



Characterizing natural interpreters' attitudes towards interpreting: The effect of experimental contexts

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Abstract

Bilingual children can perform natural interpreting in two different spontaneous settings, i.e., at home when acquiring their two languages and when practicing language brokering. In both cases, as natural interpreters and as child brokers, bilingual children can act as interpreters between two monolingual adults, although the scenario in which they interpret (domestic *versus* non-domestic settings, respectively) and the goal (raising children bilingually *versus* mediating for their family, respectively) may differ. Recently, some scholars have revealed how negatively or positively child brokers may see their role as family-society mediators. Likewise, natural interpreters may show positive or negative attitudes towards interpreting, and these may vary as they grow up as bilinguals. In order to observe how bilingual children respond to interpreting as they develop linguistically, experimental data from CHILDES involving a pair or twins across three elicited interpreting sessions were used (i.e., ages 4;6, 5;05, 6;03). The results show that both children translate efficiently and mainly when required to do so, providing predominantly simplified translations in their first experience and later an equal proportion of simplified and literal translations. To interpret these results, some external variables associated with experimental conditions (e.g., the aim behind interpreting; the interlocutors' needs and roles; the duration of the sessions) are also taken into consideration which help characterize how natural interpreters face natural interpreting.

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1. INTRODUCTION

Natural Interpreting (NI) can be broadly defined as the linguistic practice performed by bilingual children in which they act as interpreters between two monolingual adults. NI has been investigated in two disciplines: child bilingual acquisition and child language brokering. Each has viewed the NI phenomenon from a different angle and has, therefore, placed the focus of study on different issues.

Child bilingual acquisition studies have been mainly focused on the linguistic analysis of NI occurrences, as in (1) where the child, Simon, a 3-year-and-10-month-old bilingual child, is speaking in English to his mother, Melanie, about

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how many peas are left for him to eat. He then translates into Spanish the same information to Raquel, a Spanish-speaking adult, so that she receives the same information as his mother.¹

(1)

*SIM: I ate my peas look how many I am [= have] left.

*MEL: look how many you have left to go?

*SIM: one two three four five six seven eight.

*SIM: [% to Raquel] mira lo que me queda.

[look what I have left] [Simon_3;10_FerFuLice corpus (CHILDES)]²

The rendering of information in two languages, as illustrated in (1), is termed as Natural Interpreting. This (NI) specifically refers to oral translation performed by bilingual children at home. It is attested from very early ages and used recurrently over the course of their bilingual acquisition process (e.g., Harris, 1980a, 1980b, 2013; Álvarez de la Fuente and Fernández Fuertes, 2012, 2015; Fernández Fuertes and Álvarez de la Fuente, 2017; Álvarez de la Fuente et al., 2019). This practice has been typically linked, though not exclusively so, to the One-Parent One-Language (OPOL) strategy of communication (Ronjat, 1913) followed by the bilingual children's parents, as (1) also shows. Recent studies (e.g., Humeau et al., 2023) have demonstrated that the OPOL practice reinforces children's positive attitude towards the minority language.

Sociolinguistic studies, however, have mainly focused on the social aspect of the bilingual practice and defined it as Child Language Brokering (CLB). That is, the oral and written translation carried out by children of immigrant families in home and social settings (e.g., Shannon, 1987, 1990; Tse, 1996; Orellana et al., 2003; Valdés, 2003; Dorner et al., 2008; Hall and Guéry, 2010; Eksner and Orellana, 2012; Angelelli, 2016; Kim et al., 2016). One example of CLB is shown in (2), where Estela, a 10-year-old child, translates what the salesman says in English into Spanish so that her father can understand him.

(2)

[A salesman is explaining the store credit procedure expecting Estela to translate along for her father]

Salesman: Let me give you a pen to fill this out.

Estela: Here's one.

Salesman: I'll give you a board to write that.

Estela: Dice que ahorita te va a traer un lápiz y un un este para que pa' que te apoyes.

[he says that now he will bring a pencil and a. one of those for support]

[Estela_10;0_Eksner and Orellana (2012)]

Although the bilingual practice is basically the same in that a message in a source language is translated into a target language, some crucial differences between child natural interpreters and child language brokers appear. These will be addressed in section 2. A case in point is the attitudes children have when facing a situation that requires translation, something that has been tackled in the case of child language brokers who have been reported to see their role as family-society mediators in a negative way (e.g., Tse, 1996; Eksner and Orellana, 2012; López et al., 2020) or as an experience with a positive socioemotional effect (e.g., Wu and Kim, 2009; López et al., 2019). In these reports the children's attitudes are measured by means of personal interviews and questionnaires in which they are either asked about their feelings when translating or the strategies they use when translating a word or a concept (López et al., 2019). Although natural interpreters never meet the social challenges at home that child language brokers do, they may show positive or negative attitudes towards different factors related to interpreting, and these attitudes may vary as they grow up as bilinguals. To the best of our knowledge, no previous studies have focused on natural interpreters' attitudes when translating or on whether they also perceive their role as mediators negatively. In order to contribute to filling this gap, the present investigation aims at characterizing child bilingual acquisition by focusing on bilingual children's translation

¹ In the present paper, the terms "interpret/interpreting" and "translate/translating" are used interchangeably although, given the age of the child participants of our study, the oral dimension of the translation process (i.e., interpreting) is, in fact, the one targeted, such that "translate/translation" are used as umbrella terms.

² In all of the examples used in this paper, the age of the children follows the form years;months as in 3;10 for 3 years and 10 months old.

practice and their attitudes attending to their reactions and their responses as reflected in the type of translations produced at different timepoints.

The rest of this paper is organized as follows: [section 2](#) looks at what child interpreting involves as a bilingual phenomenon; [section 3](#) offers a brief account of some previous experimental studies on this bilingual practice performed by both child natural interpreters and child language brokers; [section 4](#) deals with the methodology followed in the present study; the main findings derived from the analysis of the variables presented are described and discussed in [sections 5 and 6](#), respectively; and, finally, [section 7](#) points to some general conclusions concerning the relevance of our main results and some directions for further research.

2. CHILD INTERPRETING AS A BILINGUAL PRACTICE

Child interpreting involves both NI and CLB in that both refer to the same bilingual phenomenon: they imply daily language mediations with a communicative purpose in which bilingual children translate between their two languages from a source language into a target language. However, the main differences between the two bilingual practices depend on the scenario in which the mediation takes place, the children's motivation to translate and the age at which the translation activity is reported to start.

Regarding the scenarios where this activity is performed, NI emerges when the interactions between children and parents at home require the communication of the same information in different languages. Therefore, these mediations occur only in domestic settings, i.e., the family context. As will be seen later, the reasons for this can be multiple. For instance, bilingual children can avoid communication breakdowns through translation when one of the parents understands both languages, as in (3).

(3)

*MEL: where do you think they are?

