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CROSS-LINGUISTIC INFLUENCE IN L1 LANGUAGE ATTRITION AND SIMULTANEOUS ACQUISITION: EVIDENCE FROM ITALIAN/ TURKISH BILINGUALS[1]

LA INFLUENCIA CROSS-LINGÜÍSTICA EN LA ATRICIÓN DE LA L1 Y EN LA ADQUISICIÓN SIMULTÁNEA: EVIDENCIA DE BILINGÜES ITALIANOS / TURCOS

ANNA LIA PROIETTI ERGÜN
Yildiz Technical University, Istanbul, Turkey
aergun@yildiz.edu.tr
Orcid: 0000-0002-1544-0135

ABSTRACT

The present study reports data from a 40-item acceptability judgment task in Italian on the interpretation of backward anaphora in complex sentences in which three groups participated. The groups included bilingual Italian native speakers highly proficient in Turkish as a second language (L2), and Turkish and Italian simultaneous bilingual (2L1) children and monolingual native Italian speakers as a control group. In the 40-item acceptability judgment task in Italian, they were asked the degree of acceptability of sentences introduced by short stories suggesting coreference or disjoint reading of the overt or null pronoun. It was assumed that Italian and Turkish languages do not differ with respect to the antecedent biases of null and overt subject pronouns in the contexts under investigation, except for anaphoric pronoun "kendi" that when it is used as the third-person singular or plural, always expressing anaphoric references with the subject in the matrix sentence. The findings revealed a significant difference in the monolingual group regarding the null pronoun when preceded by a quantifier. This is discussed as evidence for the cross-linguistic influence at the syntax-discourse interface in 2L1 acquisition in children and in L1 attrition in language with similar parametric settings and for the fact that quality and quantity of input in the native or minority language can significantly diminish the effect.

Keywords: cross-linguistic influence, early bilingualism, attrition, Turkish, Italian.

[1] Este estudio forma parte de un proyecto de recerca "l' Italiano como lengua de herencia en Turquía" de la Universidad Técnica Yildiz en Estambul. Otros artículos del proyecto disponible en https://www.researchgate.net/publication/346638831_Crosslinguistic_Interference_in_Simultaneous_Acquisition_of_Turkish_and_Italian.

RESUMEN

En este estudio se presentan los datos obtenidos en una tarea de juicio de aceptabilidad de 40 ítems en italiano sobre la interpretación de la anáfora en oraciones complejas en la que participaron tres grupos. Los grupos estaban formados por hablantes nativos bilingües italianos altamente competentes en turco como segunda lengua (L2), niños bilingües simultáneos (2L1) turcos e italianos y hablantes nativos monolingües de italiano como grupo de control. En la tarea de juicio de aceptabilidad de 40 ítems en italiano, se les preguntó el grado de aceptabilidad de oraciones introducidas por historias cortas que sugerían la correferencia o la lectura disjunta del pronombre abierto o nulo. Se supuso que las lenguas italiana y turca no difieren con respecto a la interpretación de la referencia de los pronombres sujetos nulos y abiertos en el contexto de la investigación, a excepción del pronombre anafórico "kendi", que cuando se usa como tercera persona del singular o plural, siempre expresa referencias anafóricas al sujeto de la oración matriz. Los hallazgos revelaron una diferencia significativa en el grupo monolingüe con respecto al pronombre nulo cuando está precedido por un cuantificador. Esto se señala como evidencia de la influencia lingüística en la interfaz discurso-sintaxis en la adquisición de 2L1 en niños y L1 atrición en lenguas con configuraciones paramétricas similares y además del hecho que la calidad y la cantidad de input en el idioma nativo o minoritario pueden disminuir el efecto significativamente.

Palabras clave: influencia cross-lingüística, bilingüismo temprano, atrición, turco, italiano.

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1. INTRODUCTION

In the past years, several studies that have investigated different bilingual groups (L2 learners, 2L1, attriters, and heritage language speakers) have assessed the effects of cross-linguistic influence on bilinguals' language production and processing (Müller and Hulk, 2001; Rothman and Iverson, 2013; Serratrice et al., 2012; Sorace, 2011, 2016; Tsimpli et al. 2004; Liceras et al., 2008; Liceras et al., 2012: Howell, 2002). It has been proposed that structures at the syntax-pragmatic interface may be more vulnerable to cross-linguistic influence, more difficult to acquire and master completely (Chamorro and Sorace 2019; Sorace, 2011, 2016; Argyri and Sorace, 2007).

