

ACQUISITION OF ENGLISH REFLEXIVES BY TURKISH
L2 LEARNERS OF ENGLISH

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ABSTRACT

ACQUISITION OF ENGLISH REFLEXIVES BY TURKISH L2 LEARNERS OF ENGLISH

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This M.A. thesis investigates the L2 acquisition of binding properties of English reflexives by Turkish L2 learners to address the issue of UG availability in L2 grammar.

140 Turkish L2 learners of English (67 elementary, 73 upper) participated in this study. They were all students at the Department of Basic English, Middle East Technical University. In addition, in the control group, there were 8 native speakers of English. A grammaticality judgment task and a story-based truth-value judgment task were used to examine whether the L2 grammars of the Turkish learners of English are governed by the principles and parameters of UG in the context of reflexive binding.

According to the Full Transfer Full Access Model (FTFA), L2 learners have direct access to innate principles and parameters of Universal Grammar (UG) from the initial state to the end-state in the process of L2 acquisition. In line with FTFA, the results of the two tests suggest that the L2 learners' grammar is UG-constrained even though they do not fully converge on native English norms with respect to reflexive binding.

Keywords: Turkish, language acquisition, reflexives in L2

ÖZ

İKİNCİ DİL OLARAK İNGİLİZCE ÖĞRENEN TÜRK ÖĞRENCİLERİN BU DİLDEKİ DÖNÜŞLÜ ZAMİRLERİ EDİNİMİ

Köylü, Yılmaz

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Bu Yüksek Lisans Tezi, Evrensel Dilbilgisi kurallarının ikinci dildeki dil bilgisinde ulaşılabilirliği konusunu sorgulama amacıyla İngilizcedeki dönüşlü zamirlerin bağlanma özelliklerinin, bu dili ikinci dil olarak öğrenen Türk öğrenciler tarafından edinimini araştırır.

İkinci dil olarak İngilizce öğrenen 140 Türk öğrenci (67 başlangıç, 73 orta – üzeri seviye) bu çalışmaya katıldı. Bu öğrencilerin hepsi Orta Doğu Teknik Üniversitesi Temel İngilizce Bölümü öğrencileriydi. Bunun yanı sıra, kontrol grubunda anadili İngilizce olan sekiz katılımcı vardı. Türk öğrencilerin İngilizce dilbilgilerinin dönüşlü zamirler bağlamında Evrensel Dilbilgisi ilke ve kuralları tarafından yönetilip yönetilmediğini araştırmak için bir ‘dilbilgisi yargı testi’ ve ‘hikâye-bazlı doğruluk yargı testi’ kullanılmıştır.

Tam Erişim modeline göre, ikinci dil edinimi sürecinde, ikinci dil öğrenenler ilk aşamadan son aşamaya kadar Evrensel Dilbilgisi’nin doğuştan gelen ilke ve kurallarına doğrudan erişime sahiptirler. Bu modele paralel olarak iki testin sonuçları göstermiştir ki; Türk öğrencilerin İngilizce dilbilgileri, onların dönüşlü zamirler bağlamındaki algıları bu dili anadili olarak konuşan kişilerinkiyle tam olarak örtüşmese de, Evrensel Dilbilgisi tarafından yönetilmektedir.

Anahtar sözcükler: Türkçe, dil edinimi, ikinci dilde dönüşlü yapılar

To my beloved family

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LIST OF SYMBOLS AND ABBREVIATIONS

1sg First Person Singular	R EXPRESSION Referential Expression
2sg Second Person Singular	SBTVJT Story Based Truth Value Judgment Task
3sg Third Person Singular	T Tense
1pl First Person Plural	T ' Tense Bar
2pl Second Person Plural	TOP Topicalization
3pl Third Person Plural	TP Tense Phrase
ACC Accusative	UG Universal Grammar
BT Binding Theory	V Verb
COMP Complementizer	VP Verb Phrase
D Determiner	VN Verb Nominalizer
DAT Dative	
DP Determiner Phrase	
GC Governing Category	
GEN Genitive	
GJT Grammaticality Judgment Task	
INFL Inflection	
INT Interrogative	
L1 First Language	
L2 Second Language	
N Noun	
NP Noun Phrase	
P Preposition	
PAP Proper Antecedent Parameter	
PART Participle	
PAST Past	
PLU Plural	
POSS Possessive	
PP Prepositional Phrase	
PSB Possibility	
REFL Reflexive	

CHAPTER I

INTRODUCTION

I.I. Background of the study

Language teaching policies differ all around the world. While in some countries the emphasis is on using the target language accurately, in others the primary concern is fluency and communicative competence. In Turkey, fluency and communicative competence is generally favored over accuracy. Hence, the teaching of grammar deductively in an explicit way is still considered to be an inappropriate strategy to be used in language teaching. Even though there are certain grammatical items that are explicitly taught both at high school and university level, some others are left out as they are thought to be exceptions or infinitesimal structures that may complicate the language teaching process rather than make it easier. The teaching of English reflexives is such an issue. It is almost never taught explicitly. While reflexives can be bound out of a governing domain in Turkish, in English, reflexives are bound in their governing domain. This potentially causes native Turkish students to misinterpret English reflexives by either binding the reflexive by more than one antecedent, thus allowing an ambiguous interpretation, or binding the reflexive to a non-local or long distance antecedent, which is ungrammatical in English. Consider the following example.

(1) Jack_i asked Martin_j to introduce himself_{*ij} to the guests.

Jack_i Martin-in_j kendi-si-ni_{ij} misafir-ler-e tanıt-ma-sı-nı iste-di.

Jack Martin-GEN himself-3.sg.-ACC guest-PLU-DAT introduce-VN-3.sg.-
ACC want-PAST-3.sg.

Although in the English sentence, the reflexive can only be bound by the preceding NP *Martin*, which is in the same governing domain, in Turkish, the reflexive pronoun can be bound by either of the nouns as the concept of governing domain in English and Turkish differs.

I.II. Purpose of the Study, Research Questions, and Hypotheses

The aim of this study is two-fold: (1) to find out how the interpretation of English reflexives develop in Turkish L2 learners of English, (2) to reveal the differences between the native English group and Turkish L2 learners of English in terms of how they treat reflexive structures. Below are the research questions addressed in this study, followed by the hypotheses.

Research Questions

- 1- Is the Subset principle, which is known to be operative in L1 acquisition, also operative in L2 acquisition?
- 2- How does the binding of English nominal reflexives develop in the interlanguage of L2 learners of native Turkish students and is there any development in terms of the interpretation of English reflexives as L2 learners' proficiency level increases in English?
- 3- Do Turkish students follow a similar or different pattern compared to Chinese, Japanese, or Korean (languages which allow both local and long distance binding like Turkish) L2 learners of English as regards the development of the binding of English nominal reflexives?

Hypotheses

- 1- Turkish L2 learners of English will mistakenly accept the long distance binding of English reflexives.
- 2- There will not be a significant difference between low level (elementary) and high level (upper intermediate) students in terms of the way they interpret reflexives.

I.III. Rationale of the study

The reason why I chose this topic as my thesis research is that English and Turkish are syntactically different with regard to the binding properties of reflexives in those languages and doing a research on this topic may prove fruitful as it will shed light on how the knowledge and interpretation of reflexives develop in Turkish L2 learners of English. According to the Binding Principle A of Chomsky (1981), reflexives must be bound in their governing category, The concept of Governing Category is the minimal category which contains the reflexive and has a subject in the English language. However, the Governing Category Parameter is different in Turkish as it is the minimal category that contains the reflexive and has a root tense (Radford, 2006). Thus, English is the most restrictive language as ‘it allows only the closest NP to the reflexive to be its antecedent’ (Hirakawa, 1989, p.2). On the other hand, Turkish is the least restrictive language in the sense that any NP in a sentence can be the antecedent of the reflexive (Hirakawa, 1989). According to the Subset Principle proposed by Wexler & Manzini (1987), children are led to choose the parameter value that is compatible with the input data and that generates the smallest subset language first, and they go beyond that value only when positive evidence is available for a more inclusive grammar (MacLaughlin, 1992). This means that children first start with the least inclusive option and then they proceed beyond that grammar or language based on positive evidence. This raises the question whether the Subset Principle also applies in second language acquisition. As Turkish is more inclusive in terms of the way reflexives are bound, students may find it quite challenging to select an option which is more restrictive than their own native language. In other words, as suggested by the Full Transfer Full Access model (FTFA) (Schwartz, & Sprouse, 1994, 1996), when the L2 of learners’ is in a subset – superset relation with the L1 (e.g. L1 being the superset, and L2 the subset as in our case), the L2 learners face a learnability problem since their task is to constrict their grammar, which does not seem plausible based solely on positive evidence. Thus, they need negative evidence (i.e. explicit instruction) in such cases. In this study, it is hypothesized in line with the FTFA model that the L2 learners will have full access to UG

and as the FTFA suggests, their L1 grammar, including the L1 parameter settings will constitute the initial state of the L2 acquisition. Moreover, accordingly with this hypothesis, since the L2 learners will start with their L1 parameter and as their L1 (which is the superset in this study) is less restrictive than the L2, they will have L1 transfer in the interpretation and acquisition of the target language.

As the knowledge of reflexives is not attached much importance in language classes, and since it is not explicitly taught, interpreting reflexive constructions may be a difficult task for Turkish L2 learners of English. Thus, the study may have consequences regarding whether reflexives should in fact be taught explicitly.

CHAPTER II

REFLEXIVITY AND BINDING THEORY

Binding Theory (BT) is one of the sub-systems of the Government and Binding model and it explains the referential properties of NPs. BT provides an explicit formulation of the grammatical constraints on the binding properties of NPs (Haegeman, 1994, p. 205). As BT mainly controls the relations between NPs in A-positions, it is called as the theory of A-binding (Tanış, 2007). Three types of NPs are classified:

a) reflexives and reciprocals (anaphors): myself, himself, herself, itself, ourselves, yourself, yourselves, themselves, and each other;

b) non-reflexive pronouns (pronominals): I, you, he, she, it, we, they, me, him, her, us, them, my, your, his, our, their;

c) full NPs including names (Referential-expressions): the king, Sue, this, the student

(Büring, 2005, p.3)

As the main focus of this research is acquisition of reflexives, we have to define reflexivity first.

II.I. What is reflexivity?

In order to give a proper definition of what a 'reflexive' is, the meaning of 'anaphora' has to be explained first. The word 'anaphora' is derived from the Greek word *αναφορα*, which means 'to carry back'. Accordingly, in modern linguistics, it is frequently used to refer to a relation between two linguistic elements, in which the interpretation of one of the elements (called an anaphor) is somehow determined by the interpretation of the other element

(called the antecedent). Among the linguistic elements that may exhibit such an anaphoric property are empty categories, pronouns, and reflexives (Huang, 2000, p.1). As the main focus of this thesis is ‘acquisition of reflexives in L2’, we shall go on with the definitions of what a ‘reflexive’ is.

Faltz (1977) claims that a class of simple clauses that express a two argument predication in which the arguments comprise a human agent or experiencer on the one hand and a patient on the other can be isolated. Such clauses include a verb, designating the predicate, two noun phrases, which refer to the arguments, and any tense – aspect, modal, agreement, or other grammatical properties that are necessitated by the syntax. In such a case, if the language has a grammatical device which particularly denotes that the agent / experiencer and the patient in such clauses are indeed the same referent, then that specific grammatical device is named the primary reflexive strategy of that language.

Reinhart & Reuland (1993), on the other hand, define a predicate as reflexive if at least two of its arguments are coindexed. They go on to claim that a predicate can be reflexive provided that it is linguistically marked as a reflexive. Two of the available ways of reflexive marking across languages are marking the predicate's head (for example, a verb) or marking one of the arguments. These are also known as intrinsic and extrinsic reflexivization respectively. In intrinsically reflexive predicates, the heads (verbs) are marked as such in the lexicon, with or without an overt morphological marking of the verb. In case of extrinsic reflexivity, a transitive predicate that is not intrinsically reflexive may turn into a reflexive predicate if reflexivity is marked on one of its arguments. Based on these proposals, it can be argued that reflexivization acts as an operation on the verb's θ -grid (marking on the verb), through which one of the verb's θ -roles such as an object noun phrase is absorbed (Reinhart & Reuland, 1993, p.622).

Presumably, not all languages make use of the same reflexivisation strategies. Some languages may apply the strategy of verbal reflexives, while others construct such structures using nominal reflexives. However, assuming

that a language has to have only one reflexivisation strategy is wrong. Consider the following examples from English:

(2) Chris shaved.

(3) Mary_i blamed herself_i for the accident.

As can be seen, in (2), *Chris* is both the agent and the patient of the verb ‘shave’. Thus, it can be argued that verbal reflexivisation is the reflexivisation strategy in the first sentence since the sentence does not contain an overt reflexive. As for (3), reflexivity is maintained with the nominal reflexive ‘herself’. This sentence is also in line with the rule of nominal reflexivisation in English, which states that ‘the subject and object noun phrases are coreferent if and only if the object noun phrase consists one of the words such as: myself, ourselves, yourself, yourselves, himself, herself, itself, oneself, or themselves’ (Faltz, 1977, p.4).

