Daller, Furman & Rothman, 2016). Some of these studies (Daller & Yıldız, 1995; Treffers-Daller, Özsoy & van Hout, 2007; Treffers-Daller, Daller, Furman & Rothman, 2016) focused on the overall proficiency of returnees, their use of collocations and syntactic embeddings in the heritage Turkish and demonstrated that about eight years after return, the heritage Turkish of returnees becomes indistinguishable from those who had lived all their lives in Turkey. On the other hand, Kaya-Soykan et.al. (2020) focusing on the evidentiality in the (re-)activated heritage Turkish showed that even after more than ten years of residence in Turkey, the evidentiality markers of the

returnee participants differed from the homeland variety suggesting that the extent of HL activation may be domain-specific.

Of all the linguistic domains, interface structures that require the activation of internal domains and the external domain of pragmatics are likely to be a strong candidate for incomplete (re-)activation. First of all, interface structures were defined as vulnerable to incomplete acquisition in second language acquisition by the Interface Hypothesis (IH) (Sorace & Filiaci, 2006). Further, the IH has been extended to bilingual language acquisition and attrition, and, last but not least, IH has been suggested as relevant to the HL development (see Montrul & Polinsky, 2011). So far, numerous studies have validated the vulnerability of interfaces across different acquisitional contexts including the HL context (Antonova-Unlu, 2015, Antonova-Unlu & Li Wei, 2020, Arslan et al., 2014; Cuza et al., 2013; Iverson et al., 2008 among others). Therefore, it seems possible to suggest that if there are any domains in the HL that would stay obstinate to complete (re-)activation after return to the country of origin, interface structures involving the pragmatics interface are expected to be among them.

To this end, the present study focusing on the case-marking of direct objects in Turkish, which is a morphology, syntax and pragmatics interface, aims to examine the direct object marking in the heritage Turkish of Turkish-German returnees, who returned to Turkey after puberty and have been residing in the country for more than ten years to see whether the heritage Turkish of the returnees has converged to monolingual-like norms, or whether it still preserves features typical for the HL at the interface domain.

### **Background to the study**

It is not uncommon for families with young children to move to a country that uses a different language and some children can be born locally in the country of their parents' migration. In most of such cases the children are exposed to the HL of their parents, which is commonly used at home. Along with it, the children may also be exposed to other language(s) spoken in the migration society. With schooling opportunities of using, the societal language(s) become(s) the dominant and preferred

language in the children's repertoire; the HL, on the other hand, is likely to become non-dominant, less preferred, and due to restricted input and use, as well as contact-induced changes, the HL may diverge from the homeland variety (Montrul, 2008; Rothman, 2009).

Later, in their adolescence or adult years, some of such individuals may want to return to their parents' country of origin (henceforth, the country of origin) for a long-lasting or permanent residence for various reasons. In this case, they will experience another major change in the language dominance of the environment: the HL becomes actively used not only in the family but also in the social environment on a daily basis.

Thus, the language development of such returnees is commonly marked with alterations in the exposure to and use of both languages in their repertoire in the course of their life.

Though research into the development of both languages of the returnee population is likely to provide interesting insights into bilingual language acquisition and the role of intra-linguistic and extra-linguistic factors in it, relatively little attention has been paid on what happens to the languages in the returnees' repertoire.

Two main foci have emerged in the topic of the returnees' language development. The first focus is on the process of attrition taking place in the dominant language of returnees after their return to the country of origin (Bilen & Develi, 1995; Daller, 1999; Flores, 2010; 2012; Tomiyama, 2009; Yoshitomi, 1999). These studies have demonstrated that after leaving their migration context, returnees tend to quit using the language of the migration society or use it less frequently, which leads to the attrition of the language. As for the factors accounting for the process of attrition, the intensity of contact with the former dominant language and the age of the return to the country of origin have been defined as playing a role in the process of attrition.

The second focus of the returnee research is related to the effect of the sociolinguistic change on the HL. As Flores and Snape (2020) indicated, 'a crucial question that derives from this sociolinguistic change is whether [...] linguistic traces that are typical of HLs (Montrul, 2016a/b; Polinsky & Scontras, 2019) are overcome if the heritage

speakers become immersed in an environment where the HL is no longer a minority language' (p. 8).'

However, the research on the status of the HL after return to the country of origin is even more scarce than the available research on the attrition of the dominant language.