Many of the studies focusing on syntax-pragmatic interface were conducted on the acquisition or attrition in bilingual learners, in whom two languages differ in parametric choices; these studies concluded that the difficulty in mastering the structures at the interface is due to underspecification and cross-linguistic influence (Lozano, 2006a, 2006b; Tsimpli, 2007; Tsimpli et al., 2004; Zobl and Liceras, 1994; Wilson, Sorace, Keller, 2009; Platzack, 1999; Maxwell and Delaney, 2004; Malakoff and Kenji, 1991; Işever, 2003). The proposal is that if a language

has a particular interface condition that is specified in L2 speakers, it becomes underspecified when this condition is absent in L1. However, studies investigating language combinations with similar parametric conditions have observed analogous difficulties in acquiring discourse constraints (Bini, 1993; Margaza and Bel, 2006; Roberts, Gullberg and Indefrey, 2008; Belletti, 2001, 2004; Bortolini et al., 1972; Sorace et al., 2009; Underhill, 1972; Pinto, 1997). There are other studies revealing that structures at the interface can be successfully and completely acquired by L2 speakers (Donaldson, 2011, 2012; Ivanov, 2012; Iverson, Kempchinsky and Rothman, 2008). These data indicate that vulnerability at the interface is not determined only by cross-linguistic influence and underspecification. Therefore, there is the need to consider some other possible factors to explain this interface optionality in bilinguals. Promising research has indicated that the processing cost of inhibiting one of the languages of bilingual speakers, can be the reason of the difficulties in mastering structures at the interface (Chamorro and Sorace, 2019; Sorace, 2016). Chamorro and colleagues (2015), while investigating the reversibility of language attrition, collected data from three groups of Spanish speakers: a group of Spanish who learned English as L2 and have been residing in the UK for at least 5 years, a group that has been recently re-exposed to L1 only for a minimum of a week, and Spanish monolinguals. The data collected with the off-line judgment test on null/overt pronoun (null pronoun when overt noun would have been a more appropriate choice and vice versa) indicated that three groups have an equal sensibility to pronoun mismatch.

It has been noted that bilinguals receive inputs that are different in quantity and quality than those received by monolinguals (Sorace, 2005; Sorace and Serratrice, 2009; Tsimpli and Sorace, 2004), and that there is a growing consensus among the researchers in assuming that the quantity and quality of input play an important role in acquiring structures that involve syntax-discourse interfaces (Chonrogianni and Marinis, 2011; Granfeldt, 2016; Kupisch, Akpinar and Stöhr, 2013; Kupisch et al., 2014; Unsworth et al., 2014; Unsworth, 2016; Jackendoff, 2007; Jaeggli and Safir, 1989; Kaltsa et al., 2015).

This study investigates simultaneously two groups of bilinguals: one group of Italian adults that migrated to Turkey after the complete acquisition of their native language and learned Turkish as a second language (L2) as immigrants, and the other group included young bilinguals enrolled in middle school who learned Turkish and Italian (2L1) from birth. The group of adult Turkish L2 speakers shares the traits that may trigger first-language attrition, so their performance in Italian language may be affected by constant contact with Turkish—the language that surrounds them and which they have learned as adults.

It is controversial to establish if there is a difference in the representation of the languages in L2 and 2L1 speakers. L2 speakers are assumed to have completely acquired the native language as a monolingual before starting to learn the sec-