Like English, Turkish also has both verbal and nominal reflexivisation strategies. Consider the following examples:

(4) Ahmet yıka-n-dı.

Ahmet wash - REFL-PAST

‘Ahmet_i washed (himself_i)’, or

‘Ahmet was washed’

(5) Ayşe kendi-ni tanı-t-tı

Ayşe SELF- ACC introduce-PAST

‘Ayşe_i introduced herself_i’.

In example (4), reflexivity is maintained with the morphological marker ‘n’ that is attached to the verb as a suffix. In example (5); on the other hand, reflexivity is expressed with the use of a nominal reflexive *kendi*. As the primary concern of this thesis is the acquisition of binding of nominal English

reflexives by Turkish L2 learners of English, properties, particularly the binding of such reflexives, will be discussed in the following parts.

Although Turkish and English examples show that these languages reflexivize in the same way; that is, both verbal and nominal reflexivization are used, in the rest of the thesis, I will focus on the nominal reflexivization strategy and we will see that English and Turkish differ significantly in how nominal reflexives are interpreted.

Based on the data above, a few generalizations can be put forth as to how reflexives are constructed across languages:

- a- Reflexives may be verbal or nominal,
- b- Although reflexivity may be provided with certain morphological markers on the verb (when verbal reflexivisation is used), there may be certain verbs which may have a reflexive meaning in the bare form,
- c- A certain language may make use of more than one reflexivisation strategy,
- d- A certain reflexive expression can correspond to a non-reflexive expression in a different language, and vice versa.

II.II. Binding Theory

Moving back to Binding Theory (BT), it has three principles, each of which controls the distribution and interpretation of one specific type of the NP outlined above. Binding Theory by Chomsky (1981) can be outlined as follows:

Principle A: An anaphor is bound in its governing category,

Principle B: A pronominal expression is free in its governing category,

Principle C: An R-expression is free everywhere.

Recall that an anaphor, such as a reflexive pronoun, is a linguistic element, the interpretation of which depends on another element in the sentence. Thus, as Binding Principle A suggests, such elements have to be bound by a proper antecedent in their governing category. Let me first discuss the term

proper antecedent. Consider the following examples:

- (6) a. Sue_i likes herself_i.
b. *Sue_i likes himself_i.

The sentence in (6b) is ungrammatical since the features of the reflexive ‘himself’ do not match the features of its antecedent ‘Sue’. On the other hand, (6a), where both the reflexive and the antecedent are feminine is grammatical. Now consider the next sentences in (7a), and (7b).

- (7) a. Sue_i likes herself_i.
b. *Sue_i thinks that herself_i is smart.

In both (7a), and (7b) there is only one possible antecedent for the reflexive *herself*, namely: *Sue*. However, (7b) is ungrammatical. We can observe that while in 7a the reflexive and its antecedent are both in the same clause; in 7b this is not the case: the NP *Sue* is not part of the embedded clause ‘that herself is smart’. The contrast between (7a) and (7b) indicates that for a reflexive to be bound, it must have an antecedent within a certain domain, which is in line with the Binding Principle A.

This brings us to the definition of Governing Category (GC).

Governing Category (GC, first version)

A minimal domain within which an anaphor must be bound.

In English, the GC seems to be the minimal clause which contains the reflexive. Consider the examples in 8a and 8b.

- (8) a. John_i doesn't know him_{*i}.
b. John_i thinks that he_i is smart

In (8a), the pronoun *him* cannot refer to John, it has to refer to an argument not

salient in the discourse. In (8b); however, it can. The contrast between (8a), and (8b) leads us to the conclusion that a pronoun cannot be bound by an NP that is ‘too close’. Referring back to the concept of GC, it seems that a pronoun must be free in the same domain in which an anaphor must be bound, which explains the Binding principle B. The GC can then be defined as follows:

Governing Category (final version)

A minimal domain in which an anaphor must be bound, and a pronoun must be free.

The last principle of the binding Theory, Principle C, suggests that an inherently referential expression must be free regardless of the governing category in which it is located. Consider the following examples:

- (9) a. He_i knew John_{*i}.
b. He_i knew that Bill knew John_{*i}.

In (9a), *John* is in the same GC as the pronoun *he*, and the sentence is ungrammatical. In (9b); however, the NP *John* and the pronoun *he* are in different GC’s, but this fact does not change the fact that the sentence is still ungrammatical when *he* and *John* are coreferential. Thus, as principle C suggests, a referential expression must be free everywhere.

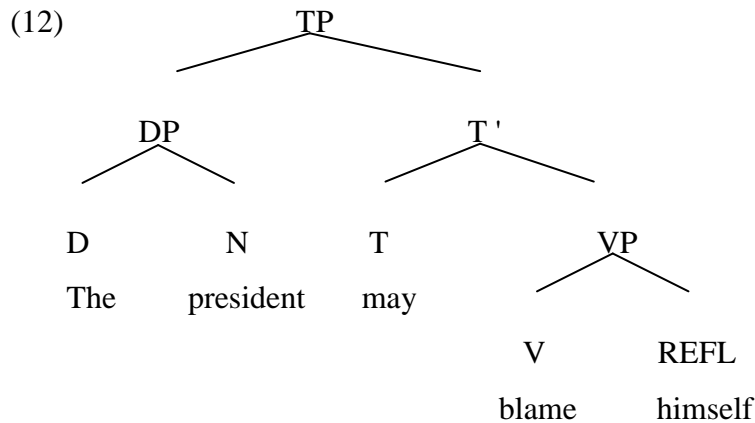
II.III. C-command

Another constraint on the binding of reflexives is the C-command condition. Radford (2006) defines C-command as follows:

(10) A constituent X c-commands its sister constituent Y and any constituent Z which is contained within Y.

(11) The president_i may blame himself_i.

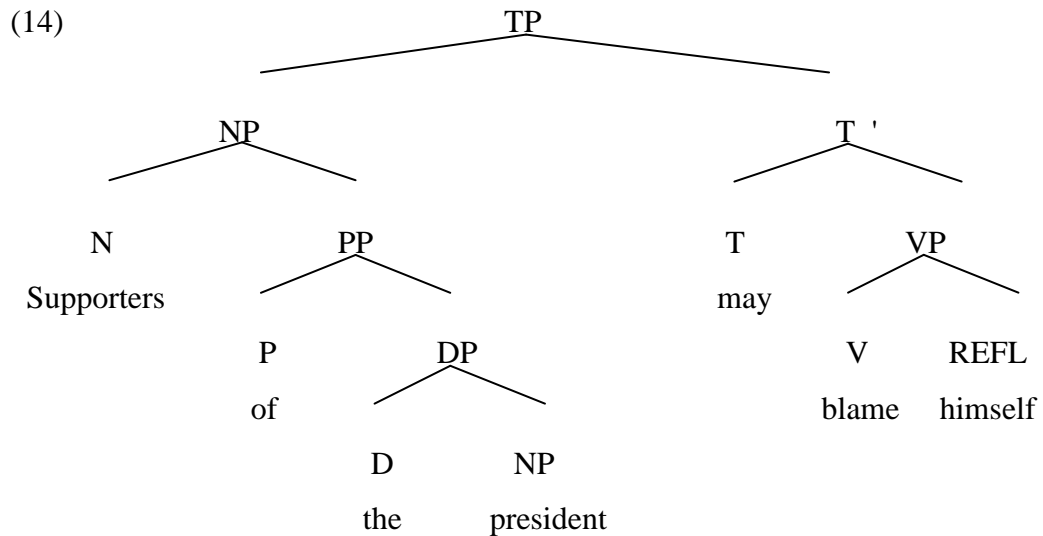
The reflexive anaphor *himself* in (11) is the relevant bound constituent having the antecedent: *the president*. Sentence (11) has the structure below:



The reflexive pronoun *himself* can be bound by the DP *the president* in (12) because the sister of the DP node is the T-bar node, and the reflexive *himself* is contained within the relevant T-bar node; as a result, the DP *the president* c-commands the anaphor *himself* and the binding condition is met. Hence (11), *The president may blame himself* is grammatical, with *the president* being interpreted as the antecedent of *himself*. Now consider why sentences like (13a) and (13b) below are ungrammatical.

- (13) a. *[Supporters of the president]_i may blame himself_i.
 b. *Supporters of [the president]_i may blame himself_i.

Both (13a) and (13b) have the structure below:



The ungrammaticality of (13a) can be attributed to *Proper Antecedent Parameter*, which states that a reflexive has to be bound in its governing category by a proper antecedent (MacLaughlin, 1992). In 13a, the reflexive is c-commanded by the NP ‘Supporters of the president’ but the two differ in the number feature (‘Supporters of the president’ is plural but the anaphor is singular). Thus, the anaphor *himself* is not a proper antecedent for the antecedent *Supporters of the president*. The other potential binder for the reflexive ‘himself’ is the DP ‘the president’ in (13b). Although this antecedent matches the anaphor in all the relevant features, the reflexive *himself* cannot be bound by the DP *the president* in (14) because the sister of the DP node is the P node, and the reflexive *himself* is not included within the relevant P node; as a result, the DP *the president* does not c-command the anaphor *himself* and the binding condition is not met (Radford, 2006).

II.IV. Governing Category Parameter

Languages differ in terms of how far away the antecedent can be from the reflexive (Wexler & Manzini, 1987, p.53). Wexler and Manzini (1987) define this as the GC below:

Governing Category Parameter

γ is a governing category for α if γ is the minimal category that contains α and

- a. has a subject, or
- b. has an INFL, or
- c. has a TNS, or
- d. has an indicative TNS, or
- e. has a root TNS

(Wexler, & Manzini, 1987)

In what follows, I will call those languages in which the Governing Category is the size of a *a languages*, and the others accordingly, i.e. *b languages*, *c languages*, etc.

Consider the following sentences:

Type a languages: English *himself* (MacLaughlin, 1992)

- (15) a. Fred_i believes John_j to have hurt *himself**_{ij}.
b. Fred_i believes that John_j hurt *himself**_{ij}.

In the above examples, a type of an *a language* such as English allows only the NP closest to the reflexive, Fred, to be its antecedent as the concept of governing category is the minimal clause including the reflexive and the subject in these types of languages. Moreover, *himself* must refer to *John* in both infinitival and tensed clauses since there are two clauses in each sentence and in each sentence *John* but not *Fred* is in the same governing category with *himself*. Thus, English does not differentiate between tensed and infinitival clauses as regards the binding of anaphors since in both of them, anaphors have to be bound in the minimal clause including the reflexive and the subject. However, Russian is different.

Type c languages: Russian *svoj* (Progovac 1992: ex. 8, 9)

- (16) a. Profesor_i poprosil assistenta_j c'itat' *svoj*_{ij} doklad.
 professor asked assistant-ACC to-read self's report-ACC
 'The professor_i asked the assistant_j to read self's_{ij} report.'
- b. Vanja_i znaet c' to Volodja_j ljubit *svoj-u*_{*ij} z'en-u.
 Vanja knows that Volodja loves self's-ACC wife-ACC
 'Vanja_i knows that Volodja_j loves self's_{*ij}.'

In (16a), the reflexive can refer to a local or a long distance antecedent in infinitival clauses. However, in (16b), the reflexive *svoj* can only refer to the local antecedent *Volodja* but not to the long distance antecedent *Vanja*. Thus it can be generalized that in *type c languages* such as Russian, reflexives in non finite clauses can be bound to either local or long distance antecedents; however, in tensed clauses they can only be bound to local antecedents.

Yet another type of languages, which differ in their governing categories, is *type e languages* such as Japanese, Korean or Turkish since in these languages the governing category is the whole sentence (Makiko, 1987).

Type e languages: Japanese *zibun*, Chinese *ziji* (Thomas 1991a: ex. 7)

- (17) Alice_i wa Sue_j ga *zibun*_{ij} o aisite iru to omotte iru.
 Alice TOP Sue NOM self ACC love is COMP think is
 'Alice_i thinks that Sue_j loves self_{ij}.'
- (18) Zhangsan_i yao Lisi_j xiang xuesheng jieshao ziji_{ij}.
 Zhangsan ask Lisi toward student introduce self
 'Zhangsan_i asked Lisi_j to introduce himself_{ij} to the students.'

Type e languages: Turkish *kendisi*

- (19) Cen_ki Ali-nin_j kendisi-ne_{ij} vur-du-ğu-nu söyle-di.
 Cenk Ali-GEN self-DAT hit-PAST-PART-ACC say-PAST

Cenk_i said that Ali_j hit himself_{ij}.

(20) Cenk_i Ali-nin_j kendisi-ne_{ij} vur-ma-sı-nı iste-di.

Cenk Ali-GEN self-DAT hit-VN-3.sg.-ACC want-PAST

‘Cenk_i wanted Ali_j to hit himself_{ij}’.

