### **Crosslinguistic Influence in Bilingual First Language Acquisition**

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#### **Abstract**

This paper presents the main views regarding crosslinguistic influence in BFLA and discusses the ways in which the proposed study will explore this phenomenon more systematically. Recent studies have shown that crosslinguistic effects do not appear always and in all grammatical domains in bilingual first language acquisition, and thus, researchers need to determine the locus, the sources and the directionality of crosslinguistic influence. Some researchers have claimed that dominance determines crosslinguistic influence and thus, its direction is predicted to be from the dominant to the weaker language. However, ita has been shown that language dominance cannot always explain crosslinguistic effects, and therefore it has been claimed that there are internal factors that determine crosslinguistic influence. Specifically it has been proposed that crosslinguistic interference is likely to occur when: a) the relevant grammatical domain involves the syntax/pragmatics interface; b) there is an overlap between the two languages regarding this domain.

#### 1 Introduction

Crosslinguistic studies in the field of child language acquisition have mostly focused on comparing data from monolingual children that acquire different languages. However, several researchers have started exploring the bilingual children's language development, who are excellent participants in crosslinguistic research, since they show how two languages are acquired by one brain in a specific context (De Houwer, 1990).

## 2 Crosslinguistic influence in Bilingual First Language Acquisition

At the present time most researchers in BFLA share the belief that bilingual children are able to differentiate between the two languages both at the syntactic and pragmatic level from early on (De Houwer, 1990). However, it has been suggested that the argument about the separate development of bilingual children's grammar does not preclude the possibility of the two languages to be in contact and thus having an influence on each other. It is therefore implied that the two linguistic systems are separate but non-autonomous (Müller, 1998). In the same vein, the identification of the factors that determine crosslinguistic influence as well as its locus and direction are major issues in research on bilingual children, as the researchers need to show that

crosslinguistic influence is a controlled and systematic phenomenon which does not occur randomly.

There are though different views among researchers in the field of BFLA. Some claim that crosslinguistic interference should be attributed to externally controlled mechanisms, whereas others suggest that crosslinguistic effects are due to internal sources and that is certain psycholinguistic processes internal to the child's mind.

Therefore, on one hand, it has been claimed that dominance, an external factor, is the crucial factor that determines crosslinguistic influence and thus, the dominant language influences the weaker language ( Paradis and Genesee, 1996). On the other hand, recent evidence has suggested that crosslinguistic influence is due to internal sources. More specifically, Hulk & Müller (2000) and Müller & Hulk, (2001) have suggested two conditions for crosslinguistic influence to occur: a) the grammatical structure involved should belong to the syntax/pragmatics interface, which is the most likely locus for crosslinguistic effects; b) a certain syntactic construction in language A allows for more than one syntactic analysis from the perspective of child grammar, and language B provides evidence for one of the two analyses.

Müller and Hulk (2001) found that the phenomenon of object drop, which belongs to the syntax-pragmatics interface, was susceptible to crosslinguistic influence in the French and Italian grammar of three bilingual children acquiring simultaneously pairs of Romance and Germanic languages (German-French, Dutch-French and German Italian). In those cases language dominance could not explain the linguistic data since the target of crosslinguistic influence was the dominant language (Romance languages) and not the weaker one (Germanic languages). However, the vulnerability of the syntax/pragmatics interface to crosslinguistic influence in BFLA was not clearly shown, since they counted only the frequency of object omissions but they did not investigate the pragmatic contexts in which those omissions took place. In this way, the pragmatics end of the interface was not tested.

Moreover, there have been two more studies that have investigated the validity of the previous hypothesis in the case of an Italian-English bilingual child (Serratrice & Sorace, 2002) and in the case of a Spanish-English bilingual child (Paradis & Navarro, 2003). The phenomenon that both studies explored was the distribution of overt and null subjects in Italian and Spanish, which is also a grammatical domain that belongs to the syntax-pragmatics interface, and it was found to be vulnerable to crosslinguistic influence from English on Italian and Spanish respectively.

Specifically, the bilingual children were found to overuse the overt pronouns, and thus it was also shown that young bilingual children have problems in coordinating the syntax and the pragmatics in certain contexts.

# 3 Limitations of the existing studies on crosslinguistic influence in BFLA and the contribution of the present study

The previous studies that have tested the claim about the vulnerability of the syntax/discourse interface to crosslinguistic influence in BFLA have certain limitations because: a) the pragmatics end of the syntax/pragmatics interface was not tested by Müller & Hulk (2001) and thus, it was not clearly shown that the interface is susceptible to crosslinguistic effects; b) they tested only one grammatical domain relevant to the syntax-pragmatics interface (object drop in the first study and the distribution of overt and null subjects in the other studies); c) grammatical phenomena that do not involve the interface between syntax and pragmatics but are pure syntactic ones were not tested at all; Therefore, these studies have not built a convincing account regarding the vulnerability of the syntax/discourse interface to crosslinguistic influence.