ond language. 2L1 individuals grow up with two languages possibly shaping, in a monolingual-divergent way, the representation of one or both of languages; in other words, it is difficult to ascribe the possible cross-linguistic influence of the two groups either to competence or to performance. The difference in 2L1 speakers' linguistic behaviors may be induced by the quality of the input received, as often the inputs are received from adults who undertake L1 attrition, and hence 2L1 speakers may not receive enough linguistic input to develop a monolingual-like representation of the minority language. There is a growing consent on the hypothesis that cross-linguistic interface is due to language processing rather than to representation (Sorace, 2016) especially in the case of language attrition (Chamorro et al., 2015; Chomorro and Sorace, 2019) and recently, Sorace (2011, 2016, 2019) has proposed that the constant need to suppress one language to retrieve the other leaves less resources available to the bilingual speaker to integrate information at the syntax-discourse interface; also, age of onset may play a role in how efficiently language is processed. The studies of "successful bilingual" seem to link quantity and quality of input to native-like attainment in heritage language speakers and in 2L1 children, which is a promising development (Chonrogianni and Marinis, 2011; Granfeldt, 2016; Kupisch et al., 2013; Kupisch et al., 2014; Unsworth et al., 2014; Unsworth, 2016).

The novelty of this study is that it investigates if there are differences in the interpretation of the anaphoric pronoun in two generations of bilingual speakers: late Italian bilinguals who learned Italian as an adult after they migrated to Turkey, and their pre-teen children in the peculiar Italian community of Istanbul that usually involves expatriates with high socioeconomic status who moved to Turkey for more advantageous professional opportunities or for sentimental reason (Ayhan and Demirel, 2018; Misir di Lusignano, 1990) so that they preserve contact with monolingual short-term residents and the home country. In principle, because late Italian bilinguals came in contact with Turkish only after completely acquiring the native language, they may show less sign of cross-linguistic effects in their native language when compared to the younger generation that is they grow up speaking two languages. It has to be taken into account that in the literature, cross-linguistic interference has mostly been assessed only when structures at the interface partially overlap; hence, interference may be expected in relation to the richer anaphoric pronoun system of the Turkish language (Gürel, 2004). However, as suggested by Sorace (2016), if structures at the interface are more vulnerable due to the cognitive outcome of continuously inhibiting one of the languages simultaneously available in the bilingual mind and that early bilingualism advantage lies in the more efficient ability in processing the two languages, then sign of cross-linguistic interference will be heavier in late bilinguals.

The focus of this study is the interpretation of overt and null subjects in back-

ward anaphora. Turkish and Italian are both pro-drop (Kornfilt,1990; Rizzi,1982), and the distribution of overt/null pronoun is regulated at the syntax-discourse interface in both the languages. This study aims to contribute to the field of bilingual acquisition by investigating a seldom researched language pair, Turkish and Italian, investigating the following research question:

1. To what extent cross-linguistic influence can be assessed in Italian late bilinguals that learned the L2 (Turkish) in immigrant setting and in young Italian/Turkish 2L1?

2. PRONOUN PROCESSING IN NULL-SUBJECT LANGUAGES

In the last ten years, research has aimed to identify the principles that govern how pronouns are mapped to their antecedents. One of the most influential proposals is Carminati's (2002, 2005) "Position of Antecedent Strategy" (PAS). This principle predicts that the null pronoun will prefer an antecedent in the subject position, and the overt pronoun will pick an antecedent in the object position. The PAS predicts that the structural configuration will guide in choosing the proper antecedent for a pronoun. However, if null-subject pronouns are biased to the subject in the matrix sentence, the overt subject shows a more flexible nature in preference to the overt subject antecedent (Carminati, 2002; Geber, 2006).

Research has been conducted on anaphora resolution in different populations of bilinguals, L1 attriters, 2L1, and early bilinguals. Gürel (2004) investigated the L1 attrition of null and overt pronouns in native Turkish speakers in L2 English migration setting. She found that late Turkish bilinguals were influenced by English as they overextend the referential property of the English pronouns to the Turkish overt pronoun *o*, and they (the late bilingual group) interpreted it as coreferential, with the matrix subject significantly more than the monolingual control group; however, null pronoun and anaphoric pronouns *kendisi* do not show signs of attrition. Tsimpli et al. (2004) investigated signs of attrition in L1 Greek and Italian in contact with English as L2; they focused on the production and interpretation of null and overt subjects as well as preverbal and postverbal subjects. The findings with regard to Italian suggested that L1 Italian attrition groups interpreted overt subject in subordinate sentences as coreferential with the subject in the matrix sentence significantly more compared to monolingual control groups. The study conducted by Sorace et al. (2009) investigated English-Italian and Spanish-Italian in younger (6-8 years old) and older (8-10 years old) bilingual children in the context of the acceptability of null and overt pronouns. Results indicate that younger bilinguals in both groups are prone to understand

overt pronoun in embedded sentences as referring to the subject in the antecedent sentence significantly more compared to monolingual control groups.