*LEO: there [% pointing at the book].

*MEL: tail?

*LEO: aquí, Ernie Bert aquí.

[here, Ernie Bert here]

*MEL: they're there, uhuh@i.

[Leo_2;07_FerFuLice corpus (CHILDES)]

Contrarily, CLB emerges when a circumstance from outside the home context requires the translation of information. This exchange of information between parents/relatives and public/private institutions could occur in many different (sometimes complex and sensitive) contexts involving formal and/or specialized social interactions such as, for example, legal or administrative settings, commercial settings, as in (2) above, or medical settings, as in (4) below. Therefore, CLB considers a wider range of scenarios ([Bauer, 2016](#)).

(4)

[Leti acts as an interpreter between her mother and her doctor]

Doctor: How do you feel about returning to work on the first of September?

Leti: First of September? That's when we're going to school?

Doctor: No. I want your mom to respond. How does she feel about returning to work?

Leti: Oh... ¿que cómo se sentiría si va a trabajar el primero de septiembre?

[oh... how would you feel about going to work on the first of September?]

Mother: Dile que yo no me siento bien pero si él quiere mandarme que...

[tell him I do not feel well but if he wants to send me...]

Leti: She doesn't feel well, but if you want to send her it's ok with her.

Doctor: Well, we don't want to send her if she's not going to be able to work.

Mother: ¿Qué dice, Leti?

[what did he say, Leti?]

Leti: Que no la quiere mandar si no puede trabajar.

[that he does not want to send you (to work) if you cannot work]

[Leti_11;0_Shannon (1990)]

Although the scenario in the case of NI is restricted to home settings, these children may not only find themselves in situations similar to those of child brokers, but at very young ages as well. Situations in which they act as interpreters for or between adults and/or relatives have been reported to occur in the case of bilingual children with different language pairs (e.g., Ronjat, 1913; Leopold, 1939–1949; Harris, 1980a, 1980b). This interpreting performance (although less socially demanding than that of CLB) can be seen as an incipient form of linguistic mediation that could (or could not) occur parallel to brokering as children may find themselves interacting in other more socially demanding situations outside the home.

As for what motivates children to translate, in the case of NI this is mainly motivated by parents who raise their children bilingually following specific communicative strategies at home. For instance, the OPOL strategy (Ronjat, 1913) favors the use of NI because this strategy is mainly used by families where one of the parents is a minority language speaker (usually the only source of this language for the children) and the other speaks the language of the community (Barron-Hauwaert, 2004). This family linguistic practice frequently leads to the minority language parents asking their children to perform NI into this language in order to ensure that their children use the minority language at home (Álvarez de la Fuente et al., 2019).

On the other hand, CLB is motivated by the lack of bilingual status, or by varying degrees of proficiency in the community language of one of the child's parents or relatives (Eksner and Orellana, 2012). When children become bilingual through immigration, parents and/or relatives depend on them to mediate between the family and the outside world. Therefore, child language brokers are asked to perform a more complex socially functional role than natural interpreters and from a very young age as well (Hall and Guéry, 2010; Kim et al., 2016).

Finally, there are important differences with regard to the age at which bilingual children start translating as natural interpreters and as child language brokers. Child language brokers have typically been reported to start interpreting when they are 9 years old and older (Eksner and Orellana, 2012; Shannon, 1990; Valdés, 2003). Natural interpreters, in contrast, start interpreting at a much younger age, with the first cases being reported as early as age 1;8 (Ronjat, 1913).

These differences between child natural interpreters and child language brokers have also shaped the fields of study from which their translation practice has been analyzed: bilingual acquisition studies in the case of the former and sociolinguistic studies in the case of the latter. And, in turn, they have shaped the different research methodologies that have been used to explore the translation practice of these children.

Language brokering data in sociolinguistic studies are mainly elicited by recording child and adolescent brokers' experiences through observations and interviews (some of them across time) (e.g., Shannon, 1987, 1990; Valdés, 2003; Orellana et al., 2003a/b; Dorner et al., 2008; Kim et al., 2016, Kwon and Martínez-Alvarez, 2021). These studies have been conducted to explore the sociological, psychological and/or emotional impact of the translation activity performed by brokers. More recent language brokering literature, based also on experimental data, has shown how brokering experiences improve brokers' thinking and metalinguistic abilities (see López, 2020 for a review). However, most of these experimental studies use tests on the semantic processing of isolated lexical items or idiomatic expressions across languages or, for instance, the Simon effect to show extent to which the adult brokers' L1 proficiency leads to negative emotional brokering experiences (López et al., 2020). To the best of our knowledge, there has not been experimental research on brokering experiences where the brokers (children, adolescents, or adults) either mediate, or are prompted to mediate, between two monolingual adults.

In the case of bilingual acquisition studies, the focus has been placed on the emergence of the two languages from birth, alongside the simultaneous emergence of the translation practice. This will be the focus of the present study.

3. BILINGUAL CHILDREN AS NATURAL INTERPRETERS

In previous bilingual acquisition literature, some scholars have shown how bilingual children are able to capture and render information in two different languages to not only process and produce speech in the two languages, but also to translate from one language to the other when they are asked to do so both in natural settings and in experimental settings.

According to some of the results obtained from studies in natural settings, translation competence is not learned but is rather innate and parallels the emergence and development of bilingualism (Harris, 1980; Álvarez de la Fuente and Fernández Fuertes, 2012, 2015; Fernández Fuertes and Álvarez de la Fuente, 2017; Álvarez de la Fuente et al., 2019; Hornaková Klapíková, 2021). That is, bilingual children's translation competence evolves over time to meet certain communicative requirements that mainly arise from parent-child interactions in bilingual homes. Additionally, the general analyses derived from most of these studies show that, regardless of the children's language pair and age, they prove to be very effective translators whether they are induced by parents or adults or whether they do so on their own initiative, providing mostly literal translations or simplified versions of the original messages (Álvarez de la Fuente and

Fernández Fuertes, 2012, 2015). In fact, only infrequently do they refuse to translate when their parents request that they do so.

Authors that have covered the topic of child interpreting using the experimental setting approach differ with regard to the purpose of their investigation and, therefore, with regard to the method used to elicit data. For instance, Swain's (1972) focus of interest is not NI itself but rather the acquisition of questions requiring yes/no answers by a French-English bilingual child over the course of one year (age 3;0 to 4;0). However, the task designed is based on two monolingual investigators asking the child participant to translate yes/no questions into the investigators' respective languages. A very large number of NI cases results from this task which leads Swain to conclude that translation is a type of paraphrase, as bilingualism and monolingualism are realizations of the same psycholinguistic process. On the other hand, the main purpose of Cossato's (2008) study on elicited translations is to describe the communicative difficulties for 14 different children and adolescents (from 4;10 to 15;0 years of age) with different language pairs (i.e., Italian-English; Italian-Swedish; English-Swedish; Hungarian-Swedish) when they act as interpreters between two adults. Cossato's results show that, in most cases, the participants manage to control the whole communicative event using different translation strategies, although personality seems to play a role on the results: the more outgoing the children are, the more effective translations they provide. In fact, on some occasions the presence of adult interlocutors seems to lead more reserved children to refuse to translate.