Further, in order for the issue of crosslinguistic influence to be addressed in a more systematic way the role of both the external and internal factors have to be investigated in the same linguistic context and in the same children, which Müller & Hulk (2001) did whereas other similar studies have not done so.

The present study though, considers the above problems of the existing studies and the issue of crosslinguistic influence in BFLA will be explored in a more principled way. More specifically, there are both syntax/discourse interface and morphosyntactic phenomena to be tested since the claim about the susceptibility of the syntax/discourse interface to crosslinguistic effects can be evaluated more systematically in this way. In other words, it would be interesting to see whether any possible crosslinguistic interference takes place only with regard to the syntax/discourse interface phenomena and not the pure syntactic ones.

### 4 The grammatical phenomena to be tested

The syntax/discourse interface phenomena to be tested are: 1) The distribution of null and overt subjects in Greek; 2) the distribution of postverbal subjects in Greek; 3) Structures that involve the drop of indefinite objects in Greek but not in English.

The syntax/discourse phenomena above are suitable for the evaluation of the Muller and Hulk's (2001) transfer hypothesis since the distribution of null and overt subjects, pre-/postverbal subjects and indefinite object drop in Greek is constrained by certain discourse principles and regarding these phenomena there is an overlap between the two languages.

## a) The distribution of null/overt subjects in Greek and English

Null subjects are required when the null subject is coreferential with a prominent topic antecedent. Further, overt subjects' use is also constrained by certain discourse principles. Their distribution is determined by the discourse status of the referent, that is, they are used only to convey contrast or emphasis and they usually refer to a non-prominent antecedent in the previous discourse. They are also used in contexts in which the subject referent is not immediately recoverable from the previous discourse or the extralinguistic context (Sorace & Serratrice, 2002).

An example for the use of null subjects in Greek is shown in (2), whereas (3) shows the use of overt subjects.

2)-Pu ehi pai I Elenii?

Where has Eleni gone?

2a)-Øi Ehi pai sto sholio.

(She) has gone to school.

2b)-\*Afti/I Elenii ehi pai sto sholio.

She has gone to school.

Response (2a) is felicitous as it has the null form, while (2b) is infelicitous since the subject referent can be easily recoverable from the preceding discourse and thus, the overt subject is pragmatically inappropriate.

3)-Pios irthe;

Who came?

3a)-I Eleni irthe.

Eleni came.

3b)-\*Ø irthe.

\*Ø came.

Additionally, response (3a) is felicitous since an overt subject is used appropriately, once the referent cannot be identified either from the previous discourse or the extralinguistic context. Therefore, (3b) is infelicitous since in order for the null subject to be used the subject referent should be easily recoverable from the preceding discourse, which is not the case here.

In contrast, the use of overt subjects (pronouns) in English is not determined by any discourse rules and their distribution is based on pure syntactic principles, i.e. the specifier of an IP has to be realised overtly regardless the specific discourse context.

### b) The use of postverbal subjects in Greek

Greek allows postverbal subjects, similar to the other pro-drop languages. Postverbal subjects are also considered to be licensed by the non-interpretable phi and D-features in the verbal system which license an 'empty' preverbal subject position (Tsimpli et. al, 2002).

However, the distribution of postverbal subjects in Greek is determined by pragmatic principles rather than syntactic principles. Thus, VSO is considered to be the pragmatically most neutral order and not SVO, which is derived from subject thematization (Stephany, 1997). In broad-focus questions, as in (6), a felicitous answer requires the appearance of the subject in a postverbal position. In this way the focussed subject is given a wide-scope interpretation. (Tzanidaki, 1996). Postverbal subjects are also felicitous in all-focus contexts as in (7).

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6)- Ti egine i mpala?what happened to the ball/?/ where is the ball?-Tin pire o Petrosher-CL took-3sg. the PetrosPetros took it.
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7)- Ti egine?What happened?-Tilefonise o Janis.telephoned-3s the JanisJanis telephoned.
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In narrow-focus contexts though, a felicitous answer in Greek involves a preverbal subject (8). In English, on the other hand, in both all-focus, broad-focus and narrow-focus contexts a preverbal subject is used as in (9), (10) and (11):

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8)-Pios tilefonise?Who called?-O Janis tilefonise.Janis called.
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- 9)-What happened?
- -John called.
- 10)-Who called?
- John called.
- 11) What happened to the ball?
- -John took it.