3. PRONOUN INTERPRETATION IN TURKISH AND ITALIAN

Along with the PAS proposed by Carminati (2002), and as discussed earlier, other interpretative facts of Italian and Turkish play substantial roles. As in other Romance languages, in Italian, there is a phenomenon that is known as "subjunctive disjoint reference effect" (Kempinsky, 1985), which means that a null/overt subject in a subjunctive embedded sentence cannot refer to the subject in the matrix sentence; however, Costantini (2011) pointed out that when the subjunctive embedded verb is other than the present (perfect or a passive voice), coreference of the subject in the subjunctive embedded sentence and the subject in the matrix sentence is not excluded. Italian is also subjected to Montalbetti's (1984) Overt Pronoun Constraint (OPC), which proposed that overt pronoun in an embedded sentence preceded by a quantifier subject cannot be indexed to the subject in the matrix sentence.

Turkish is a null subject language as Italian but it also has an anaphoric pronoun "kendi" that does not exist in Italian, when at the third person singular or plural "*kendisi*", it can be used to express anaphoric references among the subject of the embedded sentence and the one in the matrix sentence (Kornifilt, 1986). When analyzed according to Montalbetti OPC (1984), Turkish allowed the possibility for *kendisi* to be coreferential with the subject in the matrix sentence (l.).

4. THE CURRENT STUDY

4.1. Motivation

The aim of the study was to shed light on how two bilingual populations (simultaneous and late), speaking two languages that share the same parametric value but different discourse constraints, interpret null and overt subjects in backward anaphora. The main research question for this investigation is whether there is an effect of Turkish on Italian in the way the two bilingual groups process backward anaphora compared to monolingual Italian control group. If a cross-linguistic effect in one or both the groups is assessed, then the subsequent research questions will aim to answer whether the length of stay in Turkey for L2 speakers or

the quantity and the quality of the input for the 2L1 speakers play any role in the mastery of this structure.

The prediction is that any sign of cross-linguistic influence will be found in the way bilinguals interpret overt pronoun in coreferential context, assuming that overt pronoun in Italian can be influenced by the Turkish overt pronoun *kendisi* (Gürel, 2004). Taking into account the fact that those bilinguals are still receiving a large exposure to the minority language, in terms of both literacy and access to monolingual, it can be expected that the sign of cross-linguistic interference will be minimal, reinvigorating the hypothesis that quantity and quality of input may account for the success in native-like attainment of more than one language and also prevent language attrition. To meet these objectives, a language background questionnaire and an acceptability judgment task were employed.

4.2. Methodology

4.2.1. Participants

Data were collected through convenience sampling. A total of 28 individuals participated in this study. There were six Italian-Turkish (Table I) simultaneous bilinguals (mean age: 12,16; SD:0,4), using both languages on a daily basis. It was ensured that the participants were fluent and accurate in both languages. At the time of testing, all children were enrolled in the Italian Consular Middle School of Istanbul, a school following the Italian national curriculum for a minimum of three years (mean: 5; SD: 1,54). For all the six participants, contact with Turkish and Italian languages occurred since birth with one person, one language approach, and in the kindergarten, they were exposed to the Turkish language. A total of twelve Turkish L2 (Table II) (mean age: 49.5; SD: 8,4) participants who have been living in Turkey continuously for a minimum of ten years (mean: 18; SD: 7,42) were included in the study.

The minimum length of stay in Turkey was set at ten years, as there is consensus among the scientific community that this the length of contact required for attrition to take place. L2 participants have learned Turkish in a natural setting, and have a minimum level of C1. The 9 participants in the control group (mean age: 46.1; 5,85) were enrolled from different regions of Italy, and they did not have any significant competence in a second language nor experience of living abroad.

All the subjects were recruited through personal contacts and a Facebook group of Italians living in Turkey, and L2 and 2L1 subjects were living in Istanbul.

Table I. Biographical data of the 2L1 children.