In the examples (17) and (18), we can see that, unlike the case in *type c languages*, the reflexive can refer to a local or a long distance antecedent in both tensed and infinitival clauses. The same statement is true of Turkish examples in (19) and (20). Hence, we can generalize that in *type e languages* such as Japanese, reflexives can be bound to either local or long distance antecedents both in infinitival clauses and in tensed clauses.

Consequently, *type a languages* are the most restrictive languages in that they allow only the NP closest to the reflexive to be the antecedent of the reflexive; on the other hand, we can say that *type c languages* such as Russian are an intermediary level since the governing category for *type c languages* is the clause containing a finite verb and the reflexive. Furthermore, *type e languages* can be said to be the least restrictive languages in terms of the binding of reflexives since any NP in such languages can be the antecedent of the reflexive.

II.V. Proper Antecedent Parameter

As mentioned before, *Proper Antecedent Parameter* states that an anaphor must be bound in its governing category by a proper antecedent, which is the reason that (13a) (p.11) is ungrammatical.

This parameter can be outlined as follows:

Proper Antecedent Parameter

(21) A proper antecedent for α is

a. a subject; or (e.g., Japanese *zibun*)

b. any element (e.g., English *himself*; Japanese *kare-zisin*; Turkish *kendisi*)

(Wexler, & Manzini, 1987)

Considering this parameter and Governing Category Parameter, parametric differences between the Turkish reflexive *kendisi* and English reflexive *himself* can be summarized as follows:

The similarity between the Turkish reflexive *kendisi* and English reflexive *himself* is that both reflexives can take either subjects or objects as their antecedents.

However, the Turkish reflexive *kendisi* can be bound either locally or in long distance, so it selects the governing category (e). Unlike Turkish *kendisi*, English *himself*, can only be bound locally, thus it selects governing category (a).

II.VI. The relationship between acquisition and teaching

II.VI.I. Markedness – Unmarkedness

Ellis (1994) claims that some linguistic features are ‘special’ compared to the others, which are more basic. Those special features are *marked* whereas the basic ones are *unmarked*. To illustrate, the adjective ‘old’ can be considered as unmarked, while ‘young’ is marked. The reason for this is that the adjective ‘old’ can be used to ask about a person’s age:

Ex: How old is he? (What is his age?)

However, ‘young’ cannot be used for the same purpose except for special cases:

Ex: How young is he? (Is he as young as he seems?)

It could further be claimed that core features in a language are considered *unmarked* since they require minimal evidence (input) for acquisition. However, peripheral features are considered *marked* as they require far more substantial evidence (input) (Ellis, 1994).

When the above definition is taken into consideration, it is not difficult to arrive at a conclusion that between the Turkish reflexive *kendisi*, and English reflexive *himself* / *herself*, it is the Turkish reflexive *kendisi* that is marked. The

reason for this is that, as stated in the definition of markedness, an English person acquiring Turkish needs minimal evidence, which is positive evidence only, for the acquisition of Turkish reflexives. However, it can be assumed, a Turkish person acquiring English will need far more substantial evidence, i.e. positive as well as negative evidence, to arrive at the conclusion that English reflexives can only be bound by local antecedents. This brings us to the issue of positive and negative evidence.

II.VI.II. Positive and Negative evidence

There are two kinds of evidence, namely positive and negative, which help with the language acquisition process. Positive evidence is obtained by being exposed to the speech of other speakers (However, this may not be sufficient). In other words, there are some aspects of language that cannot be acquired solely based on positive input. Thus, if children are to acquire the language by getting input, they have to receive negative evidence, as well. That is, they should explicitly be given feedback on the grammaticality of their utterances. If there is some positive but no negative evidence, they have to rely on innate knowledge for language acquisition (Ellis, 1994).

II.VI.III. Subset – Superset in Language Acquisition

In first language acquisition, children do not face a problem in setting the parameters in their L1. The reason for this is that they initially select the subset value of a certain parameter and they acquire the language based on positive evidence. However, L2 acquisition is different from L1 in that L2 learners do not always start with the subset in L2. If their L1 instantiates the superset and their L2 the subset, they may not lose the additional interpretation and start the L2 as if it also had a superset value. According to the Full Transfer Full Access (FTFA), L2 learners have full access to UG at all times and their L1 constitutes the initial state of L2 acquisition. This means that the L2 learners in this study will start with their L1, which is the superset value. According to this model, it is easier to move from a subset language to a superset language since positive evidence is sufficient in this case (Ellis, 1994). However, when the L2

learners have an L1 that instantiates the superset value and they are trying to learn an L2 having a subset value, their task is much challenging. They need to lose the additional meaning their L1 grammar allows, which may not be possible without negative evidence.

To illustrate, if an English person studying Turkish is exposed to sentences including *kendisi*, s/he may understand via these sentences that the reflexive may refer to either a local or an LD antecedent. This is comparatively easy as it suffices for him/her to be exposed to utterances in which the reflexive refers to an LD antecedent. However, for a Turkish learner of English, this is not the case. As Turkish is less restrictive in the binding of reflexives, the Turkish L2 learner of English needs negative evidence. That is, s/he needs to be reminded explicitly that in English, reflexives cannot refer to LD antecedents.

Thus, it could be argued that negative evidence plays a crucial role in the acquisition of the binding properties of English reflexives by Turkish learners. The reason for this is that they cannot move from a superset language to a subset one without negative evidence.

In the next chapter, the properties of nominal reflexives in English and Turkish will be discussed.

CHAPTER III

ACQUISITION OF REFLEXIVES IN L2

III.I. Properties and binding of nominal reflexives in English: Summary

Upon explaining the constraints on reflexive binding, we can move on with what the properties of English nominal reflexives are. In English, nominal reflexives are: myself, ourselves, yourself, yourselves, himself, herself, itself, oneself, or themselves. These reflexives and their antecedents must agree with respect to the nominal features of person, gender, and number. As mentioned earlier, English reflexives also have the feature that they cannot be used to refer directly to an entity in the outside world; on the contrary, they must be bound by a coindexed, c commanding antecedent in the same clause (Pollard, & Sag, 1992). If an anaphor has no antecedent to bind it, this leads the resulting structure to be ungrammatical as seen in (22) below:

- (22) a. He_i must feel proud of himself_i.
b. *She_i must feel proud of himself_i.
c. *Himself must feel proud of you.

In (22a), the third person masculine singular anaphor *himself* is bound by a suitable third person masculine singular antecedent *he*, which results in a grammatical sentence. However, in (22b), *himself* does not have a suitable antecedent (the feminine pronoun *she* cannot be a suitable antecedent for the masculine anaphor *himself*), and hence, it is not bound, resulting in an ill-formed expression. In (22c), no antecedent of any kind exists for the anaphor *himself*, again resulting in an unbound anaphor, and ill-formed expression.

Besides the above constraints on the usage of reflexives in English, there are other structural restrictions on the binding of reflexives by antecedents.

- (23) a. The president_i may blame *himself*_i.
b. *Supporters of the president_i may blame *himself*_{*i}.

(23a) is grammatical because being a third person singular anaphor, *himself* has to be bound by a third person singular antecedent like *the president*. However, looking at the ungrammaticality of (23b), it may be said that the antecedent is not a proper one to bind to the anaphor; thus, the resulting sentence is ungrammatical since it violates the proper antecedent parameter.

Another constraint on English reflexives is that they must be bound within the minimal domain that contains a reflexive, a c-commanding antecedent, and a governor. In other words, in line with Binding Principle A, reflexives must be bound by a local antecedent as we see from the following examples:

- (24) Jack_i understood that [Michael_j blamed *himself*_{*ij}]

In English, reflexives must be bound in their governing category. In (24), the finite embedded clause *Michael blamed himself* is the governing category for the reflexive because it includes the reflexive *himself*, a potential binder *Michael* and a governor (the verb, *blame*). Therefore, the reflexive *himself* must be bound by the subject of the embedded clause, *Michael*, but not by the subject of the matrix clause, *Jack*. This is because the reflexives cannot be bound by a long-distance antecedent which is outside their local domain. It is important to note here that some languages, such as Japanese or Turkish, do have certain reflexives that allow the long-distance binding. This parametric variation across languages has led many researchers to study the cross-linguistic variations in L2 acquisition studies (Finer and Broselow, 1986; Finer, 1991; Hirakawa, 1990; Thomas, 1991; Wakabayashi, 1996).

Moreover, English does not differentiate between tensed and infinitival clauses in terms of the binding of reflexives. Consider the following example:

(25) Alice_i believes [Serena_j to have introduced herself^{*_{i/j}}]

Therefore in the biclausal sentence that includes an infinitival clause above, again English allows only local antecedents. The infinitival embedded clause includes the reflexive, a governor for the reflexive (i.e., the verb, *introduce*) and a potential antecedent, *Serena*. Thus, the reflexive *herself* can only be co-indexed with the subject of the embedded clause but not with the subject of the matrix clause, i.e. *Alice*.

To sum up the binding properties of English reflexives, we can say that in English, the GC is the minimal clause containing the subject and an anaphor (a-type languages, p.13). Another significant feature is that, even if the clause containing the reflexive is infinitival, the reflexive must be bound by the subject of the infinitival clause (ex.15a, p.13). Secondly, the binder must c-command the reflexive (ex. 12, p.11). Finally, the binder must match the reflexive in its features such as person and number (ex. 13a, p.11).

III.II. Properties and binding of nominal reflexives in Turkish

The reflexive pronoun in Turkish is *kendi*. The reflexive stem *kendi* refers to “self” and a possessive suffix is attached to it to indicate the nominal features of person and the number of the subject (Underhill, pp. 355-356).

26a) Kendi-m

self-1.sg.

myself

b) kendi-n

self-2.sg.

yourself

c) kendi or kendi-si

self self-3.sg

himself, herself, itself

d) kendi-miz

self-1.pl.

- ourselves
- e) kendi-niz
self-2.pl.
yourselves, yourself
(polite)
- f) kendi-leri
self-3.pl
themselves

Kendi is also inflected for case. This is shown in table 1.

Table 1: Case marked usages of *kendi*.

Singular	First	Second	Third
Nominative	Kendi-m	Kendi-n	Kendi
Accusative	Kendi-m-i	Kendi-n-i	Kendi-n-i
Genitive	Kendi-m-in	Kendi-n-in	Kendi-n-in
Dative	Kendi-m-e	Kendi-n-e	Kendi-n-e
Locative	Kendi-m-de	Kendi-n-de	Kendi-n-de
Ablative	Kendi-m-den	Kendi-n-den	Kendi-n-den
Plural	First	Second	Third
Nominative	Kendi-miz	Kendi-niz	Kendi-leri
Accusative	Kendi-miz-i	Kendi-niz-i	Kendi-leri-ni
Genitive	Kendi-miz-in	Kendi-niz-in	Kendi-leri-nin
Dative	Kendi-miz-e	Kendi-niz-e	Kendi-leri-ne
Locative	Kendi-miz-de	Kendi-niz-de	Kendi-leri-nde
Ablative	Kendi-miz-den	Kendi-niz-den	Kendi-leri-nden

Source: Lewis, 2000.

Kendi has to be bound in its GC. Consider the ungrammaticality of the example below:

27) *Ben_i [herkes-in kendi-m-e_i bak-ma-sı-nı] iste-mi-yor-um.

I [everyone-GEN SELF-1sg.-DAT look-VN-3sg.-ACC] want-NEG-AOR-1sg.

In the example above, because the reflexive is not bound by an antecedent in the embedded clause but rather it is bound by the subject of the matrix clause, it violates Principle A of BT (Özsoy, 1992).

In the literature on Turkish, the reflexive *kendi* is regarded as the true reflexive (Lewis, 2000). However, in the 3rd person singular, there is also the pronominal *kendisi*, inflected with the third person singular suffix *-si*. *Kendisi* also has a reflexive function. *Kendi* and *kendisi* are similar morphologically as regards their case marked forms.

A feature of the 3rd person singular reflexive pronoun *kendisi* is that, like *kendi*, it takes the pronominal ‘n’ before any case marker is attached to it (Lewis, 2000, p.67).

Table 2: Case marked usages of *kendisi*.

	kendi-si
ACC	kendi-si-ni
GEN	kendi-si-nin
DAT	kendi-si-ne
LOC	kendi-si-nde
ABL	kendi-si-nden

Source: Lewis, 2000.

The reflexive *kendisi* is different from *kendi* with regard to its binding properties. It has been argued that *kendisi* is a special pronoun that is not constrained in any way by Binding Principles (Gürel, 2002; Enç, 1989). On the

other hand, the distribution of *kendi* closely mirrors that of English reflexive pronouns in that *kendi* must be bound by an antecedent in the same clause¹.

(28) a. Ahmet_i [Mehmet-in_j kendi-ni_j suçla-dıĝ-ın-ı] söyle-di.

Ahmet [Mehmet-POSS self-ACC blame-VN-3.sg.POSS-ACC say-PAST.
'Ahmet_i said that Mehmet_j blamed himself_j'.

b. Ahmet_i [kendi-ni_i suçla-dıĝ-ın-ı] söyle-di.