#### c) The indefinite object drop construction in Greek

The object drop construction is attested in Modern Greek and null objects are allowed in specific discourse contexts. More specifically, the objects that can be dropped are usually bare or not indefinite NPs in singular or plural number. Dimitriadis (1994) has argued that null objects in Greek are phonetically null indefinite object pronominals and they are in complementary distribution with overt clitics. This means that the objects that can be dropped cannot be cliticised.

It has also been shown that certain discourse factors are relevant to the object drop construction in Greek regardless of whether they are pronominals. Null objects can be licensed when the antecedent NP has a non-specific interpretation and more specifically, it has been claimed that when the antecedent NPs receive a generic/kind interpretation objects can be dropped in Greek (Keller & Lapata, 1999). In contrast, when the antecedent NP has a specific referent, the object cannot be dropped and thus, in order to be omitted an object clitic or an object pronoun is used in both Greek and English respectively as in (12).

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12)-Eferes to gala;
brought-2sg. the milk

Did you bring the milk?

-To efera.

CL brought

I brought it.
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Therefore, the dropped object in (13) is allowed because its antecedent is non-specific in that it does not refer to a specific type of 'coat'. Further, note that in the same discourse contexts in English, an NP can be omitted only if the indefinite pronouns *some* or *one* are present as in (14), whereas the use of 'ena' (one) would be infelicitous in Greek, since the use of 'ena' in similar discourse contexts in Greek functions mainly as a quantificational indefinite and therefore, it seems to have a count interpretation. The notion of quantity is not relevant to this context and thus, the use of 'ena' is inappropriate, whereas *one* in English functions as a pronoun in this context and not as a numeral.

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13)-Ehi krio, foras palto;
has-3sg.pres cold wear-2sg. coat

It's cold, are you wearing a coat?
-Forao. (*Forao ena-I am wearing one)
wear-1sg.
I am wearing one.
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Another example of this kind is presented in (14).

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14)-Ehis stilo gia na simioso kati?
have-2sg.pres. pen to note something

Have you got a pen to note down something?
- Eho. (*Eho ena-I have got one)
have-1sg.pres.

I have got one.
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A pragmatically appropriate answer to this question involves a null object and not the use of 'ena' <sup>1</sup>(one). The use of 'ena' would be felicitous in a context in which someone would like to borrow a pen over a long period and the other person would emphasise that he has only one pen for himself.

### d) The syntactic phenomena

The morphosyntactic phenomena to be investigated are the distribution of accusative and genitive clitics in Greek and of their correspondent pronouns in English.

The main differences with respect to the distribution of pronouns in Greek and English are the following. The accusative clitics in Greek appear preverbally in non-imperative contexts whereas in English the correspondent object pronoun appears postverbally (14). Regarding genitive clitics in Greek they appear after the NP while in English they appear before the NP (15).

14) Ton ida
Him-CL acc.sg. saw-1sg.
I saw him.

15) I aderfi mu.The sister my-CL gen.sg.My sister.

## 5 The Study, the Hypothesis and possible manifestations of crosslinguistic influence

The aims of the study are: a) to evaluate the hypothesis that syntax/pragmatics interface phenomena, which show a surface overlap between the two languages, are vulnerable to crosslinguistic effects in the case of Greek-English bilingual first language acquisition; b) to explore the role of dominance in crosslinguistic influence and thus, to see whether it is external or internal factors that determine crosslinguistic influence.

<sup>&</sup>lt;sup>1</sup>The indefinite article *enas* (masc)/*mia* (fem)/*ena* (neut), which is marked for Case, Number and Gender is derived from the numeral *one* and it is used only in the singular number. The indefinite article can appear either with a noun or an NP or independently in certain contexts behaving as an indefinite pronominal.

As has already been mentioned, this study considers the limitations of the existing studies and therefore, more syntax-pragmatics interface grammatical phenomena as well as phenomena which are purely syntactic ones are to be tested through experimental tasks, in order to explore the susceptibility of the interface to crosslinguistic interference in a more systematic way.

Further, the participants of the study will be Greek-English bilingual children, 6-8 years old, both English and Greek dominant in UK and Greece respectively in order to see whether crosslinguistic effects are evident in the grammar of older children and to investigate more systematically the role of dominance, an external source, in crosslinguistic influence in BFLA. The main criteria for the children to participate in the study are to have been exposed to both languages from birth and up to present on a regular basis and for one of the parents to be a native speaker of Greek and the other a native speaker of English.