Subject 2L1	Years in the Italian school	Age
1	6	12
2	3	12
3	6	13
4	3	12
5	6	12
6	6	12

Table II. Biographical data of the L2 adults.

Subject L2	Education	Age	Length of stay in Turkey
1	BA	52	20
2	Conservatory of music	56	19
3	MA	34	21
4	MA	36	10
5	High School	56	14
6	BA	46	28
7	BA	49	28
8	BA	65	11
9	BA	54	34
10	BA	49	15
11	MA	49	18
12	Ph.D.	48	18

4.2.2. Procedure and Material

The data were collected through a biographical questionnaire and an acceptability judgment task (AJT), the data for L2 and control group adults were collected using an online survey tool, while bilingual children completed their task on paper under the surveillance of a researcher to ensure they were following the right procedure. The biographical questionnaire was given earlier so that it could be filled

online a few days before the first set of tests were conducted, and it was suggested (for the 2L1 group) that the parents and children will fill the form together. For adults, language proficiency in Turkish and Italian was assessed through a self-assessment grid from Europass (https://europass.cedefop.europa.eu/resources/european-language-levels-cefr).

2L1 children were tested on a simplified version of the Europass grid, developed for children aged 9-15 years (http://istruzione.umbria.it/portfolio/PortfolioUmbria.pdf). Both groups participated in an informal conversation in the two languages with a Turkish and an Italian research assistant. The acceptability judgment task included 40 short stories (Table III) that provided a context to sentences to be judged on a five-point Likert scale, ranging from 1 (totally acceptable) to 5 (totally unacceptable).

Table III. Scheme of the introductory stories and the sentences to be judged.

40 stories introducing sentence	20 indicative	10 null subject	5 coreferential introductory story 5 disjoint introductory story
		10 overt subject	5 coreferential introductory story 5 disjoint introductory story
	10 quantifier	5 null subject	3 coreferencial introductory story 2 disjoint introductory story
		5 overt subject	3 coreferential introductory story 2 disjoint introductory story
	10 subjunctive	5 null subject	3 coreferencial introductory story 2 disjoint introductory story
		5 overt subject	3 coreferential introductory story 2 disjoint introductory story

5. RESULTS

The choice of an appropriate statistical model to investigate small-scale research as the one in focus is also a controversial topic. On the one hand, there is a belief that investigating bilinguals with large access to high quality and quantity of input can lead to a better understanding of bilingualism; on the other hand, such a decision limited the amount of cases involved. First of all, following Larson-Hall's (2010) suggestion Cronbach's alpha measure of inter-rater reliability was conducted. The analysis revealed satisfactory and reliable internal consistency (40 items; α= 0. 786).

To improve the power of this analysis, the 12 conditions proposed in Table III were reduced to four (Plonsky, 2015), coded according to whether the anaphoric overt/null pronoun embedded in the sentence to be judged was coherent, in terms of referential/disjoint reading, with the background provided by the short story.

The statistical analysis was conducted using the program SPSS. One-sample Kolmogorov-Smirnov tests revealed that the dependent variables were normally distributed (p>0,05). As a consequence, parametric analysis was prefered. The variables met the criteria for homogeneity of variance (Levene's test, p>0.05 for all variables); thus, an Anova was carried out. To avoid type I errors due to multiple testing, the Bonferroni corrections were applied (Table IV). The results of Anova were significant for the two conditions regarding the overt pronoun. These conditions were when overt pronoun was used in a bound reading with the matrix sentence [F(2, 25) = 3,866, p = 0,034], and when overt pronoun was used in disjoint reading with the subject in the matrix sentence [F(2, 25) = 5,008, p = 0,015]. This indicated a significant difference among the groups in the way they judge the felicitousness of the sentence regarding the hint given in the introductory short story.

Table IV. Levels of significance for each variable.