The HL development of Turkish returnees has a special status in the topic of inquiry for the reason that return migration is rather common for this particular migrant population with many second- and third-generation Turkish immigrants choosing to return to Turkey. So far, there have been a number of studies that examined different linguistic and social aspects of the process, including the (re-)activation of the heritage Turkish of returnees after their return to the country of origin (Daller and Yıldız, 1995; Kaya-Soykan et.al., 2020; Treffers-Daller, Özsoy & van Hout, 2007; Treffers-Daller, Daller, Furman and Rothman, 2016). In one of the earliest studies Daller and Yıldız (1995) examined the overall proficiency in the heritage Turkish of Turkish-German returnees using a C-test. The scholars revealed that 1.6 years after the return to the country of origin, the participants scored significantly worse on the C-test when compared with the monolingual control group. However, eight years after the return, the bilingual participants did not differ significantly from the control group. In another study, Treffers-Daller, Özsoy and van Hout (2007) compared the use of syntactic embeddings among Turkish-German bilinguals who were born and lived in Germany, Turkish-German returnees who had lived in Turkey for eight years and monolingual speakers. The results showed that the Turkish-German bilinguals living in Germany used fewer and less complex embeddings than the returnees and monolinguals. The returnees, as a group, were not as good as monolinguals in their use of syntactic embeddings. However, those returnee participants who had lived in Turkey for eight years were 'indistinguishable from monolingual Turkish students in this respect' (p. 271). Further, Treffers-Daller et al. (2016), compared the use of lexical collocations including *yap-* (*do*) and *et-* (*do*) by heritage speakers of Turkish living in Germany with those of Turkish returnees and Turkish monolinguals. The findings revealed that the participants who had lived in Turkey for one year avoided collocations with *yap-* and used some hypercorrect forms in *et-*, while those who had been back for seven

years were quantitatively and qualitatively similar to the monolingual control group. Relying on their findings the scholars concluded that heritage speakers ‘can acquire new collocations after the onset of puberty and that after a certain time has elapsed, they are no longer significantly different from monolingual users of Turkish once they find themselves in monolingual environments of the heritage language’ (p.29).

On the other hand, Kaya-Soykan et.al. (2020) examined the production and perception of evidentiality markers in the heritage Turkish of returnees and compared their performance on the structured tasks with that of the monolingual control group. The findings of the study showed that the perception and production of evidentiality markers by the returnee participants, who had returned to their country of origin after puberty and lived in Turkey for many years (min 11 and max 30), still would diverge from those of the control group. The divergence appeared ‘in a few ungrammatical uses of evidentiality markers in the context of the indirect evidentiality and less sensitivity to grammatical and ungrammatical items comprising direct and indirect evidentiality markers’ (p. 16). The findings of Kaya-Soykan et al. (2020) suggest that even after many years of residing in the country of origin, some domains of the returnees’ HL may possess features that are typical for heritage speakers, thereby reflecting a need for further research on the topic.

In the existing body of research on the HL development after return to the country of origin, the scholars commonly use the terms ‘reactivation’, ‘recovery’ and ‘reversal’, all of which imply that the HL was acquired and actively used by heritage speakers but further the process of attrition took place due to the HL restricted input and use, and the dominance of the other language. However, the possibility of incomplete/imperfect acquisition of the HL structures should not be excluded and, therefore, ‘(re-)activation’ of the HL may mean learning anew of, at least, some domains in an immersion environment. In the ‘new’ learning after the onset of puberty, interface domains are expected to be difficult to learn as it is predicted by the Interface Hypothesis (Sorace & Filiaci, 2006) and demonstrated by numerous studies validating it (Antonova-Unlu, 2015, Antonova-Unlu & Li Wei, 2020, Cuza et al., 2013; Iverson et al., 2008; Massery

& Fuentes, 2017). Therefore, we hypothesize that among all the domains, interfaces will be a strong candidate for susceptibility to (re-)activation in the HL.

Against this background, the present study aims to add to the existing body of research on the returnees' HL development after the onset of puberty by seeking to understand whether interface structures would still preserve features that are typical for the HL even after many years of returnees' residing in the country of origin. We present the group analysis of direct object marking in Turkish comparing Turkish-German returnees, who returned to Turkey after puberty and have been residing in the country for a minimum of 10 and a maximum of 34 years, with the control group consisting of Turkish speakers who have been living in Turkey all their lives.

### **Direct object marking in Turkish**

There are two options for marking direct objects in Turkish: 1. the accusative-case ending *-I*, which may have eight different forms (*İ, I, U and Ü, and (y)İ, (y)I, (y)U and (y)Ü*) depending upon the preceding vowel sound in the stem and the syllable-final phoneme (i.e. whether it is a vowel or a consonant), and 2. zero-case ending, in which the form of the direct object is identical with the nominative form of nouns. The marking of direct objects in Turkish is determined by position of the direct object in the sentence and by the discourse. Therefore, marking of direct objects in Turkish requires the activation of multiple interfaces: morphology, syntax and pragmatics. Scholars (Enc, 1991; Göksel and Kerslake, 2005; Johanson, 2006; Kornfilt, 1997) defined the following contexts that determine the marking of direct objects in the Turkish language:

1. Accusative marking on a direct object is obligatory if the object is definite. If a definite object is not marked with an accusative case, the sentence is ungrammatical.

Example 1:

Senin yer-in-de ol-sa-m teklif-i kabul ed-er-di-m.

Your place-POSS.2P.SG- be-COND-1P.SG offer-ACC accept-AOR-PAST.COP-  
 LOC 1P.SG

If I were you, I would accept the offer.