More recent studies on experimental NI (Álvarez de la Fuente and Fernández Fuertes, 2012, 2015) address translational issues related to how 23 young bilingual children (from 1 to 8 years old) with different language pairs translate in both natural and experimental contexts. Their results show that in both types of contexts, and regardless of their language pair, bilingual children produce simplification (rather than explicitation) cases when interpreting. Of the total NI production, low proportions (from 15% to 24%, depending on the study) correspond to cases where the children do not respond to a translation request, though these results are not further explored.

Finally, in the case of Hornaková Klapíková's (2021) study, four experimental tasks which include a high number of isolated sentences (i.e., questions and statements) are used to elicit translation instances from a trilingual child until the age of 8. The author carries out these tasks at different stages of the linguistic development of the child who translates from and into three different languages (i.e., Slovak into German; Slovak into English). Hornaková Klapíková concludes that regardless of the directionality of the translation, the trilingual child is able to interpret the sentences accurately and only occasionally produces grammatical and lexical errors, her "insufficient linguistic competence" being the only affecting factor mentioned (Hornaková Klapíková, 2021:60).

Previous studies on NI have used different methodological techniques to study the translation practice of bilingual children from a linguistic and/or contextual approach. However, other than Cossato's study (2008), at no point do these studies address the issue of the children's attitude towards the interpreting task as an influencing factor on their performance. For this reason, and in line with Cossato's conclusions, observing the extent to which factors such as children's attitude towards interpreting and how this factor develops and changes over time could expand our knowledge regarding the process of NI that children use and develop. This, in turn, could broaden our understanding of bilingual language acquisition in general, and of the interaction between the two languages of the bilingual, in particular. In order to fill in this gap, the present paper examines the NI occurrences performed by two English/Spanish simultaneous bilingual twins. More specifically, we look at their attitude towards interpreting at different ages (4;06, 5;05, 5;03) and in experimental settings where they act as interpreters between two or more monolingual adults. In this way, we will be able to examine how these bilingual children react to different interpreting activities (i.e., different elicited situations) and whether their attitude towards their role as interpreters varies over the course of their linguistic development, while also considering the influence of certain factors related to experimental conditions.

4. OBJECTIVES

Our main objective is to study the linguistic development of young natural interpreters by analyzing their response to different experimental situations where they are explicitly required to interpret between monolingual adults. The research questions that guide our study are the following:

- (1) Does the type of experimental task have an influence on child natural interpreters' performance of NI cases? As in previous studies (Cossato, 2008; Álvarez de la Fuente and Fernández Fuertes, 2012, 2015), two possible scenarios have been reported to occur: children refuse to translate, or children do translate. The issue under investigation is to what extent these different attitudes (which may take the form of behavioral reactions or, in our case, the (in)existence of linguistic responses to verbal requests, in our case) are due to the specific experimental demands they must satisfy as interpreters.

- (2) Do child natural interpreters provide different types of translations (or use different translation strategies) depending on the experimental task? That is, will they adhere to the original message (as in spontaneous settings, [Álvarez de la Fuente and Fernández Fuertes, 2012, 2015](#)) or, rather, will they rather simplify or expand it when the experimental task requires a more dynamic interaction or when further explanations of the interchanged information are needed?
- (3) Do child natural interpreters' translation practice and attitudes evolve as they grow older? That is, do not only the experimental conditions but also the age at which the children adapt to these conditions have an important role when analyzing their NI performance?

The answer to these research questions could provide us with valuable information in two respects: first, as to the practice of translation performed by simultaneous bilingual children as part of their linguistic development; and second, as to their attitudes and reactions when faced with an experimental situation in which they are prompted to translate in order for the conversation to go on.

To provide an answer to these research questions, we have developed the study that is presented next.

5. METHODOLOGY

The data selected for the analysis are part of a longitudinal bilingual corpus freely available in CHILDES ([MacWhinney, 2000–2022](#)): the FerFuLice corpus ([Fernández Fuertes and Licerias, 2009](#)). The FerFuLice corpus contains the linguistic production of two English/Spanish bilingual children, Simon and Leo. The data cover the age range of 1;01 to 6;11 years, including about 83 hours of videotape recording, in which the children appear engaged in play activities with their parents and/or the researchers. The corpus mainly comprises spontaneous data, but it also includes longitudinal experimental data involving three different sessions designed to make the two bilingual children believe that they must act as linguistic mediators between two monolinguals so that they can understand each other (see [Álvarez de la Fuente and Fernández Fuertes, 2021](#)).

5.1. Participants

Simon and Leo are a set of English/Spanish simultaneous bilingual identical twins who were born in Salamanca (Spain), a Spanish monolingual community, where they live for most of the year, except in the summer when they travel to the USA. Their mother, Melanie, is a native speaker of American English who addresses them only in English and their father, Ivo, is a native speaker of Peninsular Spanish who addresses them only in Spanish. Both parents communicate with each other in Spanish and have strictly maintained the OPOL strategy since the twins' birth. Therefore, following [Bhatia and Ritchie's \(2004\)](#) terminology, these children are *individual bilinguals*, as they have acquired English and Spanish as their first languages in a bilingual home but in a monolingual-Spanish social context.

5.2. Data: experimental sessions

The experimental data selected from the FerFuLice corpus are freely available in the CHILDES project ([MacWhinney, 2000–2022](#)), where the original audio files as well as the written transcription of the data in CHAT (Codes for the Human Analysis of Transcripts) format can be accessed. As in [Table 1](#), the experimental data comprise three different interpreting sessions that take place in three consecutive years (at age 4;10, 5;05 and 6;03) and with different durations (33, 27 and 41 min).

All the sessions occur in a family setting where different play activities are proposed to both bilingual children so that they, together with two (or more) monolingual researchers, can have a successful communication. The three experimental sessions are designed to make the children responsive: they are made to believe that if they do not translate, the monolingual adults will not be able to play such as the dynamics of the activities may slow down and they may not enjoy themselves as much.

In the first experimental session, the siblings, Raquel (a bilingual Spanish-English researcher) and two monolingual researchers, Susana (English-speaking) and Esther (Spanish-speaking) are using a poster that Susana has brought. Susana needs to write the time and the name of the days of the week on the poster and select different types of weather conditions according to the pictures that appear in it. She asks Esther to complete this information with the help of Simon and Leo.

In the second experimental session, another researcher, Todd, joins the mediation. Susana, Todd, and Simon play as the English group against Esther, Raquel, and Leo, the Spanish group. All play a card game called *Go fish* where, at different turns, each player from one group asks another player from the other group if they have a particular animal

Table 1
The corpus data.