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
NO_OVERT	Between Groups	128,187	2	64,094	3,866	,034
	Within Groups	414,491	25	16,580		
	Total	542,679	27			
NO_PRO	Between Groups	104,449	2	52,225	1,474	,248
	Within Groups	885,658	25	35,426		
	Total	990,107	27			
TRUE_PRO	Between Groups	134,217	2	67,108	2,028	,153
	Within Groups	827,453	25	33,098		
	Total	961,670	27			
TRUE_OVERT	Between Groups	370,922	2	185,461	5,008	,015
	Within Groups	925,756	25	37,030		
	Total	1296,679	27			

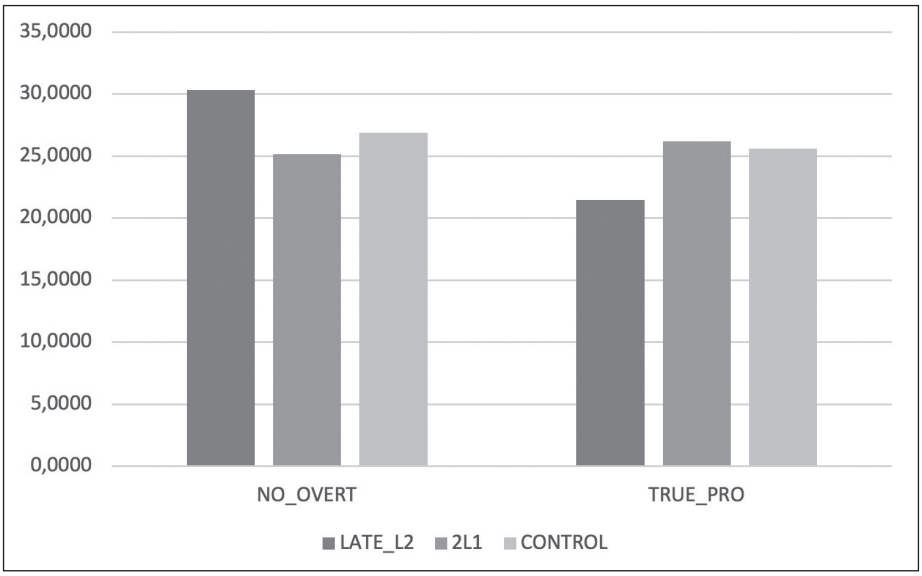
To analyze the difference among groups, a pairwise comparison of groups using Bonferroni post hoc was conducted (Table V), revealing that the variable of the overt pronoun in bound reading was significantly different for L2 and

2L1 bilingual (p<0,06). The other condition regarding overt pronoun in disjoint was found to be significant for L2 and 2L1 when compared to the control group (p<0,02). Following the hypothesis of Gürel (2002) that the anaphoric pronoun *kendisi* could have had an effect on the way bilinguals understand the overt pronoun in coreferential reading, significant results were expected for this condition. Results revealed that this hypothesis was true between groups and, in particular, between 2L1 and L2.

Table V. Pairwise comparison of groups.

Dependent Variable				Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
NO_OVERT	Bonferroni	LATE_L2	2L1	5,14103	2,00964	,051	-,0157	10,2977
			CONTROL	3,41880	1,76566	,193	-1,1118	7,9494
		2L1	LATE_L2	-5,14103	2,00964	,051	-10,2977	,0157
			CONTROL	-1,72222	2,14603	1,000	-7,2289	3,7845
		CONTROL	LATE_L2	-3,41880	1,76566	,193	-7,9494	1,1118
			2L1	1,72222	2,14603	1,000	-3,7845	7,2289
NO_PRO	Bonferroni	LATE_L2	2L1	4,64103	2,93760	,380	-2,8968	12,1788
			CONTROL	3,08547	2,58096	,729	-3,5372	9,7082
		2L1	LATE_L2	-4,64103	2,93760	,380	-12,1788	2,8968
			CONTROL	-1,55556	3,13698	1,000	-9,6050	6,4939
		CONTROL	LATE_L2	-3,08547	2,58096	,729	-9,7082	3,5372
			2L1	1,55556	3,13698	1,000	-6,4939	9,6050
TRUE_PRO	Bonferroni	LATE_L2	2L1	-4,70513	2,83943	,330	-11,9910	2,5808
			CONTROL	-4,14957	2,49471	,326	-10,5509	2,2518
		2L1	LATE_L2	4,70513	2,83943	,330	-2,5808	11,9910
			CONTROL	,55556	3,03215	1,000	-7,2249	8,3360
		CONTROL	LATE_L2	4,14957	2,49471	,326	-2,2518	10,5509
			2L1	-,55556	3,03215	1,000	-8,3360	7,2249
TRUE_OVERT	Bonferroni	LATE_L2	2L1	4,08974	3,00336	,556	-3,6168	11,7963
			CONTROL	-5,74359	2,63874	,117	-12,5145	1,0274
		2L1	LATE_L2	-4,08974	3,00336	,556	-11,7963	3,6168
			CONTROL	-9,83333*	3,20721	,015	-18,0630	-1,6037
		CONTROL	LATE_L2	5,74359	2,63874	,117	-1,0274	12,5145
			2L1	9,83333*	3,20721	,015	1,6037	18,0630