2. Accusative case marking is also used on a direct object if the object is indefinite but specific. ‘Specificity involves [...] being a subset of or standing in some recoverable relation to a familiar object’ (Enç, 1991, p. 24). There are several conditions yielding direct objects in Turkish as specific and, therefore, requiring an accusative case marking. Those occur when:

- a. direct objects are used with a possessive suffix (Example 2);
- b. direct objects are used as partitives, which are a subgroup of a referent of the noun phrase contained in the partitive. The noun phrase that yields the superset for the partitive can be marked either genitive or ablative (Example 3);
- c. direct objects that are used with strong determiners, such as *her (every)*, *bazı (some of)* (Enç, 1991).

Example 2:

Ders	bit-ti,	eşya-lar-ınız-ı	unut-ma-yın.
Class	end-PAST(3P.SG)	thing-PL-POSS.2P.PL- ACC	forget-NEG- IMPER.2P.PL

The class is over, do not forget to take all your possessions.

Example 3:

Ali	çocuk-lar-ın	hepsi-ni	tan-ır.
Ali	child-PL-GEN	all-ACC	know-AOR(3P.SG)

Ali knows all the children.

Accusative case marking is optional in Turkish for direct objects that are used with so called weak determiners, such as *birkaç (some, several)*, *birçok (many)*, *az (few)*, *bir (one)*, *two (iki)*, *elli (fifty)*, etc., as well as generic plural-marked direct objects in the pre-verbal position (Enç, 1991). Such direct objects are accusative-case marked when they are specific (Example 4) and require no case marker when they



are not specific (Example 5) (Johanson, 2006). In such cases, the specificity or non-specificity of the direct object is determined by the context of the utterance and the knowledge of the speaker and hearer. If the specifying context is not provided, the object is considered as non-specific and should be used without accusative-case marker.

Example 4:

Dün	birkaç	kitab-ı	oku-du-m.
Yesterday	several	book- ACC	read-PAST-1P.SG

Yesterday I read several (specific) books.

Example 5:

Dün	birkaç	kitap	oku-du-m.
Yesterday	several	book- ZERO-C	read-PAST-1P.SG

Yesterday I read several books.

3. If an indefinite and non-specific direct object appears before the predicate but not in the closest position to it, it will regularly be accusative-case marked.

Example 6:

Balığ-ı	herkes	sev-me-z.
Fish-ACC	everybody	like-NEG-AOR(3P.SG)

Not everybody likes fish.

Since a direct object in this opposition requires accusative marking, there is no ground for specificity opposition, and *balığ-ı* as accusative-marked in Example 6 cannot be substituted with the zero-case form. Nevertheless, native speakers of Turkish might accept this substitution under particular pragmatic conditions (Johanson, 2006).

4. Last but not least, if a direct object is indefinite and non-specific and appears in the closest position before the predicate in the sentence, it will be zero-case marked.

Example 7:

Dün	ben	ilginç	bir	haber	oku-du-m.
Yesterday	I	interesting	one	news-ZERO-C	read-PAST-1P.SG

Yesterday I read an interesting piece of news.

As the above taxonomy demonstrates, the use of direct objects in Turkish is a case of morphology-syntax-pragmatics interface, which requires the speaker to determine the case marking on direct objects depending on its position in the sentence as well as on the oppositions of specific-non-specific and definite-indefinite depending on the discourse and speaker-listener knowledge.

The present study has adapted the above-described taxonomy of the contexts defining case-marking on direct objects in Turkish to examine the perception and use of direct objects in the heritage Turkish of the returnee participants.

**Acquisition of Turkish direct object marking in different acquisitional contexts.**

The acquisition of direct object marking in Turkish has been investigated in different acquisitional contexts: monolingual, bilingual, child L2 and adult L2 acquisitions. Studies focusing on monolingual children (Aksu-Koç & Ketrez, 2003; Aksu-Koç & Slobin, 1985; Ekmekçi, 1979; Slobin & Bever, 1982) have reported that accusative case for marking direct objects appears the latest among the cases. Nevertheless, already at the age of about three years, Turkish children are able to mark direct objects, by and large, correctly not only in the sentences with canonical word orders but also with non-canonical ones. However, their case marking on direct objects was reported to be non-adult-like and marked with mistakes until the age of five.

The use of case marking on direct objects in child L2 acquisition was the focus of Antonova-Unlu (2019) who examined the narratives of sequential bilinguals (Mean age = 8.1). The participants of the study, L1 Russian and L1 English speakers, started to acquire Turkish as their child L2 at the mean age of 4.1. The findings revealed that the participants were able to mark Turkish direct objects according to the discourse-related conditions: they used a zero-case marker with the first-mentioned and/or

indefinite direct objects and an accusative-case marker with the previously mentioned and/or definite ones. However, the study also revealed that some of the participants tended to avoid using nouns as direct objects replacing them with pronouns, which have just one form in the function of direct objects.