# of experimental sessions (duration)	Play activity	Adult participants (language(s))	age of children	# of utterances & MLUw		# of NI cases	
				Leo	Simon	Leo	Simon
Session 1 (33 minutes)	Fill-in posters (weather and time)	Esther (SP)	4;10	54	186	20	53
		Susana (EN)		4.138 (SP)	3.274 (SP)		
		Raquel (SP-EN)		3.985 (EN)	3.792 (EN)		
Session 2 (27 minutes)	Card game (<i>Go Fish</i>)	Esther (SP)	5;05	117	161	13	18
		Susana (EN)		4.046 (SP)	3.700 (SP)		
		Todd (EN)		5.356 (EN)	5.263 (EN)		
		Raquel (SP-EN)					
Session 3 (41 minutes)	Board game (<i>Totally Gross</i>)	Esther (SP)	6;03	217	184	10	8
				5.083 (SP)	4.500 (SP)		
		Melanie (EN)		5.798 (EN)	4.465 (EN)		
Totals 3 sessions (101 minutes)				388 919	531	43 122	79

SP = Spanish; EN = English.

card. If they do, then they must give away the animal card; if they do not, then they say, “go fish” and the player must take any card from the pool. The winner is determined by who collects the most matching cards. Due to the dynamics of the game, it is necessary for the adults to understand what type of cards are being requested, making the children’s role as mediators very important.

In the third session, Esther plays a board game called *Totally gross* with the children and their English-speaking mother, Melanie. In this game, each player must answer a question and then perform a gross-out (which is like a dare) or lose a turn. As the questions are usually related to major scientific disciplines, the winner is the player who correctly completes his/her experiment. Therefore, some of the questions and answers include specialized terminology that the children have to translate for the Spanish monolingual player.

All the NI cases were collected after reading the transcriptions and listening to the audios of each experimental session. Subsequently, they were coded manually considering the variables of analysis. According to the information shown in Table 1 above, a total of 122 NI cases were collected in 101 minutes of experimental recording. Most of the totals of NI cases were performed from English into Spanish (81 cases, 66,4%) as Esther, the Spanish investigator present in the three sessions, was repeatedly prompting the children to translate for her. Table 1 also displays the children’s MLUw (Mean Length of Utterances by words) in each language which was calculated to show their linguistic development across the three sessions. As inferred from these values their MLUw increases over time in both languages although differences appear in the twins’ MLUw rates. Leo shows a higher value in Spanish than Simon across all the sessions. In contrast, English MLUw values are more similar for both children in sessions 1 and 2 but not in session 3, where Leo’s values are much higher than those of Simon’s. Additionally, as observed from the utterance-count and the number of NI cases, Leo seems to be less talkative than Simon across the three sessions and also less prolific as an interpreter, except in session 3. This may affect how the two children differ when assuming a mediation role.

5.3. Data classification

The NI cases produced by the two bilingual children were classified according to three main variables:

1) the (in)completeness of the translation/interpreting process, i.e., if children do translate when they are requested to do so. This variable would provide us with information as to the children’s attitude towards the interpretation activity in an overall way. That is, attending to the NI productivity of each child would point to their willingness or reluctance to translating.

2) the type of stimulus: the children’s reactions are observed in relation to the presence or lack of stimulus to interpret (i.e., positive or negative reaction to a translation request, respectively). Due to the nature of the experimental mediations where the children are prompted to translate, it could be taken for granted that all of the interpreting occurrences are induced by adults. However, we have also taken into consideration as a variable of analysis when those occurrences are produced without a verbal or explicit prompt on the part of the adults, which could suggest a positive attitude to interpreting. That is, the children’s attitude towards performing the interpretation activity may not need to be based on direct instruction on the part of the adults, even under these experimental conditions.

3) a linguistic variable typically associated with the translation process: the semantic equivalence (or lack thereof) between the original and the target utterances. Analysis of this variable would help us understand how cognitive and linguistic knowledge develops in these bilingual children in the form of the translation strategies they use. Furthermore, this would provide valuable information as to their responsiveness when taking decisions or resolving communication problems in terms of reducing or expanding the original message, or being more faithful to it when producing the target message.

Each of these variables is presented next.

5.3.1. (In)completeness of the interpreting process

A complete translation is illustrated in (5), where the original message in one language is completely translated into the other such that the translation process is completed.

(5)

*SIM: we don’t have pairs!

*LEO: [% to Esther] ha dicho que no tienen parejas.

[he said that they do not have pairs]

[Leo 5;05_Experimental session 2]

In the case of an incomplete translation, as in (6), part of the original message is not translated since the information in the original language is kept, and so the translation process has not been fulfilled.

(6)

*SUS: tell her to write the month here.

*SIM: tienes que marcar el month.
[you have to mark the month]

[Simon 4;10_Experimental session 1]

The example in (7) shows a null translation case where the translation process has not been completed because the children either refuse to translate or ask someone else to do it for them.

(7)

*LEO: esto es icing.

*EST: pero qué es?
[but what is it [icing]?]

*SIM: se lo preguntas a Melanie.
[ask Melanie]

*LEO: esto es icing.

[Simon 6;03_Experimental session 3]

5.3.2. The type of stimulus

As stated in [Section 2](#) above, these bilingual children are usually asked to translate by the minority-language parent so that they keep the OPOL strategy as strictly as possible. In the case of the present study, who or what motivates the children to translate has also been taken into consideration.

Adult researchers verbally induced the children to translate, as in (8), where Esther (the Spanish monolingual researcher) does not understand the instructions that Susana (the English monolingual researcher) is providing for all to play and asks Simon to interpret for her.

(8)

*EST: pregúntale a Susana cómo se hace, por favor.
[ask Susana how you do it, please]

*SIM: how do you do it?

[Simon 4;10_Experimental session 1]

However, the children may not receive any verbal stimulus to translate, as in (9), where Leo translates on his own initiative what Todd (the other English-speaking researcher) said so that Esther (the Spanish-speaking researcher) can understand.

(9)

*TOD: we gotta be careful with him looking at our cards.

*LEO: [% to Esther] han dicho que eran unos tramposos.
[they said that they were cheating]

[Simon 5;05_Experimental session 2]

5.3.3. The semantic equivalence between source and target utterances

A third variable, more linguistic in nature, focuses on the interpretative relation between the original and the target utterances in the interpreting process.

According to this variable, three different types of translations can be distinguished, i.e., pairings (when there is a semantic equivalence between source and target utterances), simplifications (when the information rendered in a source utterance is reduced to a shorter or less informative target utterance), and expansions (when the information rendered in a source utterance is expanded into a longer or more informative target utterance). All these NI types are illustrated in examples (10), (11), and (12), respectively.

(10)

*LEO: [% to Todd] tienes un zorro?
[do you have a fox?]