The other condition that revealed a significant difference is when the short story suggests a disjoint reading for the anaphoric pronoun in the sentence to be judged. In this case, 2L1 group showed a significant difference compared to the control group but not with L2 group, and not the L2 group with the control group. Given the small sample at our disposal, it is beneficial to visually capture the distribution of the data among groups (Graph 1):



Graph 1. Mean between groups for the four conditions.

Recall that data were collected through a Likert scale going from 1-totally acceptable to 5-totally unacceptable. In the first significant condition, L2 more firmly rejected the possibility of overt pronoun in bound reading with the subject in the matrix sentence. The second significant condition implied that the short story introduced a sentence that required a disjoint reading of the embedded (overt) subject. In this case, the 2L1 group accepted this reading significantly more than the control group. No statistically significant differences were discovered for L2

6. DISCUSSION AND CONCLUSION

The aim of this study was to contribute to a better understanding of the phenomenon of bilingualism, by investigating the interpretation for null and overt pronouns in backward anaphora. This phenomenon has been largely investigated

earlier; nonetheless, this study is one of the few investigations that investigate together the two generations of bilinguals – those who learned the L2 in an immigrant setting and thus qualify for language attrition and teenagers that grew up speaking the two languages simultaneously. The social and economic status of the participant in this study allowed, to a certain extent, to control the quality and quantity of input enjoyed by the groups. The focus was on understanding to what extent the structures at the interface between syntax and discourse are equally vulnerable to cross-linguistic interference in L2 and 2L1 when the two languages of the bilinguals share the same parametric setting. To this end, data were collected from late bilinguals with a large possibility of contact with their L1 and young 2L1, who are formally schooled in an Italian school where teachers are Italian L1 monolingual speakers appointed by the Italian government on a short-term basis.

In regard to the research question, "to what extent L2 and 2L1 Turkish influence the interpretation of null/overt subject pronoun in Italian", the original hypothesis was, following Gürel (2004), that a sign of cross-linguistic interference would be found in the way bilinguals interpret overt pronoun in coreferential interpretation, assuming that the interpretation of the overt pronoun in Italian can be influenced by the overt Turkish pronoun "*kendisi*." Coherent with previous studies, focusing on this particular interface phenomenon (Gürel 2004; Sorace et al. 2009; Tsimpi et al. 2004), it was found that L2 judge, as non-felicitous, the sentences with an overt subject in coreferential reading significantly more than 2L1 but there is no difference with the control group. This finding confirms what was suggested by Sorace (2016, 2019) that the cognitive load required to process this particular condition, and that mismatched pronoun interpretation poses a challenge to monolingual as well to bilinguals.

The other significant condition was the one with a short story suggesting a disjoint interpretation of the embedded overt subject in the sentence to be judged. In this case 2L1 accepted significantly more the disjoint reading of the overt pronoun when compared to monolingual but not when compared to L2. This result is, in a sense, mirroring the situation in the first significant condition, underling the fact that off-line interpretation of overt/null pronoun is a challenging condition for all groups of speakers, but paradoxically, bilinguals are more accurate. A possible explanation is that the particular set of participants in this study is, to a certain extent, more aware of their Italian, more used to recall to their metalinguistic knowledge to maintain or acquire a native-like performance.

The present study has some methodological bias. It investigates a very small community, and this resulted in a statistical analysis that is not so strong. Nevertheless, it is important to study communities of "successful" bilinguals to understand what can be done to prevent loss and to empower heritage language speakers, and this study contributes to the hypothesis that the cross-linguistic interference is due to language processing and not to representation (Sorace, 2016; 2019).

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