The use of case marking on direct objects has been in the scope of studies investigating the use of case markers by L2 learners of Turkish with different L1 backgrounds (Altunkol and Balcı, 2013; Akdoğan, 1993; Antonova-Unlu, 2015, Antonova-Unlu & Li Wei, 2020; Gürel, 2000; Güven, 2007; Haznedar, 2006; Papadopoulou et al., 2011). The findings of these studies have showed that using case marking on direct objects (accusative or zero) was problematic for all the L2 users of Turkish even at the advanced levels of proficiency and independently from their L1 backgrounds.

To sum up, the case marking on direct objects in Turkish was reported to be challenging in different acquisitional contexts. Most of the above-mentioned studies explained the difficulties in the acquisition of case marking on direct objects as due to necessity to activate internal (syntax and morphology) and external (pragmatics) domains simultaneously when marking direct objects in Turkish.

## **Study**

### **Participants**

#### **Returnee Group**

The returnee group consisted of 17 bilinguals (11 females and 6 males) whose age ranged from 26 to 46 ( $M = 36.1$ ). Ten of the participants were born in Turkey and at the age of about three ( $M = 2.11$ ) moved to Germany with their families. The other seven participants were born in Germany. Both parents of the participants were Turkish and came from the Central Anatolian region. The communication among the family members was in Turkish while living in Germany. All the participants started a German kindergarten at the age of three, so a formal contact with the dominant language started at this age. After the kindergarten, the participants continued their education at primary, secondary and high schools. The German language was the

medium of instruction in all the educational institutions. Seven of the participants took two-hour-per-week Turkish classes as elective during their primary education, eight had Turkish as elective at the primary, secondary and high schools, and two of the participants reported that they did not take any Turkish classes at school. After graduating from high schools, the participants chose to pursue their education in Turkey, where, at the age of about 17 ( $M = 16.7$ ), they took the university entrance exam and entered the departments of translation and interpreting in Ankara and Istanbul. The medium of instruction during the university education was mostly Turkish, but German was also used when translating and interpreting. After university, 12 participants began working as instructors at the departments of translation and interpreting, 3 participants at the department of German language and literature in universities in Ankara and Istanbul, and 2 participants got a position in private companies in Ankara and Istanbul. At the moment of the data collection, the participants had been residing in Turkey from 10 to 34 years ( $M = 23.4$ ). The participants reported that after their return to Turkey, they had been using Turkish while communicating with their family members, friends, and colleagues as well as in public places. Their use of the German language had been mostly restricted to the activities during university classes. The participants stated that their weaker language, Turkish, had improved significantly after they got back to Turkey and they defined themselves as monolingual-like users of Turkish in speaking, comprehension, writing and reading in the language. All of them underlined that their current competence in Turkish made them undistinguishable among Turkish people who had been living all their lives in Turkey.

Overall, the sample under the analysis can be considered as homogeneous regarding the participants' language histories, i.e. all the participants have been using Turkish in their families from the birth, all of them started their formal contact with the German language at the age of about three; their primary, secondary and high education was also received in Germany with the German language as a medium of instruction, all the participants graduated from a Turkish university and have lived in Turkey for at least ten years after the return. All the participants also indicated that they had had

difficulties with Turkish upon their return to Turkey but at the moment of the data collection all of them defined themselves as monolingual-like users of the Turkish language. Though there are variations among the participants regarding the duration of their stay in Germany, and their residence in Turkey after return, all the participants meet the requirements of 1. the acquisition of the HL in the dominant environment of the German language till puberty and 2. exposure to the HL for at least ten years after their return to Turkey, which suggests that the sample is suitable for examining the attainments in the (re) activated HL.

### **Control Group**

The control group included 17 speakers of Turkish (7 males and 10 females) who were born and lived in Ankara and Istanbul all their lives. The participants' age ranged from 27 to 53 years old ( $M = 36.2$ ) and they were at least a university graduate. The participants were working at different places (companies, governmental and educational institutions).

### **Materials**

Two production tasks (a narrative task and a completion task) and a grammaticality judgement task were developed to examine the direct object marking in Turkish of the returnee participants and the control group.

### **Narrative Task**

The narrative task required the participants to write about a remarkable event in their life in approximately 300 to 400 words. The goal of the narrative task was to examine whether the returnee participants were able to use markers on direct objects in their free production according to the norms of the Turkish language. The participants were not restricted in time and they were asked not to use any vocabulary and grammar books.

### **Completion Task**

The completion task required the participants to use a case maker (accusative or zero) on direct objects. The task consisted of 60 items: 36 items that were included into the analysis (9 items for each of the four contexts defining case making on direct objects) and 24 distractors. The completion task aimed to examine whether or not the returnee participants marked direct objects in the structured production task similarly to the monolingual control group.

Example 8 illustrates one of the items from the completion task in which the participants were requested to use the noun in the parenthesis in the correct form.

Example 8:

Deniz çok berraktı: dibindeki bütün (taşlar) gördüm.