*TOD: what?

*LEO: do you have a fox?

[Leo 5;05_Experimental session 2]

(11)

[Susana is marking the day of the week on a poster]

*SUS: we are going to mark the time here and here.

*EST: qué hay que hacer?
[what do I have to do?]

*SIM: tenemos que marcarlo.
[we have to mark it]

[Leo 4;10_Experimental session 1]

(12)

*EST: [% to Leo] pregúntale a Susana qué más tengo que hacer por favor.
[ask Susana what I need to do please]

*LEO: [% to Susana] what do you need to do now?

[Leo 4;10_Experimental session 1]

Simplification in (9) shows how this strategy involves the use of much less linguistic material in the Spanish target utterance (compared to that produced in the English original text). This variable is not concerned with the number of words when comparing source and target utterances, but rather with the semantic equivalence between them, or lack thereof. In fact, simplification may also imply the use of the same number of words in both the original and target messages, as in (13), where the English target word “things” is more general than the original Spanish word “muros” (‘walls’) such that the simplification strategy is used.

(13)

[Todd and his playmates are putting their hands in front of their cards]

*RAQ: Simon hay que decirles que no valen muros.
[Simon you have to tell them that they cannot use walls]

*SIM: [% to Todd] you can't put things there. . .

*SIM: because then you can't see anything.

[Simon 5;05_Experimental session 2]

The same reasoning can be applied to some expansion cases which do not include an addition of more words in the target utterance, but rather the use of fewer words that nonetheless provide more information than in the original utterance, as in (14).

(14)

[Simon is offering Esther and Susana a toy rifle full of candies]

*EST: ah pero Susana no sabe lo que es.

[ah but Susana does not know what it is]

*EST: se lo decís lo que es?

[could you tell her what it is?]

*SIM: una pistola!

[a gun!]

*EST: pero no sabe español.

[but she does not know Spanish]

*SIM: [% to Susana] eh es un... rifle.

[eh it is a...]

[Simon 4;10_Experimental session 1]

In (14) the information provided with the English noun “rifle” in the target utterance is more specific and adequate than the Spanish noun “pistola” (‘pistol’) in the original utterance.

6. RESULTS

The analysis was conducted considering the variables proposed in Section 5.3 to address the research questions outlined in Section 4. In order to detect statistically significant differences when comparing across the variables of analysis, contrasts of proportions have been performed.³

6.1. The (in)completeness of the interpreting process

6.1.1. Overview across sessions

Table 2 shows the distribution of the different NI cases performed by Simon and Leo across the three experimental sessions.

In total, 112 NI cases are produced by the two children in experimental linguistic mediations, and when comparing totals across sessions (73 cases in session 1, 31 in session 2 and 18 in session 3) significant differences are detected (p -values < 0.05), which seems to indicate that as the children grow older, their activity as interpreters decreases.

A closer look at our results according to the (in)completeness of the interpreting process shows that the bilingual children translate efficiently over the three experimental sessions, while the translation process is partially completed in sessions 1 and 2.

Although in the three sessions the bilingual children show their reluctance to translate to a greater or lesser extent, the total proportion of null cases is not significantly representative (p -value < 0.001) in comparison with that of the complete NI production (33 cases, 27.1%, vs. 85 cases, 69.6%, out of 122, respectively).

Most of the total of 33 null NI cases involve occurrences where the bilingual siblings either do not remember or know how to translate parts of the original message. This is the case of Leo in example (15), who timidly does not translate “Tuesday” into Spanish, although Simon helps his brother by making a simplified version of the original utterance.

Table 2

NI cases in the FerFuLice corpus’ experimental data: general overview *per session*.

	Complete	Incomplete	Null	Row-total
Session 1 (age: 4;10)	69.9 % (51)	4.1 % (3)	26 % (19)	100 % (73)
Session 2 (age: 5;05)	87.1 % (27)	3.2 % (1)	9.7 % (3)	100 % (31)
Session 3 (age: 6;03)	38.9 % (7)	0 % (0)	61.1 % (11)	100 % (18)
Total	69.6 % (85)	3.3 % (4)	27.1 % (33)	100 % (122)

³ All the p -values were obtained by running z-tests whereby contrasts of proportions were used to determine (non-) significant differences across conditions.

(15)

-
- *SIM: [% to Susana] Tuesday.
 *EST: qué está diciendo?
 [what is she saying?]
 *LEO: [% looking down] no sé muy bien.
 [I do not really know]
 *SIM: mhm... está diciendo qué día es.
 [mhm... she is saying what day is today]

[Leo 4;10_Experimental session 1]

It may be the case (as happens in brokering as well) that certain sensitive matters could prevent the children from mediating, as in (16), where Leo keeps silent when asked to translate a message that he may perceive to be rude.

(16)

-
- *SUS: what happens?
 *EST: que sois unos tramposos.
 [that you are cheaters]
 *SUS: what?
 *EST: [% to Leo] díselo.
 [tell her]
 *EST: o no?
 [or (you'd better) don't?]
 *EST: es un poco fuerte decírselo eh?
 [it is a bit strong to tell her ah?]

[Leo 5;05_Experimental session 2]

In other occurrences, the siblings do not provide a translation in the form of a target message because they are not aware that they are using the same original language, as in (17), where Simon repeats the same message in English instead of translating it into Spanish.

(17)

-
- *SIM: [% pointing at Leo and Esther] their turn.
 *EST: qué?
 [what?]
 *SIM: it's still your turn.

[Simon 5;05_Experimental session 2]

As for the results of the NI performance across the three experimental sessions, taking into account the totals *per session* Table 2 shows that the children's production of complete cases increases significantly from session 1 to 2, but then decreases from session 2 to 3 (all p -values < 0.05). The incomplete translations are very scarce in number in sessions 1 and 2, while the null ones are present in the three sessions (19 cases, 26%; 3 cases, 9.7%; 11 cases, 61.1%, respectively). The rate of null NI decreases significantly between sessions 1 and 2 (p -value = 0.03) and then significantly and dramatically increases, between sessions 2 and 3 (p -value < 0.05).

6.1.2. Overview across children

The performance of each bilingual child as interpreters across the three sessions is captured in Fig. 1, where Simon proves to be a more prolific interpreter than Leo in session 1 (37 vs. 14 complete, 3 vs. 0 incomplete, and 13 vs. 6 null NI cases, respectively, all p -values < 0.05).