Ahmet [self-ACC blame-VN-3.sg.POSS-ACC say-PAST.
'Ahmet_i said that he_i blamed himself_i'.

In (28a) Mehmet is by far the most probable antecedent for the reflexive *kendi*. Accordingly in (28b), in which the subject of the subordinate clause is not expressed by an overt noun phrase, the most likely referent is Ahmet. However, if we substitute *kendi* with the third person form of the reflexive *kendisi*, *kendisi* can refer either to an antecedent in its own clause, or to an antecedent in another clause or to an implicit argument understood from the discourse.

Kornfilt also (2001) claims that *kendi* has a subject oriented referential property. *Kendisi*, on the other hand, is not only subject oriented and can be bound by an antecedent in an embedded or a matrix clause. Thus, studying *kendi* might prove to be uninformative since it shares common features with the English reflexives as regards both the governing category and the proper antecedent parameter. Thus, in order to gain insight into the acquisitional development of the English reflexives by Turkish L2 learners of English, the Turkish reflexive, *kendisi*, which has a different governing domain compared to English *himself*, is going to be the focus of the study. For this reason, we shall start with the binding properties of *kendisi*.

The binding of kendisi

¹ The difference between the behavior of *kendi* and that of English reflexive pronouns is that *kendi* must be bound by a local subject.

Demirci (2000) states that the Turkish reflexive *kendisi* allows both local and long distance binding. ‘*Kendisi*’ falls into the largest and the most marked setting of Governing Category parameter, which means that the reflexive and the antecedent can be in different clauses in the sentence. Furthermore, *kendisi* may have as its antecedent either a subject or an object. It should be noted here that such anaphors as Turkish ‘*kendisi*’ are named as ‘simplex reflexives’ and they can be bound by any antecedent in a sentence even when the antecedent is in a different clause than the reflexive itself. On the contrary, the English reflexives such as ‘himself’ have the smallest setting of GCP, thus they have unmarked settings. Under normal circumstances, these reflexives can be bound to the antecedent closest to the reflexive, and they are called ‘complex reflexives’. In general, complex anaphors, such as English ‘himself’, are known to take either subjects or objects as their antecedents; whereas simplex anaphors take only subjects as their antecedents. However, Turkish reflexive *kendisi* allows both local and non-local antecedents, and it can also refer to a subject or to an object. In that sense, we can say that *kendisi* is free from binding conditions.

Demirci (2000) mentions some examples of binding properties of *kendisi*, which are outlined below.

Kendisi can occur as the subject of the subordinate clause:

(29) Ahmet_i kendi-si-nini zeki ol-du-ğu-nu bil-iyor.

Ahmet self-3.sg.GEN clever be-PAST-PART-ACC know-AOR-3.sg.

‘Ahmet_i knows that he_i is clever’

The binders of ‘kendisi’ may not need to C-command the anaphor:

(30) Ayşe_i-nin anne-si_j kendi-si-ne_{ij} kitap al-dı.

Ayşe-GEN mother self-3.sg.POSS-DAT buy-PAST-3.sg.

‘Ayşe_i’s mother_j bought a book for herself_{ij}.

Kendisi may not require an antecedent within the sentence but might be discourse bound:

(31) a. Zehra'ya sen mi sor-du-n?

Zehra-DAT you INT ask-PAST-2.sg.

Did you ask (it) of Zehra?

b. Hayır. Kendi-si söyle-di.

No. Self-3.sg.POSS say-PAST

No. (She) said (it) herself.

The binding of kendisi may depend on the pragmatic properties of the context in the sentence in which it is used:

(32) Küçük çocuđı baba-sı-nın_j kendi-si-ne_{ij} oyuncak al-ma-sı-na sevin-di.

Little boy father-3.sg.POSS-DAT toy buy-VN-3.sg.POSS-DAT become
happy- PAST-3.sg.

'The little boy_i got happy that his father_j bought a toy for himself_{ij}'.

Our world knowledge tells us that fathers buy presents for their children not for themselves and for this reason, the reflexive in the above sentence is interpreted to be bound to 'the little boy'. However, the reflexive in the above sentence can also be bound to *father* in a different discourse.

Another property of *kendisi* not noted by Demirci (2000) is that it can refer to an antecedent which is not explicitly stated in the discourse.

(33) Ahmet_i kendi-si-ni_{ij} sev-iyor.

Ahmet self-3.sg.POSS-ACC- like-AOR

'Ahmet_i likes himself_i'.

'Ahmet_i likes him_j'.

In the example above, for the third person singular reflexive, either *kendi* or *kendisi* can be used. Even though these two usages seem like to have the same function: namely, a reflexivization function, there exist certain differences between the two². For example, in (33), *himself* can refer to both Ahmet or an external argument. Consider another example.

(34) Ahmet_i [Mehmet-in_j kendi-si-ni_{ijk} suçla-dıĝ-ın-ı] söyle-di.

Ahmet [Mehmet-POSS self-3.sg.POSS-ACC blame-VN-3.sg.POSS-ACC say-PAST.

‘Ahmet_i said that Mehmet_j blamed himself_{ijk}’

The above sentence has three possible interpretations as follows:

(i) ‘Ahmet_i said that Mehmet_j blamed himself_j’.

(ii) ‘Ahmet_i said that Mehmet_j blamed him_i’.

(iii) ‘Ahmet_i said that Mehmet_j blamed X_k (another antecedent understood from context)’.

The binding properties of *kendisi* make it possible for 34 to be 3-way ambiguous³.

² However, in the sentence below, the reflexive *kendi* can only refer to *Ahmet* but not to an external argument.

Ahmet_i kendi-ni_i sev-iyor.

Ahmet self-ACC like-AOR

‘Ahmet_i likes himself_i’.

³ However, in the sentence below, the interpretation is that the reflexive *kendi* can only refer to Mehmet but not Ahmet or to any other non-salient argument.

Ahmet_i [Mehmet-in_j kendi-ni_j suçla-dıĝ-ın-ı] söyle-di.

Ahmet [Mehmet-POSS self-ACC blame-VN-3.sg.POSS-ACC say-PAST.

‘Ahmet_i said that Mehmet_j blamed himself_j’.

To sum up, the third person singular reflexives, both *kendi* and *kendisi* can be used for reflexive function; however, with a difference in meaning. As for the antecedent of *kendi*, it has to be within the same clause as the reflexive, which is indicated either by a noun phrase or by person marking on the verb. However, the binder of *kendisi* can be in any clause in the sentence.

Reduplicated form of kendi: kendi kendi

Kendi kendi is an emphatic version of *kendi* in its reflexive usage. The second ‘*kendi*’ is compulsorily inflected for person and case whereas the first one is in its bare form. Thus, the person marked usages of ‘*kendi kendi*’ is as follows (Lewis, 2000).

Table 3: Person marked usages of *kendi kendi*

	Kendi kendi
1 st singular	Kendi kendi-m
2 nd singular	Kendi kendi-n
3 rd singular	Kendi kendi-si
1 st singular	Kendi kendi-miz
2 nd singular	Kendi kendi-niz
3 rd singular	Kendi kendi-leri

Source: Lewis, 2000.

Consider the following example:

(35) *Ödev-i kendi kendi-m-e yap-tı-m.*

Homework-ACC self self-1.sg.-DAT do-PAST-1.sg.

‘I_i did the homework myself_i’.

(36) *Kendi kendi-(si)-ne yumurta bile pişir-e-me-z.*

Self self-(3.sg.)-DAT egg even cook-PSB-NEG-AOR

‘He_i cannot even cook egg by himself_i’.

As seen in the example (36), *kendi kendi*, or *kendi kendisi* can be used referring to the third person singular. However, the usage of the former occurs in less formal contexts.

As mentioned before, *kendi kendi* is an emphatic usage of the reflexive form *kendi*. Although the two forms may be perceived as having the same semantic function apart from the emphatic usage of *kendi kendi*, there may exist considerable differences when the two constructions are inflected for cases. Consider how the following examples differ semantically:

(37) Kendi-m-e tatlı yap-tı-m.

Self-1.sg.-DAT dessert make-PAST- 1.sg.

‘I_i made dessert *for* myself_i’

(38) Kendi kendi-m-e tatlı yap-tı-m.

Self self-1.sg.-DAT dessert make-PAST- 1.sg.

‘I_i made dessert *by* myself_i’.

Note that semantically (37) and (38) are quite different since in (38), what is emphasized is that the person did something without the help of others.

To sum up, the binding features of the Turkish *kendisi* can be outlined as follows:

a- *Kendisi* can take a local or a long distance antecedent regardless of the type of the clause (tensed or infinitival) (GC type-e),

b- *Kendisi* can be bound by a subject or an object as proper antecedents (PAP, 1b).

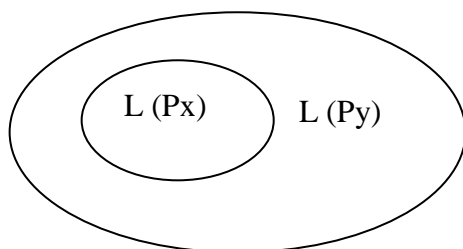
Although the differences between *kendi* and *kendisi* have been outlined above and it is clear that they show differences in their binding properties, what Yarar (2007) suggests may contradict this. She carried out a study to investigate the referential properties of Turkish reflexive pronouns *kendi* and *kendisi*. She used three different types of verbs; namely, a transitive

verb ‘to call’, a psych verb ‘to like’ and a causative verb ‘to kill’ and tried to determine whether the antecedents of these reflexive pronouns varied. One of her findings was that *kendi* and *kendisi* had mostly parallel referential patterns in sentences including transitive and causative verbs and they did not differentiate with respect to this property. Yasar (2007) concluded that the verb used in the embedded clause can determine the binding properties of *kendi* and *kendisi* and thus *kendi*, contrary to the claim that it has to be bound in its governing domain, may be bound by an antecedent in the matrix clause depending on the verb used in the embedded clause. The reason for this is that, the verb used in the embedded clause creates a pragmatic rather than a syntactic condition, which affects the binding properties.

III.III. The Subset Principle

The Principles and Parameters approach in Universal Grammar states that children acquire languages by setting the parameters to match the input data. Despite the fact that UG constrains the acquisition task, it may still be possible for a learner to arrive at an incorrect grammar when s/he makes a mistake in parameter setting. In this situation, a question arises regarding how the learner could acquire the correct setting, considering the assumption that only positive evidence is available to the language learner. In particular, a learning problem arises when the language generated by one value of a parameter is included in the language generated by the other value (MacLaughlin, 1992, p.1). This situation is illustrated as follows:

(39) A “subset parameter” with 2 values, x and y



If the target language has the subset value (value X) and a learner mistakenly chooses the more inclusive or superset value (value Y), there will not be any positive evidence to guide the learner back to the subset value. The learner will have an over-general grammar. As the first language acquisition is successful under normal conditions, the learner must be able to overcome this subset learning problem in a way. The Subset Principle has been put forth in an attempt to solve this problem. According to this principle, when the learner is faced with a learning situation such as 38, s/he is forced to choose the subset value provided that both values are compatible with the input (MacLaughlin, 1992, p.1). A definition of the Subset Principle, from Wexler, & Manzini (1987), is as follows.

(40) *Subset Principle* (Wexler, & Manzini, 1987)

The learning function maps the input data to that value of a parameter which generates a language:

- (a) compatible with the input data; and
- (b) smallest among the languages compatible with the input data.

The issue of the availability of Universal Grammar to second language learners has become a topic of great interest in the field of second language research. Second language acquisition, like first language acquisition, is considered to proceed from positive evidence only, in which case the same subset learning problem might arise for second language learners. If one accepts the hypothesis that learners have the ability to set UG parameters while acquiring a second language, the question then arises as to whether or not the Subset Principle is available to guide that parameter setting (MacLaughlin, 1992, p.1).

In English and Turkish language pair, the English reflexives constitute the subset value whereas the Turkish reflexives can be referred to as the superset value. In relation with the FTFA model, it is predicted that the Turkish L2 learners of English will have full access to UG through their L1. They will

start with their L1 parameter and allow LD binding and since there is no negative evidence, they will not be able to constrict their L2. Accordingly, Turkish L2 learners may not perceive the fact that the English reflexives can not be bound by long distance antecedents without negative evidence because they cannot constrict their L1 grammar. The subset principle states that only through negative evidence can students realize that unlike the Turkish reflexives, English reflexives cannot be bound to long distance antecedents.

So far several researchers have investigated the role of the Subset Principle in second language acquisition (For example; White (1989), Zobl (1988), Finer, & Broselow (1986), Thomas (1989), Hirakawa (1990), Finer (1991), and they have suggested that the Subset Principle is not available to second language learners. For instance, White (1989) summarizes the findings of her research as below:

(41) *Subset Principle Difference Hypothesis*

...‘the results suggest that it is the Subset Principle which is no longer available to L2 learners, rather than UG itself. That is, UG and the parameter values are still available, but the ability to compute which value leads to the subset language is lost’ (White, 1989, p.164). This means that English speakers could learn Turkish binding of reflexives more easily than the other way round.