Deniz	çok	berrak-tı	dib-in-de	bütün	taş-lar-ı	gör-dü-m.
Sea	very	clear-	bottom-POSS.3P.SG-	all	stone-PL-	see-PAST-
		PAST.COP(3P.SG)	LOC		ACC	1P.SG

The sea was very clear: I saw all the stones on the bottom of it.

Before being used, the task was checked by two teachers of Turkish who were native speakers of the language, and piloted on ten native speakers. The test-retest reliability coefficient was .98 over a period of three weeks.

### **Grammaticality Judgement Task**

The grammaticality judgement task required the participants to rate the grammaticality of the items on a 7-point Likert-type scale ranging from 1 = grammatically incorrect to 7 = grammatically correct. The goal of the grammaticality judgement task was to examine whether the returnee participants perceived grammatical and ungrammatical marking on direct objects similarly to the control group. The task consisted of 60 items: 20 grammatical items, 20 ungrammatical items and 20 distractors, which were both grammatical and ungrammatical. The distractors were not included into the analysis.

Before being used the grammaticality-judgement task was checked by two teachers of Turkish who were native speakers and piloted on ten native speakers. The test-retest reliability coefficient was 0.94 over a period of three weeks.

## Data Analysis and Results

### Production Tasks

#### Narrative Task

To examine whether the returnee participants marked direct objects in Turkish according to the norms of the Turkish language, two experts, native speakers of Turkish, who worked as teachers of the Turkish language were asked to assess marking on direct objects in the narratives of the returnee participants. The data analysis showed that there were 392 direct objects in the narratives and all of them were correctly marked (128 as zero-case and 264 as accusative-case marked). Example 9 and Example 10 illustrate a correct use of the zero-case and accusative-case markers on direct objects, respectively.

#### Example 9:

En	iyi	dost-lar-ım	ile	birlikte	harika	bir akşam	geçir-di-k.
Most	good	friend-PL- POSS.1P.SG	with	together	great	an evening-ZERO-C	spend-PAST-1P.PL

We spent a great evening together with my best friends.

#### Example 10:

Eşi-m	bana	beğen-diğ-im	bilgisayar-ı	hediye et-ti
Spouse- POSS.1P.SG	I- DAT	like-NOM-POSS.1P.SG	computer-ACC	present- PAST(3P.SG)

My husband presented me the computer that I liked.

The analysis of the narratives also revealed that direct objects appeared in all the four contexts that determine case marking on direct objects: there were 128 zero-case marked direct objects that were indefinite and/or unknown from the context, 108 accusative-case marked direct objects that were definite and 154 that could be defined

as specific and two indefinite accusative-case marked direct objects that appear before the predicate but not in the immediate pre-verbal position.

The analysis of the narratives showed that the returnee participants marked direct objects accurately depending upon the context and position of the direct object in the sentence in their free production.

### **Completion Task**

To examine whether or not the returnee participants marked direct objects in the structured production task similarly to the control group, the answers of the returnee participants and control group on the completion task were evaluated by the experts and the performance of the returnee group was statistically compared with that of the control group. The results of the completion task are presented separately for each of the contexts that define direct object marking.

#### *Context I: Direct objects that are definite.*

The data analysis revealed that there were no instances of incorrect marking on direct objects that were definite and/or known from the previous context in the data of both the returnee participants and the control group. No difference was found between the groups in Context I.

#### *Context II: Direct objects that are specific.*

The data analysis revealed that there were seven instances where the returnee participants used a zero-case marker on the specific direct object. The incorrectly used direct objects were either partitives or marked with a possessive marker. Such cases were defined as ungrammatical by the experts and they were not found in the data of the control group. Example 11 illustrates such a case:

#### **Example 11:**

Hava sođu-muş \*mont-lar-ımız ala-lım.



Weather get cold-EVD(3P.SG.) jacket-PL-POSS.1P.PL- take-IMP.1P.PL.  
(ZERO-C)

The weather has got cold, let's take our jackets.

In Example 11, the participant used a zero-case marker on the direct object *montlarımız* (*our jackets*); however, since the direct object was marked with a possessive marker and, specific, an accusative-case marker should be used on the direct object in this example.

Further, Welch's two-sample t-test was run to examine whether the direct object marking of the returnee group in Context II significantly differed from that of the control group. The test results revealed that the direct object marking of the returnee group in Context II ( $M = 0.961$ ,  $SD = 0.195$ ) differed significantly [ $t(152) = 2.491$ ,  $p = .0138$ ] from that of the control group ( $M = 1$ ,  $SD = 0$ ).

*Context III: Accusative-marked direct objects that are indefinite and appear before the predicate but not in the closest position to it.*

The data analysis revealed that there were five instances where the returnee participants used a zero-case marker on indefinite direct objects that appeared before the predicate but not in the closest position to it. Interestingly, the control group participants also used a zero-case marker ten times in this context.

The results of Welch's two-sample t-test revealed no significant difference [ $t(276) = 1.323$ ,  $p = .186$ ] in the use of the markers on direct objects of the returnee group ( $M = 0.967$ ,  $SD = 0.178$ ) and the control group ( $M = 0.935$ ,  $SD = 0.248$ ) for Context III.