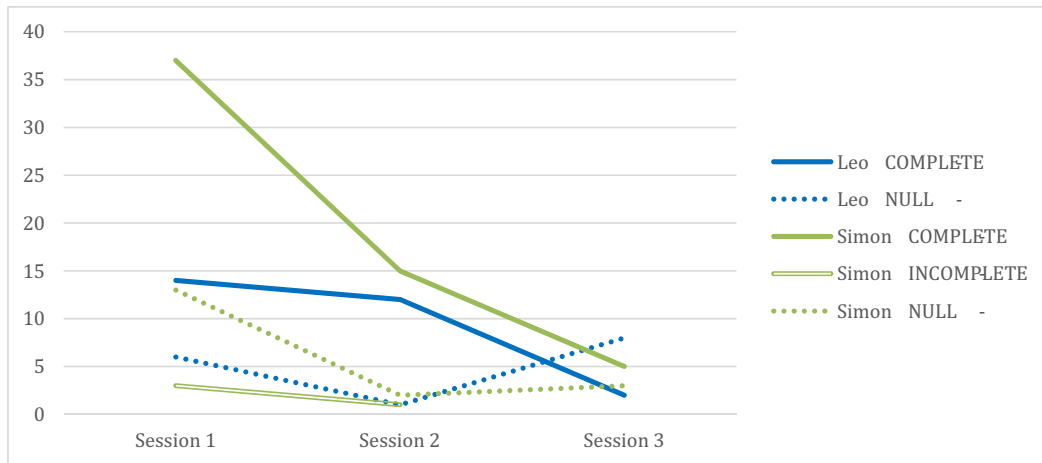


Fig. 1. NI cases in the FerFuLice corpus' experimental data: NI typology across sessions and children. Total = 122 cases.

In session 2, however, the interpreting activity declines (more sharply in the case of Simon) to a more equal number of cases in the two children (15 vs. 12 complete, 1 vs. 0 incomplete, and 2 vs. 1 null NI cases, respectively, all p -values > 0.05). This is maintained in session 3 (5 vs. 2 complete, respectively, p -value = 0.10) except in the case of the null NI cases, as Leo produces a significantly higher number of this type of NI than Simon (8 vs. 3 cases, respectively, p -value = 0.03).

Despite these differences between the twins across the three sessions in terms of raw and proportion counts, a different perspective can be taken observing the proportions of the type of NI cases (i.e., complete plus incomplete vs. null) regarding the total utterances produced by each child in each session (see Table 1 in section 5.2.). Along this line, Table 3 shows that there are no significant differences between Leo and Simon (all p -values > 0.05) except in their total production of (in)complete NI: overall Simon produces significantly more NI cases than Leo (61 vs. 28, respectively, p -value = 0.01).

Therefore, their behavior as interpreters in terms of the NI typology pattern is similar across all the experimental sessions even if Simon seems to be more responsive to translating.

6.2. The type of stimulus

6.2.1. Overview across sessions

Regarding the stimulus variable, the results in Table 4 show that the children most often complete the translation process (either fully or partially) when they are requested to do so (the sum results in 71 cases, 58.1%, out of 122 cases in total, all p -values < 0.05). However, although in a lower proportion, they also take the initiative when they are aware of their interlocutors' needs (18 cases, 14.8%).

When prompted to translate and considering the percentages *per* session, the children respond significantly more to verbal requests for translating in sessions 1 and 2, but much less so in session 3. This appears to be in line with the sharp increase of the null NI percentage (61.1%) in this same session (all p -values < 0.05). The verbally unprompted

Table 3
NI cases in the FerFuLice corpus' experimental data: NI typology across children's utterances.

	Complete & Incomplete		Null	
	Leo	Simon	Leo	Simon
Session 1 (L=54; S=186)	25.9 % (14)	21.5 % (40)	11.1 % (6)	7 % (13)
Session 2 (L=117; S=161)	10.3 % (12)	9.9 % (16)	0.9 % (1)	1.2 % (2)
Session 3 (L=217; S=184)	0.9 % (2)	2.7 % (5)	3.7 % (8)	1.6 % (3)
Total (L=388; S=531)	7.2 % (28)	11.5 % (61)	3.9 % (15)	3.4 % (18)

Table 4

NI cases in the FerFuLice corpus' experimental data: stimulus *per* session.

	(IN)COMPLETE		NULL	Row-total
	requested	own initiative	requested	
Session 1 (age: 4;10)	61.7 % (45)	12.3 % (9)	26 % (19)	100 % (73)
Session 2 (age: 5;05)	64.5 % (20)	25.8 % (8)	9.7 % (3)	100 % (31)
Session 3 (age: 6;03)	33.3 % (6)	5.6 % (1)	61.1 % (11)	100 % (18)
Total	58.1 % (71)	14.8 % (18)	27.1 % (33)	100 % (122)

behavior suggests that the children's independence as mediators is emerging, and especially so in session 2 where most of the own-initiative cases are concentrated. However, this behavior follows the same descending pattern as the other two NI subtypes in session 3 (all p -values < 0.05).

6.2.2. Overview across children

Parallel to the results found in the NI typology, the proportions of the type of stimulus in terms of the children's total utterances contained in Table 5 show that both children react quite similarly across the three sessions when asked to translate (all p -values > 0.05). The only significant difference is found again in the total (in)complete NI production due to Simon responding more often to the researchers' demands to translate than Leo (50 vs. 21 cases, respectively, p -value = 0.01).

6.3. The semantic equivalence

6.3.1. Overview across sessions

When focusing on the total sum of the (in)complete production of NI in terms of semantic equivalence, as in Table 6, the bilingual children seem not to adhere so literally to the original message they receive and provide instead non-equivalent versions of it: the grouping of expansive and simplified translations makes a total of 61 cases out of 122 (68.5%), in contrast with 28 cases of pairings (31.5%) (p -value = 0.001). When zooming in on the totals within the production of non-equivalent translations, there is a significantly higher proportion (p -value = 0.001) of simplified versions of the original message than of expansive translations (40 simplified cases, 44.9%, vs. 21 expansive cases, 23.6%).

In the evolution of the children's production according to the totals of the semantic equivalence variable *per* session, even though the preponderance of the simplified type is also attested in sessions 1 and 3, no significant differences are detected across sessions (all p -values > 0.05). The only significant difference observed is a decrease of expansive NI cases from session 2 to 3 (p -value = 0.05).

Table 5

NI cases in the FerFuLice corpus' experimental data: stimulus across children's utterances.

	(IN)COMPLETE				NULL	
	requested		own initiative		requested	
	Leo	Simon	Leo	Simon	Leo	Simon
Session 1 (L=54; S=186)	24.1 % (13)	17.2 % (32)	1.9 % (1)	4.3 % (8)	11.1 % (6)	7 % (13)
Session 2 (L=117; S=161)	5.12 % (6)	8.7 % (14)	5.1 % (6)	1.2 % (2)	0.9 % (1)	1.2 % (2)
Session 3 (L=217; S=184)	0.9 % (2)	2.2 % (4)	0 % (0)	0.5 % (1)	3.7 % (8)	1.6 % (3)
Total (L=388; S=531)	5.4 % (21)	9.4 % (50)	1.8 % (7)	2.1 % (11)	3.9 % (15)	3.4 % (18)

Table 6

NI cases in the FerFuLice corpus' experimental data: semantic equivalence *per* session.