While White (1989) makes such a comment as to the operation of the subset principle in L2, MacLaughlin (1992) mentions the fact that transfer from students’ L1 might also be interfering with students’ acquiring the language and he concludes his article as follows:

(42) The transfer + subset hypothesis:

‘The Subset Principle does operate in L2 acquisition, but L2 learners initially transfer their L1 parameter setting, before the Subset Principle is invoked. The Subset Principle is then available to guide the learner through progressively larger parameter settings’ (MacLaughlin, 1992, p.10). Aiming to

find out whether Turkish L2 learners of English can reset the parameter to the subset value in the interpretation of English reflexives, this thesis will also discuss the claims made by White (1989), and McLaughlin (1992).

III.IV. Previous studies on the acquisition of English reflexives by L2 learners

Acquisition of reflexives is a fruitful topic in acquisitional studies since it is possible to gain insights into the developmental pattern of language learners in learning or acquiring language structures through such experimental studies. Binding properties of reflexives have attracted L2 researchers for a long time since the interpretation of these properties is governed by the Principle A of Binding Theory, accepted to be the innate linguistics ability which is specified within UG. Moreover, since L2 learners do not usually get explicit instruction regarding reflexive binding, the acquisition of the binding properties of reflexives makes up an excellent underdetermination issue in L2 acquisition studies (Thomas, 1993). For this reason, L2 acquisition of Binding Principles has been an extensively studied topic in UG based L2 research (Finer and Broselow, 1986; Finer, 1991; Thomas, 1991, 1995; Wakabayashi, 1996).

Ever since the early study of Finer and Broselow (1986), there have been many studies regarding the L2 acquisition of reflexive binding under Principle A of the Binding Theory. The studies on the acquisition of reflexive binding (e.g. Finer and Broselow, 1986; Finer, 1991; Hirakawa, 1990; Thomas, 1991, 1995; Wakabayashi, 1996) were done within the framework of Wexler and Manzini's (1987) Parameterized Binding Principle Theory, which was proposed for L1 acquisition. Wexler and Manzini (1987) suggested two different parameters to explain the cross linguistic differences in reflexive binding. These are: The Governing Category Parameter (GCP, p. 12) and the Proper Antecedent Parameter (PAP, p.15). It should be recalled that according to Wexler and Manzini, the GCP has five values that are sanctioned by UG. As for the PAP, it has two values.

There exists a subset relation between the settings in each parameter. In other words, the settings of each parameter are arranged hierarchically. Wexler

and Manzini (1987) claimed that during the course of L1 acquisition, a child adopts the unmarked GCP and PAP settings (p.12-15) since these are the most restrictive domains in which the reflexives can be bound by proper antecedents. To give an example, because a child acquiring English is never exposed to evidence that reflexives can be bound outside the local domain, the GCP has to be set at 1(a). However, this child will not stick to the most restrictive value in terms of the PAP since s/he will have some input in L1, indicating that reflexives can be bound by subject and object NP's.

The studies adopting the proposal of Wexler and Manzini (1987) specifically tried to answer the question of whether resetting the parameters where L1 and L2 differ is possible or whether the learners whose L1 is similar to L2 in terms of the binding properties of reflexives are at an advantage in acquiring the L2.

III.IV.I. *Finer and Broselow (1986)*

Finer and Broselow (1986) studied the L2 acquisition of reflexive binding in English by L1 Korean speakers. English and Korean differ from each other with respect to the GCP since Korean, like Japanese, allows both long distance and local antecedents and has the most marked value; whereas English necessitates merely local antecedents, thus having the most unmarked value. It could be said that English and Korean are examples of the two extremes regarding the GCP, since the former is the most restrictive and the latter the least. With respect to PAP, Korean sanctions only subject NP's as proper antecedents while in English, it is acceptable for a subject or an object to be a proper antecedent for a reflexive. Based on these features of the two languages, Finer and Broselow (1986) foresaw that Korean learners of English would bind English reflexives with either local or long distance antecedents, and that would indicate the transfer of the L1 parameter setting. Six Korean learners of English were tested in this study. Five of the students were intermediate or advanced and one was elementary. The instrument was a picture identification task and the results showed that Korean learners of English could reset the L1 parameter but not in line with the L2 value. The binding principle that the learners made

use of was in accordance with UG parameters, but consistent neither with L1 nor L2 parameter values. The learners in the study tended to bind the reflexive to a proper antecedent in the local domain in tensed clauses. Nevertheless, they also bound the reflexives to non local antecedents in infinitival clauses. For example, in the following statement:

(43) Sue wanted Mary to criticize herself.

the Korean learners usually opted for the non local antecedent 'Sue'. Finer and Broselow conclude that the learners have fixed the L2 GCP to 1(c) or 1(d) (p.13), according to which a reflexive has to be bound in a tensed clause but not in an infinitival clause. This parameter is not a binding option found in Korean or in English but acceptable in some other languages, such as Russian as discussed above.

III.IV.II. Finer (1991)

Finer (1991) did another study to confirm the results of the pilot study previously carried out (Finer and Broselow, 1986). As he did in the pilot study, he used a picture identification task. This study included L1 Japanese and Hindi speakers. Like Korean, Japanese also permits both long distance and local antecedents, which is value (1e) according to the GCP. On the other hand, Hindi limits binding to a tensed clause, which is value (1c). Regarding the PAP, Japanese, Hindi and Korean are similar in that only subjects can be proper antecedents. In contrast, both subject and object NPs can be proper antecedents in English. The results of the picture identification task supported the results of the previous study. They showed that reflexives in tensed clauses were bound locally more than reflexives in infinitival clauses. Specifically, Japanese and Korean speakers made a distinction between tensed and infinitival clauses since they sanctioned co-referentiality of English reflexives with local antecedents in tensed clauses. They accepted long distance antecedents for reflexives in infinitival clauses. Unlike Japanese and Korean speakers, Hindi speakers did not make such a distinction between tensed and infinitival clauses. They

consistently bound reflexives locally in both types of clauses. According to Finer, the results of the study can be explained by the fact that English has been the official language for a long time and it has extensively been used in higher education in India. Thus, it is not surprising that the Hindi group has a native like performance. Finer (1991) also notes that the people living in India may be thought to be native speakers of a form of English. Another thing that was revealed in the study was that both the Japanese and the Korean speakers fixed the GCP at an intermediate value: (1c) since they allowed the reflexives to be bound by LD antecedents in non finite clauses but not in tensed ones. As for the PAP, the study showed that L2 learners of English opted more for subject NPs rather than object NPs. This also substantiated the claim that L2 learners adhered to their L1 settings in terms of the PAP in L2 grammar.

III.IV.III. Hirakawa (1990)

A study that supported the evidence suggested in Finer and Broselow (1986), and Finer (1991) was carried out by Hirakawa (1990). She tested 65 Japanese speakers in terms of how they interpreted reflexives, using a sentence comprehension task which had examples of tensed subordinate clauses and monoclauses with two possible antecedents, in which subjects were asked to answer who *himself* or *herself* referred to in contexts like the following:

44) John said that Bill hit *himself*.

- a. John
- b. Bill
- c. Either John or Bill
- d. Someone else
- e. Don't know

Via this study, Hirakawa (1990) aimed to reveal how Japanese speakers acquire the binding properties of English reflexives. Her subjects were low level Japanese learners of English.

Japanese is known to have value 1(e), and 2(a), and English 1(a), and 2(b) as regards the GCP and PAP respectively. Thus, Hirakawa assumed that the participants would transfer the L1 parameter settings into the L2 English grammar while interpreting reflexives. The results indicated that many Japanese learners bound reflexives to local antecedents in subordinate clauses. In tensed clauses, 68% of the participants favored local binding. On the other hand, in infinitival clauses, 54% of the participants opted for local binding. Like the studies by *Finer and Broselow (1986)* and *Finer (1991)*, when it came to infinitival clauses, the preference for local binding decreased. What Hirakawa has proposed is that L2 learners might have difficulty resetting the GCP, which may stem from the fact that the participants have to move from a marked setting to an unmarked L2 value. Hence, though temporarily, the learners may set the parameters at an intermediate value, permitting long distance binding of reflexives in infinitival clauses but not in tensed clauses. Moreover, Hirakawa found that in monoclauses, 74% of the participants bound the reflexives to subject NPs while merely 20% of the participants bound them to non-subject NPs. The results showed that the Japanese speakers allowed LD binding in both finite and non-finite statements, which suggested that they transferred their L1 parameter setting into L2 English. Hirakawa concluded that resetting the parameter to the subset value appeared to be difficult but nevertheless possible, at least for some learners, since 10 out of 65 L2 subjects correctly bound the reflexives to local antecedents in all the test sentences. She also stated that L2 learners initially think that L1 parameter setting is also allowed in L2. However, provided the L2 input, these Japanese learners of English were able to reset the PAP without difficulty despite the lack of negative evidence.

III.IV.IV. *Thomas (1991a)*

In contrast to the above mentioned studies, *Thomas (1991)* came up with a divergent result. She did a study so as to investigate whether resetting the L2 parameters, where L1 and L2 have different binding properties, is possible and whether L2 acquisition gets easier when L1 and L2 allow the same parameter setting. Initially, she looked at the interpretation of L2 English

reflexives by native Japanese and Spanish speakers. English reflexives and the Spanish clitic *se* are known to have setting (1a) regarding the GCP since they must refer to an NP in their governing category containing the reflexive, a c-commanding antecedent, and a governor. As stated earlier, in the below example only *Josh* can bind the reflexive *himself* since English allows only local reflexives.

(45) Mark knew that [Josh respected himself]

In terms of the PAP, English and Spanish have the same binding properties. Both subject and object NPs are allowed as proper antecedents in these languages. On the other hand, Japanese is unlike English and Spanish as regards the binding properties of reflexives. *Zibun*, the Japanese reflexive, has value (1e) in terms of the GCP. In other words, *zibun* could allow both local and long distance antecedents. In the example below, *zibun* can take both *Sue* and *Mary* as a proper antecedent.

(46) Sue_i wa Mary_j ga zibun_{i/j} o aisite iru to omotte iru
 Sue TOP Mary NOM self Acc love is COMP think is
 ‘Sue_i thinks that Mary_j loves herself_{i/j}’

(Thomas, 1991: 218)

As regards the PAP, Japanese *zibun* takes only subject NPs as proper antecedents. In her study, Thomas made the prediction that Spanish learners of English would have no difficulty interpreting the English reflexives correctly since the two languages have the same binding properties. However, she predicted that Japanese learners of English could be unsuccessful in the interpretation of the reflexives in English owing to the transfer of L1 parameter setting into the L2 grammar. Seventy Japanese learners of English and sixty-two Spanish learners of English took part in the study. Based on their scores in the individual L2 proficiency tests, each group was divided into three groups, namely: low, mid, and high. Two instruments were used in this study. In the

first instrument, the L2 learners imitated sentences in the target language. In the second one, the L2 learners were tested on how they interpreted reflexives in English through a multiple choice comprehension task. According to the results, in biclausal sentences and biclausal relative clauses which contained reflexives, 81% of both Japanese and Spanish L2 learners of English permitted local antecedents only; 10% accepted either local or long distance antecedents; while 3% of the participants, interestingly and in contradiction with the UG claim, allowed long distance antecedents only, for which there is no parameter setting. Thomas concluded that the level of proficiency did not have any effect in the interpretation of reflexives for even low level Japanese and Spanish learners of English bound English reflexives to local antecedents. Furthermore, a great majority of the L2 learners opted for subject NPs as proper antecedents for English reflexives in monoclausal sentences, having two potential antecedents. Because those monoclausal sentences are ambiguous in English since the reflexive in such sentences can be bound either by a subject or an object NP, this result is not supportive of the PAP setting of English. Nonetheless, Thomas stressed that 52% of the control group also allowed this subject-only option. Hence, it cannot be argued that L2 learners violate the PAP parameter by choosing the subject NPs as proper antecedents for reflexives. Thomas points out that this could be linked to the participants' preference but not to their failure in the interpretation of reflexives.