The results of the qualitative analysis showed that among seventeen control group participants, five used a zero case-marker on indefinite direct objects that appeared before the predicate but not in the closest position to it in two completion task items (Example 12 and Example 13). In both cases, the direct objects were uncountable nouns denoting food substances.

Example 12:

\*Dondurma çok sev-er-im.

Ice-cream-ZERO-C                      very                                      like-AOR-1P.SG.  
I like ice-cream very much.

Example 13:

\*Çikolata                                      herkes                                      sev-er.  
Chocolate-ZERO-C.                      everybody                                      love-AOR(3P.SG.)  
Everybody loves chocolate.

The experts explained that these examples do not conform to the prescriptive rules of Turkish grammar, however, such uses are possible in colloquial Turkish and may be used among native speakers. Along with it, the control group did not accept the omission of the accusative case marker on indefinite direct objects that appeared before the predicate but not in the immediate preverbal position when the direct objects were concrete nouns.

The analysis of the returnees' data, on the other hand, revealed that among five items in which a zero-case marker was used on indefinite direct objects that appeared not before the predicate, two were similar to the control group. The other three appeared in the items where accusative case marker cannot be omitted and, therefore, such uses were defined as unacceptable by the experts. In these three cases the accusative case marker was omitted on direct objects that were concrete nouns. Example 14 illustrates one of such cases.

Example 14:

\*Bilgisayar    herkes                      güzel                      kulan-a-ma-z.  
Computer    everybody                      nicely                      use-PSB-NEG-AOR(3P.SG)  
Not everybody can use a computer very well.

*Context IV: Direct objects that are indefinite and non-specific and appears in the closest position before the predicate:*

The data analysis revealed that there were no instances of incorrect marking on direct objects that were indefinite and/or unknown from the previous context and appeared before the predicate in the data of both the returnee participants and the control group. No difference was found between the groups in Context IV.

To summarize the results of the completion task, the returnee participants were similar to the control group in the contexts where direct objects were definite and/or known from the previous context (Context I) and where direct objects were indefinite and non-specific and appeared immediately before the predicate and required a zero-case marker (Context IV). However, the performance of the returnee participants was different quantitatively in the context where direct objects were specific and required an accusative case marking since they belonged to partitives or were marked with a possessive marker (Context II). Qualitative differences (in terms of error patterns) were found between the returnee participants and the control group in the context where direct objects were used before the predicate but not in the closest position to it and required an accusative-case marker (Context III).

### **Grammaticality Judgement Task**

The grammaticality judgement task required the participants to rate the grammaticality of the items on a 7-point Likert-type scale ranging from 1 = grammatically incorrect to 7 = grammatically correct. The goal of the grammaticality judgement task was to examine whether the returnee participants perceived grammatical and ungrammatical marking on direct objects similar to the control group. For this reason, the answers of the returnee participants were statistically compared with those of the control group using Welch's two-sample t-test. The results of the grammaticality judgement task are presented separately for each of the contexts that define direct object marking.

#### *Context I: Direct objects that are definite and/or known from the previous context*

The data analysis revealed that the returnee group perceived grammatical items ( $M = 6.482$ ,  $SD = 1.151$ ) and ungrammatical items ( $M = 1.49$ ,  $SD = 1.11$ ) comprising marking of direct objects that were definite and/or known from the previous context

significantly differently [ $t(92.76) = 3.676, p < .000$ ] for the grammatical items, and [ $t(84) = 4.109, p < .000$ ] for the ungrammatical items when compared with the control group ( $M = 6.96, SD = 0.26$  for the grammatical and  $M = 1, SD = 0$  for the ungrammatical items).

*Context II: Direct objects that are specific*

The data analysis revealed that the returnee group perceived grammatical items ( $M = 6.21, SD = 1.50$ ) and ungrammatical items ( $M = 1.75, SD = 0.85$ ) comprising marking of direct objects that were specific significantly differently [ $t(84.00) = 3.763, p < .0001$ ] for the grammatical items, and [ $t(89.18) = 4.497, p < .000$ ] for the ungrammatical items when compared with the control group ( $M = 6.95, SD = 0.26$  for the grammatical and  $M = 1, SD = 0$  for the ungrammatical items).

*Context III: Accusative-marked direct objects that are indefinite and non-specific and appear before the predicate but not in the closest position to it.*

The data analysis revealed that the returnee group perceived grammatical items ( $M = 5.35, SD = 2.18$ ) and ungrammatical items ( $M = 1.88, SD = 1.58$ ) comprising marking of direct objects that were indefinite and non-specific and appeared before the predicate but not in the closest position to it significantly differently [ $t(84.91) = 84.410, p < .000$ ] for the grammatical items, and [ $t(117.65) = 2.420, p = 0.017$ ] for the ungrammatical items when compared with the control group ( $M = 6.99, SD = 0.01$  for the grammatical and  $M = 2.73, SD = 2.65$  for the ungrammatical items).