	EQUIVALENT	NON-EQUIVALENT		Row-total
	pairing	expansive	simplified	
Session 1 (age: 4;10)	25.9 % (14)	24.1 % (13)	50 % (27)	100 % (54)
Session 2 (age: 5;05)	39.3 % (11)	28.6 % (8)	32.1 % (9)	100 % (28)
Session 3 (age: 6;03)	42.9 % (3)	0 % (0)	57.1 % (4)	100 % (7)
Total	31.5 % (28)	23.6 % (21)	44.9 % (40)	100 % (89)

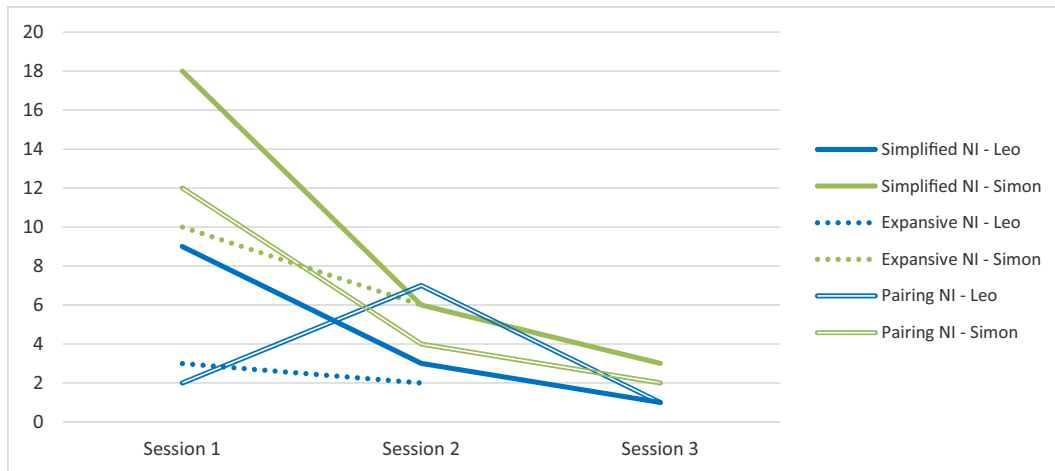


Fig. 2. NI cases in the FerFuLice corpus' experimental data: semantic equivalence across sessions and children. Total = 89 cases (complete + incomplete).

6.3.2. Overview across children

Fig. 2 shows that in session 1 Simon significantly more frequently uses simplifications rather than expansions as a non-equivalent translation technique (18 simplified vs. 10 expansive NI cases, p -value = 0.03), which is a pattern also observed in Leo (9 simplified vs. 3 expansive NI cases, p -value = 0.03). However, in session 2, Leo produces a similar number of non-equivalent translations and pairings (5 vs. 7, p -value > 0.05), while Simon uses significantly more non-equivalent translations than pairings (12 vs. 4, p -value = 0.008). Finally, in session 3 the two children seem to use both semantic types of NI in a similar proportion (all p -values > 0.05), although this finding should be interpreted with caution due to the scarce number of NIs produced by both children in this session.

Some of the differences found between the children in the raw counts become less pronounced when considering them in relation to the total number of utterances produced by each child and *per* session. In this regard, Table 7 illustrates how Leo and Simon follow a similar pattern as interpreters in terms of the semantic equivalence rendered in their translations (all p -values > 0.05). An exception to this pattern is found in the total of expansive NI cases: Simon's overall production shows a slight trend for this type of translation when compared with that of Leo's (16 cases vs. 5, respectively, p -value = 0.04).

7. DISCUSSION

For the interpretation of these results, external variables associated with the experimental context (also reported in child language brokering literature) are taken into consideration. These include, for instance, the goal of interpreting, the translation of sensitive issues, the relationship with adult interlocutors and the duration of the interviews.

In experimental session 1, the two monolingual researchers (Susana and Esther) ask the children to translate when playing the game. As their first experimental experience, the children seem conscious of the beneficial nature of their mediation as they feel their help is useful or necessary for the dynamics of the game. Although the children's goal (i.e., game playing itself) differs from that of brokering, this socioemotional factor, together with the responsibility for ensuring communication (even of sensitive issues), is present in the case of brokers as well (Kim et al. 2021). Consequently, it is in session 1 when Leo and (especially) Simon prove to be efficient interpreters, providing mostly simplified translations and only few null responses. Due to the experimental conditions, on most occasions they are verbally prompted to mediate but they can act on their own initiative as well (a sense of independence extended in time as it is also attested one year later in session 2).

In experimental session 2, a total of four adults are present in the session, i.e., two English monolingual researchers (Susana and Todd), one monolingual Spanish researcher (Esther) and one bilingual Spanish-English researcher (Raquel). To ensure fluid communication, a lower number of translations were requested of the children in order to avoid them feeling overburdened or too impatient. Despite of this, when compared with session 1, active participation in the game is slowed down, which involves a decrease in the number of complete NI cases requested and produced. This change in the dynamics of the game may affect the reaction of the children when interpreting (resulting in weariness, for instance), which can be observed in a balanced use of equivalent translations (i.e., lexical pairings) and non-

Table 7

NI cases in the FerFuLice corpus' experimental data: semantic equivalence across children's utterances.

	EQUIVALENT		NON-EQUIVALENT			
	pairing		expansive		simplified	
	Leo	Simon	Leo	Simon	Leo	Simon
Session 1 (L=54; S=186)	3.7 % (2)	6.5 % (12)	5.6 % (3)	5.4 % (10)	16.7 % (9)	9.7 % (18)
Session 2 (L=117; S=161)	6 % (7)	2.5 % (4)	1.7 % (2)	3.7 % (6)	2.6 % (3)	3.7 % (6)
Session 3 (L=217; S=184)	0.5 % (1)	1.1 % (2)	0 % (0)	0 % (0)	0.5 % (1)	1.6 % (3)
Total (L=388; S=531)	2.6 % (10)	3.4 % (18)	1.3 % (5)	3 % (16)	3.4 % (13)	5.1 % (27)

equivalent translations (especially simplified ones) in session 2. This variation in their interpreting behavior does not seem to be related to the evolution of their linguistic development in either language (see Table 1 in section 5.2). In fact, the pattern observed in the MLUw values is similar in both sessions (i.e., Leo's Spanish MLUw values are higher than those of Simon, while English MLUw values are similar in both children).

Despite being session 3 being the longest in duration and although Leo and Simon are two years older than in session 1, they appear to be less productive as interpreters in session 3. This can be explained by the fact that Esther's position at the family home is not as authoritative as that of Melanie's, their English-speaking mother, who grants the power in the mediations leading to power differentials (also present in specialized brokering domains; Angelelli, 2004, Mason and Ren, 2012). This change of roles in the interlocutors may hinder the children's sense of independence when translating, which is replaced by their mother's help in the interactions with the researcher and results in a lower complete NI production in line with a higher proportion of null translations (compared to that in sessions 1 and 2). In terms of total production, this result seems to be attested particularly in the case of Leo, although this difference does not exist when considering the proportions of NI cases over each child's total utterances in each session.