III.IV.V. Thomas (1991b)

In the next research in the same year, Thomas (1991) studied how the native speakers of Chinese and English interpreted the Japanese reflexive *zibun*. As stated before, Japanese *zibun* and English *himself* are at the two extremes of the GCP. However, Chinese *ziji* is similar to *zibun* in that it can be bound by a local or a long distance antecedent. Furthermore, like *zibun* in Japanese, *ziji* allows only subject NPs as proper antecedents. Thirty-three English learners and eight Chinese learners participated in this study. The English learners of Japanese were divided into three groups based on their proficiency levels but the Chinese learners were not for certain practical reasons. The results showed

that most of the low and intermediate level English learners of Japanese bind the Japanese *zibun* to local antecedents in biclausal sentences while proficient learners permitted both local and long distance antecedents for the reflexives, which can be claimed to argue that advanced L2 learners correctly interpreted and thus acquired the binding property of the Japanese reflexive *zibun*. This finding may suggest that the more proficient the learner is in L2, the more correctly s/he interprets reflexives. Thomas claims that as L2 learners are exposed to a great deal of input in L2, they gradually become aware of the fact that Japanese *zibun* has different binding properties than those of English *himself*. Unlike the English group, 50% of the Chinese learners of Japanese allowed only long distance antecedents, 25% permitted local antecedents. However, no Chinese learner consistently bound *zibun* to either local or long distance antecedents. Like the comment she made regarding the results of the first study, Thomas suggested that 50% of the Chinese group bound the reflexives merely to long distance reflexives, which is not a GCP option, not because of their inability to grasp the reflexives in L2 or because of their deficit in linguistic knowledge but solely because of their preference. Regarding the proper antecedent, 88% of Chinese learners allowed only subject NPs. Nevertheless, the percentage was 33% for English learners of Japanese. Moreover, 17% of mid level English learners of Japanese and 23% of the high level English learners of Japanese preferred both subject and object NPs as proper antecedents. This shows that L1 English learners transferred the reflexive binding in their language into the L2 grammar while using the Japanese reflexive *zibun*. Thomas interpreted the results of the study saying that adult language learners had direct access to UG principles and parameters in the interpretation of reflexives in L2.

III.IV.VI. Yuan (1994)

In his study, Yuan (1994) argued that the results of the study he carried out concerning reflexive binding of English reflexives by speakers of Chinese-type languages did not provide any evidence for parameter resetting or access to UG. He further claimed that those results could only be accounted for

in terms of transfer from the native language, since the native languages of the subjects in these studies have both local and LD reflexives. Yuan (1994) summarizes his study by concluding that L2 learners who exhibit LD binding in the interlanguage have simply transferred properties of the LD reflexive found in the L1. Similarly, L2 learners who exhibit local binding have transferred properties of a different, local reflexive from the L1. In summary, Yuan (1994) concluded that there was no parameter resetting in L2.

III.IV.VII. *Thomas (1995)*

In yet another research carried out by Thomas (1995), she investigated whether L2 learners of Japanese know that the morphologically simplex anaphor ‘*zibun*’ can only be bound by a subject as its antecedent. In her experiment, she had 58 learners of Japanese as a foreign language, 34 in a low proficiency group and 24 in a high proficiency group. A truth-value judgment task involving stories and pictures was used to test the subjects. The results showed that most of her subjects at a high-proficiency level who bind ‘*zibun*’ in long distance reject object antecedents, which means that they have acquired the binding of reflexives in Japanese. However, the low proficiency learners failed to bind reflexives by long distance antecedents, which may account for the fact that the lower level Japanese learners transfer the parameter from their L1 and bind the Japanese reflexive ‘*zibun*’ only to local reflexives. For this reason, the issue of subject-orientation could not be investigated for these learners.

III.IV.VIII. *Wakabayashi (1996)*

What Wakabayashi (1996) found was in line with the findings of Thomas (1991). Wakabayashi (1996) did a study to investigate how Japanese learners interpreted reflexives in English so as to see whether Japanese learners could correctly set the GCP and PAP. He claimed that Japanese learners would acquire the acceptable L2 value of the GCP by resetting the value from 1(e) to 1(a). He also predicted that the Japanese learners would be successful in resetting the PAP from 2(a) to 2(b). Yet, he stated that, the Japanese learners would use their L1 settings in the L2 grammar at the beginning of the study. He

gave the participants a grammaticality judgment test. The results indicated that 95 % of the participants acquired the correct L2 parameter values with respect to the properties of reflexives. This proved further evidence that it is possible to reset the parameters in the L2 grammar, which substantiates the claim that UG is available in the L2 grammars of learners.

III.IV.IX. MacLaughlin (1998)

MacLaughlin (1998) conducted experiments on the acquisition of English reflexives by native speakers of Chinese and Japanese. She used a sentence judgment task to investigate UG constraints in the development of English reflexives. Her results indicate that although transfer is an important factor in L2 development, L2 learners advance beyond the constraints imposed by their native languages. She does not disagree with Yuan's proposal that transfer cannot be ruled out. She argues in her study that something else is also going on, at least with some of the L2 learners who allow LD binding outside non-finite clauses, but not outside finite clauses. This kind of binding system is not found in the native language, and in fact, is not found in the target language either. However, this is apparently the case for Russian reflexive *svoj*, suggesting that UG is involved in its acquisition. That is, L2 learners can acquire a system of reflexive binding that is not found in the native language (nor in the target language), but one that is nevertheless sanctioned by Universal Grammar. To summarize MacLaughlin (1998) claimed that the students successfully reset the parameter, but to a different value from both the L1 and L2.

Despite the fact that many L2 researchers have used the Parameterized Binding Theory of Wexler and Manzini (1987), this theory has been criticized for certain reasons. Among the criticisms is that the GCP and PAP can be connected with different settings for each lexical item (Wexler and Manzini, 1987) since different anaphors within the same language may necessitate different parameter settings. To illustrate, Chinese *ziji* has the GCP value of (1e) and the PAP value (2a). Nonetheless, *taziji*, which is another Chinese reflexive, is similar to English reflexives in terms of the GCP and PAP. Hermon (1992)

states that associating the parameter setting with certain lexical items instead of the grammar as a whole contradicts the rationale of the principles and parameters model.

Yet another criticism is as regards the Subset Principle, which is involved in Wexler and Manzini's (1987) model. The existence of the Subset Principle is claimed to be a controversial issue challenged on empirical bases (e.g., Kapur et al., 1992). Alternative hypotheses such as movement of anaphors at LF (Cole and Sung, 1994; Cole, Hermon and Sung, 1990; Katada, 1991; Pica, 1987; Reinhart and Reuland, 1991, 1993) have been proposed in the theory of binding following the criticism directed to the Parameterized Binding Theory of Wexler and Manzini (1987). L2 acquisition researchers have primarily been interested in the relation among the three crucial properties of reflexives: LD binding, morphological complexity, and subject orientation in this approach. What is assumed in this approach is that morphologically simple anaphors such as Japanese *zibun*, Turkish *kendi*, and Chinese *ziji* allow LD antecedents as they have no theta-features (person, gender, and number). On the other hand, morphologically complex reflexives, such as English *himself*, necessitate local antecedents. The underlying assumption of this approach is that LD binding requires subject antecedents.

III.IV.X. Bennett (1994)

Several following studies were carried out to reveal the L1 transfer on L2 grammars. To illustrate, Bennett (1994) studied the L2 acquisition of English reflexives by native Serbo-Croatian speakers. Forty native speakers of Serbo-Croatian and twenty native English speakers (the control group) took part in the study. The L2 learners of English were divided into two groups based on their proficiency level. The instruments consisted of a picture identification task and a multiple choice comprehension task. English and Serbo-Croatian are not similar in terms of the binding properties of reflexives. Unlike English, Serbo-Croatian allows both local and long distance antecedents for reflexives but the antecedents must be subject NP's. In view of these differences, Bennett envisaged that at the beginning, L2 learners would transfer the properties of

reflexives in their own language into L2. The results supported her prediction since the L2 learners of English initially bound the English reflexives to long distance antecedents. Bennett claims that the learners' failure stems from the fact that they have difficulty understanding the complex nature of English reflexives. Bennett also makes the point that though the learners do not bind the reflexives to local antecedents only at the initial stages, this does not mean that they have no access to UG but rather it is a matter of preference at these stages.

III.IV.XI. *Yip and Tang (1998)*

Yip and Tang (1998) carried out another study to find out about the L1 transfer in the interpretation of reflexives. They specifically wanted to test the hypothesis put forth by Yuan (1994), who claimed that successful L2 binding properties of reflexives can be due to the similarities in L1 and L2. To test this, they used two hundred and sixty-eight native Cantonese students learning English as L2. Cantonese and English diverge as regards the binding of reflexives. Different from English, in Cantonese, the reflexive *zigei* can be bound locally or long distance and it has to be bound to a subject. Based on a language test, the participants were divided into three groups and they were given a grammaticality judgment test. The results showed that the more advanced the learners were, the more correctly they bound reflexives to antecedents. It was found out that a great deal of the most proficient learners correctly rejected long distance antecedents and accepted local ones. On the other hand, L1 transfer in the interpretation of reflexives was more conspicuous among low level learners since they treated English reflexives like the Cantonese reflexive *zigei*. With respect to the acceptance of object NP's for reflexives in ambiguous mono-clausal sentences, a similar finding was not observed as the learners usually could not see the multi-interpretation in such clauses. Thus, they can be said to stick to the properties of the Cantonese reflexive *zigei*, which allows only subject NP's.

III.IV.XII. *Yuan (1998)*

Yuan (1998) did another study on the acquisition of Chinese long distance reflexives *ziji* by English and Japanese native speakers. There were fifty seven English and twenty four Japanese speakers. It should be recalled here that Chinese *ziji* and Japanese *zibun* have similar binding features. Yuan tried to reveal whether it would be easier for the Japanese learners to acquire the binding properties of Chinese *ziji* since the two languages are similar in that aspect. The instrument used was a multiple choice task. The results showed that there was an apparent indication of the L1 effect in the L2 acquisition of *ziji*. Like Yuan tried to find out, the Japanese speakers did better than L1 English speakers in the interpretation of reflexive *ziji* since they consistently bound it to long distance antecedents unlike English learners of Chinese, who usually bound *ziji* to local antecedents.

III.IV.XIII. Yusa (1998)

Yusa (1998) carried out a study in which he had twenty six L1 Japanese speakers, who were advanced English learners. There were three tasks namely: a syntax task, a multiple choice comprehension task and a grammaticality judgment task. The results of the study demonstrated that 79% to 95% of the learners were able to consistently bind the reflexives to local antecedents in tensed clauses. Moreover, even in the picture-noun type sentences, the L2 learners bound the reflexives to local antecedents. As a conclusion, Yusa claims that UG is available to L2 learners of English.

III.IV.XIV. Akiyama (2002)

Another study was carried out by Akiyama (2002) to find out about the L2 acquisition of locality condition of English reflexives by Japanese learners of English. Akiyama's research was a little different than the previous ones since she carried out a developmental research. The experimental group was divided into five levels based on the length of time learning English. There were also two control groups including twenty English and Japanese speakers. Akiyama used a story based value judgment task, a syntax task, and a transfer task, which required the participants to translate three English biclausal finite

sentences into Japanese. The results indicated that finite sentences were interpreted more correctly than non-finite sentences, which is referred to as ‘tense – infinitive asymmetry’ by Yuan (1994). Akiyama claimed that this asymmetry prevailed among all levels of adult Japanese learners. Another result of the study was that as the proficiency levels of the students increased, they interpreted reflexives in finite clauses better; however, this was not the case for non-finite clauses.

III.IV.XV. Tremblay (2006)

In another study, Tremblay (2006) investigated the second language acquisition of Spanish reflexive passives and reflexive impersonals by French and English speaking adults at an advanced level of proficiency. The participants were 13 English, 16 French and 27 Spanish speakers (controls). They were given a 64-item grammaticality judgment task. The results showed that L2 learners could in general differentiate grammatical from ungrammatical items, but they performed significantly differently from the control group on most sentence types. However, there was not a significant difference between the different L2 groups. The results confirmed that the L2 acquisition of Spanish reflexive passives and reflexive impersonals by French and English speaking adults instantiates a learnability problem, which has not yet been overcome at an advanced level of proficiency.

III.IV.XVI. Jiang (2009)

Jiang investigated whether reflexives in interlanguage grammars (ILGs) are constrained by Principle A of the Binding Theory. These earlier studies focused on the role of sentence type, including both finite and non-finite test sentences; they did not examine the role of antecedent type, namely distinguishing between quantified antecedents and referential antecedents in the test sentences. This study explores Chinese learners’ acquisition of the locality constraints on the binding of English reflexives from a developmental perspective, focusing both on the role of sentence type and the role of antecedent type. A story-based truth-value judgment task was administered to

three proficiency levels of Chinese-speaking learners of English. It was found that the finite/non-finite asymmetry in the learners' long-distance (LD) judgments was strongest for the intermediate participants but much weaker for the beginners and advanced participants; the referential/ quantified asymmetry in the learners' LD judgments was strongest for the advanced participants but much weaker for the beginners and intermediate participants.

III.IV.XVII. *Kim, Montrul, & Yoon (2010)*

Kim, Montrul and Yoon (2010) investigated how the dominant language of Korean heritage speakers (English) influences Korean (minority language) in binding interpretations by comparing the performance of Korean immigrants in English dominant context with that of incomplete learners of Korean and L2 learners of Korean. Four groups (10 Korean immigrants, 17 simultaneous bilinguals, 14 late L2 learners, and 30 Korean native speakers) were tested. Differences between English and Korean in Governing Category and structural constraints were tested through a Truth Value Judgment Task with stories. Overall results showed that Korean immigrants did not differ from Korean controls, while simultaneous bilinguals (incomplete learners) and late L2 learners of Korean showed behavior different from Korean control when two languages were different in their binding properties.