Similar to the completion task, the control group participants identified some of the 'ungrammatical', according to the prescriptive rules of Turkish grammar, items as correct. For this reason, their mean for the ungrammatical items in Context III is above 2.0 and it is marked with a high standard deviation. The responses of the returnee participants, on the other hand, were more in accordance with the prescriptive rules and more homogeneous.

*Context IV: Direct objects that are indefinite and non-specific and appears in the closest position before the predicate.*

The data analysis revealed that the returnee group perceived grammatical items ( $M = 6.31$ ,  $SD = 1.49$ ) and ungrammatical items ( $M = 1.14$ ,  $SD = 0.41$ ) comprising the marking of direct objects that were indefinite and appeared just before the predicate significantly differently [ $t(84.89) = 4.216$ ,  $p < .000$ ] for the grammatical items, and [ $t(84) = 3.15$ ,  $p = .002$ ] for the ungrammatical items when compared with the control group ( $M = 6.99$ ,  $SD = 0.11$  for the grammatical items, and  $M = 1$ ,  $SD = 0$  for the ungrammatical items).

To summarize, the analysis of the grammaticality judgement task showed that the returnee participants differed from the control group in their perception of grammatical and ungrammatical uses of markers on direct objects in all the four contexts determining the use of direct object marking in Turkish.

Furthermore, the mean score for grammatical and ungrammatical items in all the four contexts in the returnees' data suggest a kind of tendency among the returnee participants to go for 'middle' scores on the Likert scale. In this respect, the returnee participants differed from the monolingual control group, who were, by and large, clear-cut when judging the grammaticality of the items and evaluated them either as grammatical or ungrammatical.

## **Discussion**

The aim of this study was to contribute to the research on the HL development of returnees after the onset of puberty to understand whether the complete (re-)activation of the HL at the interface is possible or whether interfaces are likely to preserve features that are typical for the HL even after many years of residing in the country of origin. For this purpose, we presented the group analysis of the direct object marking in Turkish of Turkish-German returnees, who returned to Turkey after puberty and have been residing in the country for a minimum of ten years and a maximum of thirty-four years, and compared them with the control group consisting of speakers of Turkish who have been living in Turkey all their lives.

Our findings revealed that the free production task was done by the returnee participants according to the norms of the Turkish language: the participants used

direct object markers productively and no ungrammatical uses of marking on direct objects were found in the narratives of the returnee participants. The performance of the returnee participants on the free production task suggests that the participants could use case-marking on direct objects productively depending on the discourse and syntactic position of the direct object in their heritage Turkish.

However, in the completion task where the participants were requested to mark direct objects in the structured context, there were several instances of direct object marking that were not target-like, thereby causing the use of case-marking on direct objects by the returnee participants to differ significantly from the control group. Out of the four defined contexts, the returnee participants were similar to the control group in two contexts, where definite and/or known from the previous context direct objects required an accusative-case marker and where indefinite/ unknown direct objects required a zero-case marker. As for the contexts where an accusative-case marker was to be used on specific direct objects, the performance of the returnee group differed significantly from the control group. If to consider the performance of the returnee group on the free production task and the completion task, it seems that the difference in the returnees' performance between the tasks cannot be related to the tendency to avoid 'problematic' structures in the free production task because the use of direct objects was observed in all the four contexts, including the most challenging context of specific and non-specific direct objects. Most probably, the difference may be related to the task type, that is it was more difficult for the returnee group to cope with the 'school-like' completion task, which can be due to the fact that the returnee participants lacked formal classes in the Turkish language during their school education in Germany.

Furthermore, the divergence between the returnee participants and the control group got more significant when their perception of grammatical and ungrammatical direct object marking was considered. The returnee participants were less sensitive to both grammatical and ungrammatical items in the three contexts. As for the context where accusative-marked indefinite direct objects appeared before the predicate but not in the closest position to it, the returnee participants adhered to the prescriptive rules of Turkish grammar more than the control group in both the completion and

grammaticality judgement tasks. Along with it, the returnee group tended to prefer ‘middle’ scores on the Likert scale, while the control group was clear-cut when judging the grammaticality of the items and evaluated them either as grammatical or ungrammatical. This may suggest that the returnee participants were less confident than the monolinguals in their grammaticality judgements and they may lack linguistic intuition that would allow them to assess the (in-)correctness of the task items in the target-like manner.

Since the case marking on direct objects in Turkish requires analyzing of status of the direct object in terms of the categories of definiteness/ indefiniteness, specificity/non-specificity as well as the syntactic position of the direct object, the imperfect understanding of one of the categories and/or deficient integration of syntactic and pragmatic information would lead to non-target uses of case marking on direct objects. Relying on our data analysis it is possible to say that the returnee participants encountered most difficulties with the pragmatic category of specificity since this context (Context II) was found to differ from the control group in both structured tasks. Probably for the same reason, the returnee participants also performed ‘more grammatically’ in Context III, where the accusative marker was determined by the syntactic position of the direct object but not discourse. In contrast to the control group, who would rely on the pragmatic criterion of specific/non-specific opposition and omit accusative-case markers on indefinite and non-specific direct objects in the non-preverbal position, the returnee participants did not tend to substitute the accusative-marked form with the zero-case form as often as the controls did, relying on the syntax requirements of the direct object marking. On the other hand, the direct object marking on definite and indefinite direct objects was the least problematic for the returnee group, which may be due to the positive transfer from their German language where the category of definiteness/indefiniteness is available.