On the other hand, in session 3 Esther changes her status as a monolingual speaker, as she tells the children that she has learned some English since the last time they saw her, which may have influenced their lack of interest in translating for her (or its necessity altogether) while playing. Finally, in this game the children encounter more advanced vocabulary, and the gameplay is more complex, which may also affect their more careless and less engaged responsiveness in this last session. All the facts mentioned may lead them to adopt more conservative translation strategies balancing equivalent and non-equivalent translations in their performance and even avoiding translating altogether.

In the light of the results obtained, the following conclusions can be drawn in relation to our initial research questions. The role of the type of experimental task (research question 1), but also the adult interlocutors intervening in each session, seem to influence to a large extent the number of NI cases produced by the twins. This could be reflective of how they feel their mediation is less necessary in session 3 where a bilingual speaker (i.e., their mother) is involved. The same argument could be applied to the different translation types produced (research question 2): the fact that most of the NI cases are simplified translations or equivalent pairings may reflect the children's willingness to speed up the board game. Finally, with respect to the children's evolution as interpreters (research question 3), the results show that the children react mostly positively to interpreting as they complete most of the requested translations, and sometimes even translate on their own initiative. The slight change in the NI typology pattern common to both children and seen across the three sessions (i.e., the production of more literal translations over time, or the refusal to translate in session 3), which could be due to their linguistic evolution as interpreters (more faithful to the original message) or to the experimental context referred to above. Additionally, the analysis of each child's NI performance regarding the total number of utterances they produce leads us to assert that both children show a similar pattern as interpreters, although Simon seems to be more prolific and responsive in his overall complete NI production than Leo.

8. CONCLUSIONS AND FURTHER RESEARCH

This study is concerned with the attitudes of child natural interpreters when they are placed in an experimental situation in which they are prompted to act as language mediators. The experimental conditions cannot be compared to the real-life situations that child language brokers face. However, in some ways the strategies that child natural interpreters use in these situations, and the attitudes they display, can be related to those experienced by child language brokers. The analyses of the data from the two simultaneous bilingual children point to different conclusions regarding their performance and attitudes as child natural interpreters.

Our analyses show that although each child proves to be more or less productive at interpreting, both are evidenced to be efficient natural interpreters in experimental conditions over a period of three years (research questions 1 and 3). The first conclusion concerns the fact that not only are they able to translate as part of their bilingual development (as seen in their spontaneous production; [Álvarez de la Fuente and Fernández Fuertes, 2012, 2015; Álvarez de la Fuente et al., 2019](#)), but that this has but positive implications for them as they feel confident when translating for other interlocutors (also reported by [López et al. \(2019\)](#) as a beneficial experience from language brokering). However, some factors (some of them also mentioned in the child brokering literature) may affect their differing performance in their evolution as interpreters, e.g., the leading roles when interacting with adults, which may grant them a greater or lesser degree of autonomy as interpreters, or the repetitious routines in interpreting sessions where children only want to play and so simplify the mediation dynamics. In fact, at the age of 4;04 when asked about what they were doing when mediating, their answer was "(Simon) está repitiendo (...) son unos loros" [(Simon) he is repeating, they are parrots] because they see translating as a mere act of repetition of the same message.

The second conclusion derived from our analysis points to the fact that the bilingual children are aware of their interlocutors' needs and accommodate them. Therefore, the children translate even without receiving a verbal stimulus, and this is so regardless of their age.

Our third conclusion is that bilingual children's NI activity evolves regarding the semantic equivalence type of the translations they provide (research questions 2 and 3): in their first experience as NIs they tend to produce more simplified translations, but as they grow older they combine the translation types in a more balanced way between simplified and literal translations. This change in the production of semantic equivalence translation types seems to be influenced not only by their linguistic development as bilinguals, but also by issues surrounding each interpreting session (e.g., the presence of more than two interlocutors or that of the mother as a powerful and active agent in the mediation). Due to the limitations of the experimental design (e.g., the lack of consistency in terms of context, games and/or interlocutors over time), it may be difficult to assert which of these two factors weighs more heavily on the children's interpreting behavior (i.e., the linguistic development or the different testing conditions across the three time points). When we compare the linguistic factors across the 3 sessions (e.g., MLUw or the number of utterances), we see a difference that is consistent with development. And this is so regardless of differences in how the data were elicited across the three sessions. This leads us to suggest that testing conditions, although relevant, do not temper the fact that change in development might very well be behind the change in translation patterns. However, the data that are available do not allow us to explore this issue any further.

As a final conclusion, even though the external conditions may affect the resulting translation patterns, when the number of utterances produced by each child is taken into consideration for each variable of analysis, they do not differ much in their behavior as interpreters in each session taken separately.

Further research including more experimental data from bilingual children and from other language pairs would help to observe whether this is indeed a general pattern in NI of child natural interpreters. In fact, some recent studies ([Kwon and Martínez-Álvarez, 2021](#)) point out that little is known about how very young children act as language mediators for others. In this line of thought, as NI is a less widely studied phenomenon than child language brokering, there is also a need for further examination of this practice in other bilingual children, or even in bilingual youngsters or adults in order to compare their behavior as interpreters and the evolution in their performance, and, at the same time, to observe how this practice enhances their cognitive and linguistic development.

As [López \(2020:11\)](#) states, "language brokering is not necessarily a dichotomous variable, where a bilingual either is or is not a broker." In this spirit, the present study opens the door to exploring potential similarities or differences in the performance of this bilingual practice by older bilingual children and adolescents who act as language brokers. At the same time, our study also offers an interesting perspective to the teaching area, as NI in the form of linguistic mediations is a natural and genuine bilingual practice that could be promoted at bilingual schools to improve young (or older) students' academic performance. It could also foster a positive attitude towards the languages acquired in their households ([Humeau et al., 2023](#)) or learned at schools ([Hornaková Klapíková and Baranovská, 2022](#)). In fact, according to the language policy program of the [Council of Europe \(2020:114\)](#) in the last updated framework of CEFRL (Common European Framework of Reference), oral and written mediation across languages is described as concerning "a language user who plays the role of intermediary between different interlocutors," and as having important relevance to teachers, students and professionals for successful communication.

CREDIT AUTHORSHIP CONTRIBUTION STATEMENT

Esther Álvarez de la Fuente: Conceptualization, Formal analysis, Investigation, Methodology, Supervision, Writing – original draft, Writing – review & editing. **Raquel Fernández Fuertes:** Investigation, Supervision.

Data availability

Data will be made available on request.

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