In conclusion, the studies carried out about the acquisition of reflexives and are cited in this thesis can be categorized under three headings:

- a) The studies that gave due importance to the positive development of the L2 learners as their proficiency level in L2 increases (Bennett, 1994; Yip and Tang, 1998; Akiyama, 2002),
- b) The studies the results of which indicated that the L2 learners converged on an intermediate value in L2, not found in either L1 or L2 but still sanctioned by UG and found in certain languages. The significance of these studies was that they still showed a developmental pattern and that the learners were moving from their L1 towards L2 (Finer and Broselow, 1986; Finer, 1991; Hirakawa, 1990, MacLaughlin, 1998),

- c) The studies which were carried out to investigate whether it made a difference in the acquisition of reflexives when the learners' L1 had the same or different binding properties compared to the properties of English reflexives (Thomas, 1991(b); Yuan, 1998).

In this thesis, the issues regarding the development and interlanguage grammar issues will be addressed. As for the item (c) above, since only Turkish L2 learners of English were the participants, investigating this is beyond the scope of this research.

CHAPTER IV

THE STUDY

In this chapter, a study intended to find out about the development of reflexives by Turkish L2 learners of English will be presented. First, the predictions regarding the study will be put forth followed by the explanation of the methodology of the study and the results together with the discussions, conclusions and the implications for further research.

IV.I. Predictions

Recalling the hypotheses (p.4) of the study,

Hypotheses

- 1- Turkish L2 learners of English will mistakenly accept the long distance binding of 'himself, herself'.
- 2- There will be no significant difference between low level (elementary) and high level (upper intermediate) students in terms of the way they interpret reflexives.

it is predicted that there will be significant differences between the native control group and the L2 learners of English. Moreover, since two different L2 groups (elementary, and upper) will be the participants of the study, I also predict that there will be no significant difference in terms of the correct interpretations of reflexives by these learners since such grammatical structures are not explicitly taught in the department of Basic English, Middle East Technical University. Thus, in line with the Full Transfer Full Access Model (FTFA), stating that L2 learners have direct access to innate principles and parameters of Universal Grammar (UG) from the initial state to the end-state in the process of L2 acquisition, in this thesis, I expect that the L2 adult Turkish

learners of English will have full access to UG (full access), but they will also have L1 transfer.

IV.II. Methodology

IV.II.I. Participants

So as to get detailed information regarding the participants, a ‘Language Background Questionnaire’, adopted from Gürel (2002), was given before the Grammaticality- Judgment and Truth-value Judgment tasks (See Appendix A for Language Background Questionnaire). With the help of the questions in the questionnaire, information with respect to the issues below has been collected.

- i) first exposure to L2 English
- ii) L2 proficiency level
- iii) the length of stay abroad (i.e., in an L2 country)
- iv) knowledge of a second foreign language
- v) knowledge of L2 English syntax

The first item was used to understand students’ first exposure to L2 English to create a homogenous L2 group. The second item was for students to evaluate themselves in terms of their proficiency in English. Their evaluation was then compared to their actual L2 level and since all the students made accurate judgments as to their proficiency level, no student was eliminated based on this item. The third item was used to eliminate students who stayed in an English speaking country for more than six months, which could have made a big difference on the parts of such students in the way they interpreted reflexives in English. The fourth and fifth items were also used to eliminate students who knew another second or foreign language or the ones that got explicit instruction in English syntax.

IV.II.I.I. The L2 group

The participants were all students in the Department of Basic English, Middle East Technical University. L2 learners at different proficiency levels in English were used in this study. These were high (upper) and low (elementary) level L2 learners. 5 students at varying proficiency levels and 2 teachers of English took part in the pilot study in order to determine whether there was any problem comprehending the language used in the two tasks or whether there were any points which were not clear.

Thanks to the comments of the students taking part in the pilot study, and a few native colleagues who read the preliminary drafts of the instruments, some alterations, such as the use of the male name 'Richard' instead of another male name 'Ross' since a few students thought what was meant by 'Ross' was actually 'Rose', have been made to clarify certain things in these tasks.

As for the actual study, 149 students (75 elementary and 74 upper) took part in it as L2 learners of English. However, there had to be some changes regarding the characteristics of the L2 learners. The students at the Department of Basic English have to take a proficiency exam, testing grammar, reading, listening and writing, and they can be exempt from the preparatory English classes if they get over 60 in this exam. The students who get lower than sixty and thus have to attend the preparatory classes for one year also have to take another exam called 'The Placement Exam', after which they are placed into appropriate levels based on the overall scores they get both from the Proficiency and the Placement exams. In order to make sure that the students actually belonged to their present levels, the overall scores they obtained from these exams were scrutinized. The overall score range for the elementary was 30 – 52; and for the upper group it was 70 – 93. It should be noted here that although the score range for the elementary group may seem somewhat low, it was sufficient for them to comprehend the instruments to carry out the tasks. The answers of 8 elementary students were omitted from the study since these students' overall scores (20 - 26) were quite below their peers, which may have caused some comprehension problems among them if they had participated in the study. In addition, 1 upper student was taken out of the study since his overall score (58) was almost the same as students from the elementary level.

Since METU is an international university, some of the students at both levels had different L1's such as: Afghan, Azerbaijan, Mogul, and Russian. Such students were also eliminated from the study since the aim is to investigate the acquisition of English reflexives by Turkish L2 learners of English. Finally, the answers of 67 elementary and 73 upper students were analyzed. The L2 students were aged between 17 – 25, and the mean age was 18,83. According to the results obtained from the Language Background Questionnaire (Gürel, 2002) none of the students had ever lived in an English-speaking country before and none of them had ever taken a course in Linguistics or English Syntax. Moreover, almost all the students from both groups said that they seldom used English, and the only place that they used it was the classroom.

IV.II.I.II. The native control group

As for the control group, there were eight participants. Five of the participants were from Britain and four of them from the U.S. The age range of the native group was between 30 – 49, and the mean age was 38,25. All of the participants in the control group were teaching English for a variety of purposes at the time of the study.

IV.III. Data Collection Instruments

There were two instruments used in this study; namely a 'Grammaticality Judgment Task', and a 'Story Based Truth Value Judgments Task', both of which were prepared by the researcher.

IV.III.I. Grammaticality Judgment Task (GJT)

This task format was adopted from Yip and Tang (1998) but with some alterations, such as the addition of extra items (distractors) not including reflexives intended to hide the aim of the study. It consisted of 40 statements, all of which had 3 YES – NO questions that asked students what certain object pronouns and reflexive pronouns referred to. In order not to reveal the aim of the study, 20 statements included object pronouns and the questions in these statements asked students what these object pronouns could refer to. These

questions were eliminated from the study since that was not the objective of the thesis. As for the items that explicitly asked students about reflexive structures, there were 20 statements and 3 questions under each statement. There were two types of sentences in which the reflexives were used in this task: Bi-clausal finite (Bi-clausal sentences including a finite clause) and bi-clausal non-finite (bi-clausal sentences including a non-finite clause) sentences. The rationale behind using these types of sentences is because of practical reasons. Both finite and infinitival sentences were used to see whether students were equally successful or not in both of them or whether they did better in one type of these sentences as in *Finer & Broselow, 1986; Finer, 1991; Hirakawa, 1990, MacLaughlin, 1998*. Mono-clausal sentences were not used since it would be impossible to test whether students would bind reflexives to LD antecedents. Sentences with more than two clauses were not used because the analysis would be too challenging as there would be 16 possible options the students could choose in the GJT. The instruction for this task and an example of the bi-clausal finite sentences are as follows:

Instruction: There are 40 statements and 3 questions for each statement below. Read the statements below and answer **ALL OF THE QUESTIONS** under each statement by circling either the YES or the NO option.

a) Josh was sure that Jack defended himself.

- | | | | |
|----|--|-----|----|
| a- | Does ‘himself’ refer to Josh? | YES | NO |
| b- | Does ‘himself’ refer to Jack? | YES | NO |
| c- | Does ‘himself’ refer to somebody else? | YES | NO |

The other sentence type was the bi-clausal non-finite sentences, an example of which is given below:

b) Elizabeth expected Melinda to protect herself.

- | | | | |
|----|------------------------------------|-----|----|
| a- | Does ‘herself’ refer to Elizabeth? | YES | NO |
| b- | Does ‘herself’ refer to Melinda? | YES | NO |

c- Does ‘herself’ refer to somebody else? YES NO

Unlike the case in Turkish reflexives, students are expected to, if they have accurately acquired the binding properties of English reflexives, only say yes to option ‘b’, which is the sole grammatically acceptable option in both types of the sentences. If students transfer from L1, in which both a long distance and an argument not salient in the discourse can be an appropriate antecedent, they can be mistaken. Thus, the correct choice for all the questions must be circling NO-YES-NO for the questions a, b, c, respectively.

A drawback here is that the grammatical option is to circle the same string of options for all the questions. However, in order not to mislead the students, the options were not scrambled in different questions but they were always supplied in the same order.

IV.III.II. Story Based Truth Value Judgment Task (SBTVJT)

There were series of short English stories in this task. Similar to the first task, in order not to reveal the aim of the study, each story was followed by three sentences, only the first of which was taken into consideration since these were the only ones including reflexive structures. The second and the third questions following each story had examples of object pronouns or they asked some comprehension questions so as not to give the impression that the focus of the study was testing reflexive structures. The participants were asked to read a story and decide whether the subsequent sentences could conceivably be *True* or *False* for the context of that specific story. Similar story-based truth-value judgment tasks have been used in L2 research in the context of reflexive binding (Akiyama, 2002; Thomas, 1995; White et al., 1997). This type of data collection instruments can be said to be more effective compared to the first one because they eliminate the problem of preferences in sentences involving reflexives.

There were 4 different types of sentences and each sentence type was tested using 5 stories. Thus, this task also included 20 stories that were tested. The sentence types and the examples created for each one are as follow:

- a- Bi-clausal finite sentences forcing local antecedents
- b- Bi-clausal non-finite sentences forcing local antecedents

(The stories for the above sentence types were constructed in such a way that the students were expected to say *True* for the first question since the context forced them to do so and the *True* option was the grammatically correct one. Examples a-b, p. 47–48).

- c- Bi-clausal finite sentences forcing long distance antecedents
- d- Bi-clausal non-finite sentences forcing long distance antecedents

(The stories for the *c*, and *d* sentence types were constructed in such a way that the students were led to say *True* for the first question because the context in the stories forces them to do so. In fact, the answers to the first questions for both kinds of the sentences in this task have to be *False* since this option is the grammatically correct one. In this respect, these kinds of stories test students' ability to say *False*, and reject a long distance antecedent for a reflexive even if the context forces them to do the opposite. Examples c-d, p. 47–48).

The Instruction for the Story Based Truth Value Judgment Task (SBTVJT) and Stories prepared for Sentence type a: Bi-clausal finite sentences forcing local antecedents

Instruction: There are 20 paragraphs and 3 questions for each paragraph below. Read the paragraphs below and answer **ALL OF THE QUESTIONS** under each paragraph by circling either the TRUE or the FALSE option. If there is no information about the sentence, please circle the FALSE option.

Ex. a:

Diana has a daughter, Amy. Amy is a very intelligent high school student, so her mother is proud of her. Although Amy is one of the best students in her class, she sometimes says 'Why cannot I be the best student? I got only

85 on the last exam. Why did I not study more? I could have got 100’.

Diana does not like the fact that Amy makes such comments.

- a- Diana is unhappy that Amy criticizes herself. TRUE / FALSE
- b- Diana is unhappy that Amy criticizes her. TRUE / FALSE
- c- Diana is Amy’s daughter. TRUE / FALSE

The story given in (a) is an example for bi-clausal finite sentences. This story forces co-indexation between the local antecedent “Amy” and the reflexive “herself”. If L2 learners act in line with Principle A, stating that an anaphor must be bound in its local domain, they have to accept this statement as “true”. However, if they have not acquired the binding properties of English reflexives, they will probably choose the “false” option for this statement.

Stories prepared for Sentence type b: Bi-clausal non-finite sentences forcing local antecedents

Ex. b:

Ava and her friends went out. While Ava was driving, a car hit Ava’s car. Fortunately, no one was badly hurt; however, Ava’s friend Sandra slightly hurt her arm. Sandra told Ava not to feel bad. Sandra also said that it was the other driver that caused the accident.

- a- Sandra didn’t want Ava to blame herself for the accident. TRUE / FALSE
- b- Sandra didn’t want Ava to blame her for the accident. TRUE / FALSE
- c- Sandra thought that the accident was no one’s fault. TRUE / FALSE

The story given above is an example for bi-clausal non-finite sentences requiring local antecedents. Unlike the story given in (a), this story forces the co-indexation between the reflexive and the subject of the non-finite embedded clause, Ava. L2 learners, aware of the principle A of Binding Theory, will choose “True” for the (a) option in this example.