If to compare our findings with the previous research on the HL development after return to the country of origin, our findings are inconsistent with those of Daller and Yıldız (1995), Treffers-Daller, Özsoy & van Hout (2007) and Treffers-Daller, Daller,

Furman and Rothman (2016) who reported that returnees do not differ significantly from monolingual users of Turkish in their overall proficiency, use of collocations and syntactic embeddings once they find themselves and reside in the monolingual environments of the heritage language. On the other hand, our results support the findings of Kaya-Soykan et. al. (2020) who examined the evidentiality in the (re-)activated heritage Turkish of returnees, which is another external interface, and reported that the heritage Turkish of the participants at this interface still had features that would make it differ from the homeland variety after a long period of residing in Turkey. Therefore, considering the available research on the HL (re-)activation it is possible to suggest that interface structures seem to be vulnerable not only in L2, 2L1 and HL acquisition but also in HL (re-)activation. However, the available research on HL (re-)activation is too limited to allow decisive conclusions in this respect.

The development of the HL before return to the country of origin has been well investigated in bilingual research and several studies have demonstrated that approximately up to the age of four to five, the acquisition of the HL is likely to follow monolingual-like patterns, by and large, even in cases when the input is limited (Antonova-Unlu & Li Wei, 2016, 2018(a), 2018(b); de Houwer, 2009; Meisel, 2007 among others). The further development of the HL, however, is known to be unstable, and since the language is not supported by the society, the restricted input and use of the HL are likely to cause the fossilization of the developmental patterns, attrition and incomplete acquisition (Meisel, 2011; Montrul, 2008). As a result, the HLs of bilinguals are likely to diverge from monolingual norms as demonstrated by numerous studies on the HL development (Aalberse, Backus & Muysken, 2019; Montrul, 2016a, b; Montrul and Bowles, 2009; Polinsky, 2018; Rothman, 2007; Turan et.al. 2020 among many others). The question of whether the (re-)activation of the HL after several years of residing in the country of origin is possible is quite reasonable since after the return, the HL becomes the dominant language and it is routinely used by heritage speakers, which is likely to lead to the (re-)activation of the competence that was once acquired (even if imperfectly) and attrited to some extent. All the participants in our study reported that after their return to Turkey, their Turkish had



improved significantly and their performance on the free writing task has evinced their claim. The findings of the previous studies on returnees also support the possibility of (re-)activation (Daller & Yıldız, 1995; Treffers-Daller, Daller, Furman and Rothman 2016). What is to be examined further is whether all the domains of the HL are restorable to the target-like level or whether some of the domains are likely to preserve features that are typical for the HL. This question is in line with attempts to develop the model of heritage speakers' competence and to understand what would stay and what would go in the heritage systems (Meir & Polinsky, 2019). As Polinsky and Scontras (2019) suggested among all the domains, morphology, ambiguous constructions, long-distance syntactic dependencies and interfaces seem to be the most vulnerable in the heritage system. The results of this study are consistent with this view regarding the vulnerability of interfaces in HLs.

Last but not least, it is necessary to refer to the age factor when discussing the results of this study. All our participants returned to Turkey after puberty, which, according to the Sensitive Period Hypothesis (Hyltenstam and Abrahamsson 2003; Lenneberg 1967; Meisel 2011), is considered as the border of a period of growth in which full native competence in the acquired language is possible. It, thus, seems possible to speculate that the age of return may be a factor accounting for the returnee participants' divergence from the target-like use and perception of direct object marking in their heritage Turkish despite many years of their residing in the country. That is, if the participants had returned to the country of origin before their onset of puberty, their competence in the HL at the interface domains might have converged towards that of monolinguals. However, our data do not allow us to draw any definite conclusions here, indicating that further research on the effect of external and internal factors on the (re-)activation of the HL is called for.

To conclude, the findings of this study as well as the relatively restricted research on the language development of the returnee population in general highlight the necessity of further investigation into the competence in both languages in the returnees'

repertoire and the role of various intra-linguistic and extra-linguistic factors accounting for it.

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#### Abbreviations

ACC	Accusative Case
AOR	Aorist Tense
COP	Copula
DAT	Dative Case
EVD	Evidential
GEN	Genitive Case
IMP	Imperative Mood
INF	Infinitive
INST	Instrumental Case
LOC	Locative Case
NEG	Negative

NOM	Nominalizer
PL	Plural
POSS	Possessive
PAST	Past Tense
PSB	Possibility
1P	First Person
2P	Second Person
3P	Third Person
SG	Singular
ZERO-C	Zero Case Marker
	* Ungrammatical