The hypothesis predicts that certain syntax/pragmatics interface phenomena, which exhibit a surface overlap between the two languages, will be found susceptible to crosslinguistic influence from English on Greek in the developing grammar of English-Greek bilingual children, whereas the pure syntactic phenomena will not be affected. Dominance is not predicted to be an important factor that determines crosslinguistic interference, and thus, it is predicted that the direction of crosslinguistic influence will be from English on Greek in both groups, that is Greek and English dominant.

Specifically, with regard to the distribution of null and overt subjects, Greek allows for both null and overt subjects and English provides a lot of positive evidence for the overt subjects option. As a result, bilingual children are expected to overuse overt subjects in contexts in which monolinguals would use null subjects. It is also predicted that the bilingual children will allow the possibility of coreference between the overt subject pronoun and the matrix subject in contexts that involve forward anaphora.

Concerning the distribution of pre-and postverbal subjects, Greek allows for both preverbal and postverbal subjects but English strengthens the option of preverbal subjects. Thus, the bilingual children are expected to accept and use preverbal subjects in all-focus contexts, whereas the Greek monolinguals would use postverbal subjects.

With respect to the construction of object drop, Greek allows for objects to be realised overtly (lexical objects) and depending on the discourse context clitics or null objects can be used. However, null objects are not allowed in English and thus, when an object is omitted, English requires the use of either a weak object pronoun or the indefinite pronouns *some/one*. As a result, English strengthens the option for objects not to be entirely omitted.

Therefore, crosslinguistic influence is expected to occur regarding object drop construction. The bilingual children will tend to accept less than the monolingual Greek children object drop constructions and they will instead accept structures in which the indefinite pronouns *some/one* or accusative clitics are used, although the felicitous structure would involve a null object.

Moreover, no crosslinguistic interference is expected to take place regarding the syntactic phenomena to be tested, since they do not involve the syntax/discourse interface and there is no overlap between English and Greek with respect to these domains. As a result, the bilingual children are expected to use the clitics and pronouns in Greek and English, in the appropriate preverbal or postverbal position.

#### 6 Conclusion

To conclude, the systematic and principled investigation of crosslinguistic influence in bilingual development should involve the investigation of both external and internal factors that have been shown to determine crosslinguistic interference in several studies on bilingual children. Only in this way we will be able to disentangle the possible sources of crosslinguistic influence in bilingual acquisition and to define its locus and direction and therefore, to show that it is not a random phenomenon but a controlled one.

#### References

De Houwer, A. (1990). *The Acquisition of Two Languages from Birth: A Case Study*. Cambridge: Cambridge University Press.

Dimitriadis, A. (1994). Clitics and island-insensitive object drop. *Studies in the Linguistic Sciences*, 24, 153-169.

Hulk, A. & Müller, N. (2000). Bilingual first language acquisition at the interface between syntax and pragmatics. *Bilingualism: Language and Cognition*, 3(3), 227-244.

Keller, F. & Lapata, M. (1999). Object drop and discourse accessibility. In Shahin K. et al. (eds), *Proceedings of the seventeenth West Coast conference on Formal Linguistics*. Stanford, CA: CSL1. 362-374.

Müller, N. (1998). Transfer in Bilingual First Language Acquisition. *Bilingualism: Language and Cognition*, 1 (3), 151-171.

Müller, N. & Hulk, A. (2001). Crosslinguistic Influence in Bilingual Language Acquisition: Italian and French as Recipient Languages. *Bilingualism: Language and Cognition*, 4 (1), 1-21.

Paradis, J. & Genesee, F. (1996). Syntactic Acquisition in Bilingual Children: Autonomous or Interdependent?. *Studies in Second Language Acquisition*, 18, 1-25.

Paradis, J. & Navarro, S. (2003). Subject realization and crosslinguistic interference in the bilingual acquisition of Spanish and English: What is the role of input?. Manuscript, University of Alberta.

Serratrice, L. & Sorace, A. (2002). *Overt and Null Subjects in Monolingual and Bilingual Italian Acquisition*. Paper presented at the BUCLD 26 Conference, Boston.

Stephany, U. 1997. The Acquisition of Greek. In D.I. Slobin, (ed.), *The Crosslinguistic Study of Language Acquisition*, Vol. 4. Mahwah, New Jersey, London: Lawrence Erlbaum Associates, Inc.

Tsimpli, I.M., Sorace A., Heycock, C., Filiaci, F., & M. Bouba (2002). Subjects in L1 attrition: Evidence from Greek and Italian Near-native speakers of English. Paper presented at the BUCLD 26 Conference, Boston.

Tzanidaki D.I., (1996). Configurationality and Greek clause structure. *UCL Working Papers in Linguistics*, 8, 1-37.