Stories prepared for Sentence type c: Bi-clausal finite sentences forcing long distance antecedents

Ex. c:

Although Belinda is an active girl who always gets high grades and participates in class discussions, her teacher Georgia does not think that Belinda is a promising student and Belinda is sad because she knows her teacher's feelings about her. There is an important exam, and Georgia thinks Belinda is not going to pass this exam.

- a- Belinda knows that Georgia underestimates herself. TRUE / FALSE
- b- Belinda knows that Georgia underestimates her. TRUE / FALSE
- c- Belinda will pass the exam very easily. TRUE / FALSE

The above example represents the bi-clausal finite sentences long-distance antecedents category. The contexts in these kinds of stories in this task force the co-referentiality between the matrix subject 'Belinda' and the reflexive herself. Nonetheless, this is neither acceptable nor grammatical in English grammar. Hence, the participants should answer (a) as "False" even if the context forces them to do the contrary.

Stories followed by Sentence type d: Bi-clausal non-finite sentences forcing long distance antecedents

Ex. d:

Samantha had an accident last week and her car is useless now. She told her mother Naomi, 'Mom, please buy me a new car.'

- a- Samantha told Naomi to get herself a new car. TRUE / FALSE
- b- Samantha told Naomi to get her a new car. TRUE / FALSE
- c- Naomi won't buy a new car for her daughter. TRUE / FALSE

Similarly, stories like the one above investigate whether L2 learners of English allow long distance antecedents for reflexives in bi-clausal non-finite sentences. Understandably, the context in the story forces the participants to bind the reflexive with the matrix subject *Samantha*. Yet, in English, a reflexive cannot be bound by an NP outside its governing domain. Hence, supposing the L2 learners have acquired the binding properties of English reflexives, the expected and correct answer has to be “False”. On the other hand, if the L2 learners allow long-distance binding of reflexives, which may stem from L1 Turkish influence, they will possibly prefer the “True” option, which is grammatically incorrect.

IV. IV. The Results

IV.IV.I. Grammaticality-judgment Task

It should be noted that the Grammaticality-judgment task (GJT) consists of two categories, namely: bi-clausal finite sentences and bi-clausal non-finite sentences. The numbers of the sentences testing bi-clausal finite sentences are 2, 8, 11, 15, 19, 31, 32, 34, 36, and 37 (ten items in total, see Appendix 2). The numbers of the sentences testing bi-clausal non-finite sentences are 4, 7, 13, 18, 21, 22, 24, 27, 29, and 40 (ten items in total, see Appendix 2). The results of the GJT will be presented according to these categories. So as to reveal whether there are significant differences between the L2 and the control groups with regard to the binding options they preferred, the Mann-Whitney U Test was conducted. Moreover, Wilcoxon Signed Rank Test was carried out to reveal whether the differences within each group (L2 and control group) are significant in terms of their acceptance rate.

Biclausal Finite Sentences

English reflexives, as mentioned earlier, allow only local antecedents in bi-clausal finite sentences. In other words, English reflexives can only be bound by the embedded subject in bi-clausal finite sentences in line with the Binding

Principle A. Table 4 below shows the overall acceptance rates of different antecedents for English reflexives in bi-clausal finite sentences by all groups.

Table 4: GJT Results: Biclausal Finite Sentences

Potential antecedents	Elementary Group (n=67)	Upper Intermediate group (n=73)	Control Group (n=8)
Local only	36,9 (247/670)	57 (416/730)	98,8 (79/80)
*Long Distance only	21,9 (147/670)	19,3 (141/730)	0,0 (0/80)
*Disjoint only	5,2 (35/670)	0,3 (2/730)	0,0 (0/80)
*Local and Long Distance	15,2(102/670)	17,1(125/730)	0,0 (0/80)
*Local and Disjoint	3,7 (25/670)	0,0 (0/730)	0,0 (0/80)
*Long Distance and Disjoint	6,1 (41/670)	1,1 (8/730)	0,0 (0/80)
*Local, Long Distance and Disjoint	4,5 (30/670)	2,2 (16/730)	0,0 (0/80)
*No antecedent	1,5 (10/670)	0,1 (1/730)	0,0 (0/80)
Missing data	4,9 (33/670)	2,9 (21/730)	1,2 (0/80)
Total	100 (670/670)	100 (730/730)	100 (80/80)

Note: * indicates unacceptable antecedents

Note: Missing data were not included in the analyses

Note: ‘Disjoint’ refers to an antecedent not explicitly stated in the sentence

The overall percentage for the correct antecedent, which was the *local antecedent only* option, was chosen by the elementary group at a rate of 36,9%, by the upper intermediate group at a rate of 57% and by the native control group at a rate of 98,8%.

In order to determine whether the scores the elementary, upper and the native control groups obtained were significantly different from each other, the Kruskal-Wallis test was conducted. The obtained test statistics was 30.406 (p-value<0.0001), indicating that at least one group was different from the others

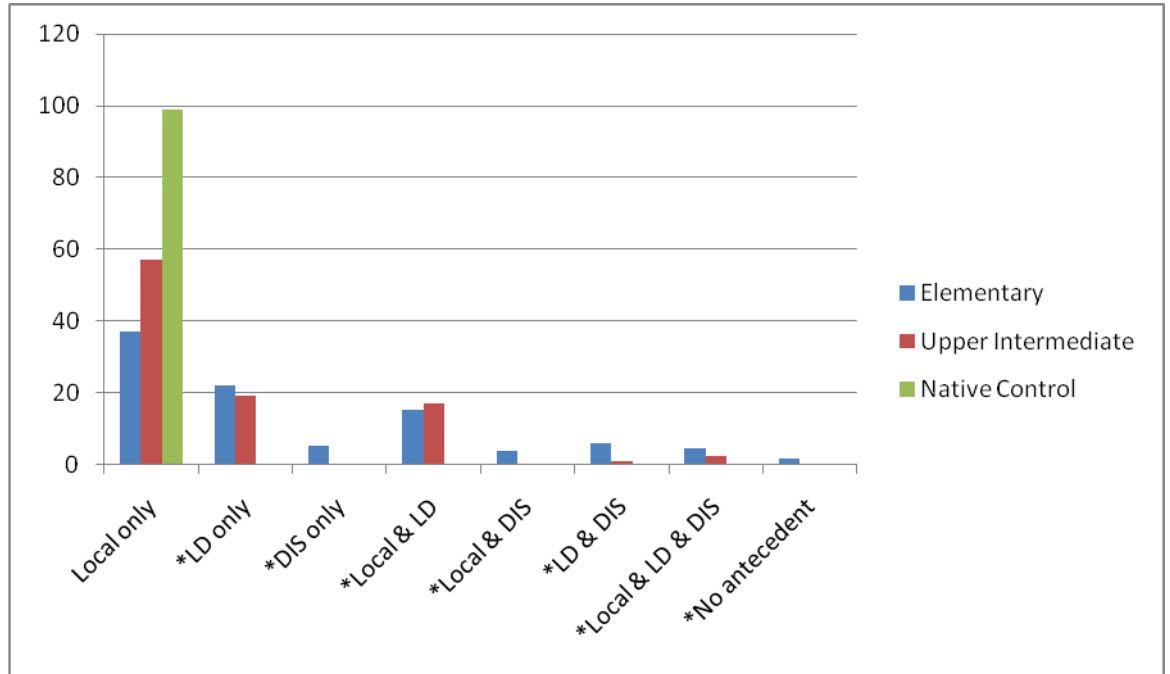
at a 0.95 significance level. In addition, Mann-Whitney U tests were carried out to reveal which groups were different from each other. The results of the Mann-Whitney U tests indicated that there was a statistically significant difference between elementary and upper groups (Mann-Whitney U=1564.5, p-value<0.0001); elementary and native groups (Mann-Whitney U=19.0, p-value<0.0001) and upper and native groups (Mann-Whitney U=45.0, p-value<0.0001).

The local antecedent only option was the most frequent one in terms of its acceptance rates by all groups. The second most frequent reading for the upper intermediate group in bi-clausal finite sentences was the *long distance only* option. Whereas the acceptance rate for this option in the elementary group was 21,9%, this rate was 19,3% for the upper intermediate group. This shows that, unlike the native control group, neither the students in the elementary group nor the ones in the upper intermediate group were aware of the fact that an LD antecedent is not grammatically acceptable in bi-clausal finite sentences in English.

A similarity between the elementary and the upper intermediate group was that they both preferred the *local + long distance antecedent* option for the bi-clausal finite sentences at a considerably high rate. This rate was 15,2% for the elementary group while it slightly increased for the upper group: 17,1%. The results for these questions suggest that there was L1 transfer into L2 grammar as it is possible for an antecedent to be bound by both a local and a long distance antecedent (not at the same time) in Turkish, rendering such constructions ambiguous.

Considering the fact that an argument not salient in the discourse can also be a proper antecedent for *kendisi* in Turkish, and that L2 students in both groups sanctioned *local and long distance* antecedent option at noticeably high rates, it was interesting to see that the students accepted *local, long distance and disjoint* (A disjoint antecedent refers to an argument which is not salient in the discourse) option at low rates. The acceptance percentages for this option was 4,5% and 2,2% for the elementary and the upper groups, respectively.

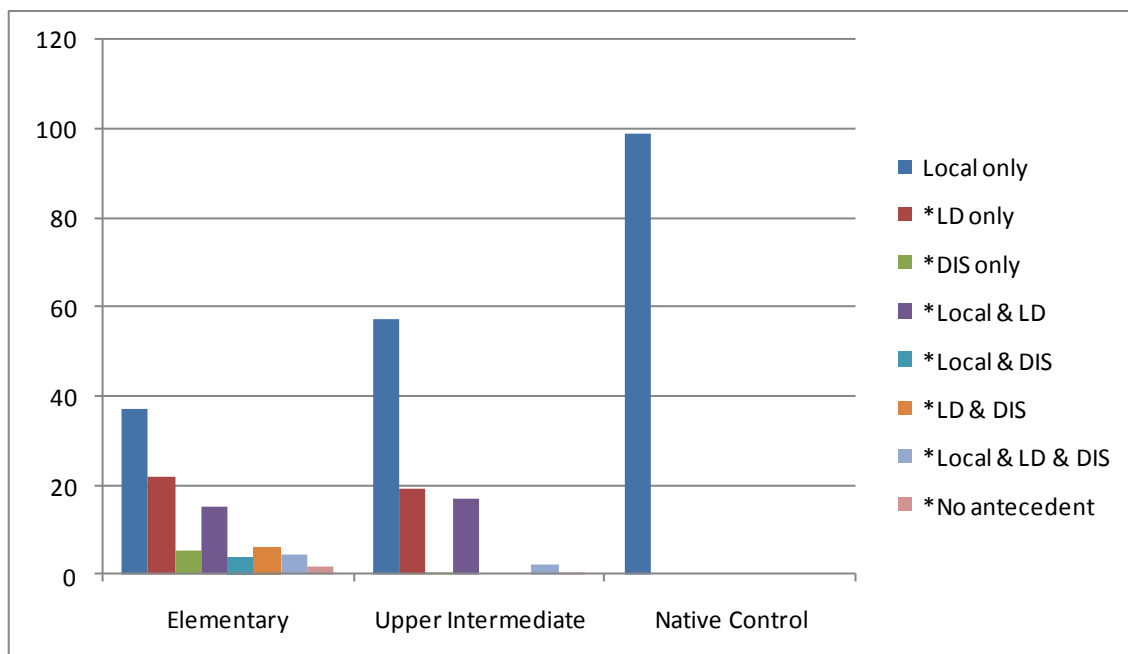
The overall results for the bi-clausal finite sentences can be seen in the figure below.



Note: * indicates unacceptable antecedents

Figure 1: GJT Results: Bi-clausal Finite Sentences

The next figure indicates the same results with a focus on the differences between the groups (in order to make it easier for the reader to see how various preferences compare to each other within a single group)



Note: * indicates unacceptable antecedents

Figure 2: GJT Results: Bi-clausal Finite Sentences (with a focus on the differences between the groups)

It is clear to see the developmental pattern from the elementary to the upper intermediate group. Moreover, that the elementary group preferred the LD option more than the upper intermediate group may suggest L1 interference.

Bi-clausal Non-Finite Sentences

It should be recalled that in bi-clausal non-finite sentences such as “Mary wanted Amy not to blame herself”, the proper antecedents for the English reflexives can only be the subjects of the non-finite embedded clause. As is the case in bi-clausal finite sentences, the matrix subject of bi-clausal nonfinite sentences is considered a long-distance antecedent and thus it cannot be a proper antecedent for English reflexives. Table 5 below presents the overall percentage acceptance rates of different antecedents for all groups in bi-clausal non-finite sentences.

Table 5: GJT Results: Biclausal Non - Finite Sentences

Potential antecedents	Elementary Group (n=67)	Upper Intermediate group (n=73)	Control Group (n=8)
Local only	34,3 (230/670)	55,5 (405/730)	100 (80/80)
*Long Distance only	24,6 (165/670)	17,3 (126/730)	0,0 (0/80)
*Disjoint only	5,7 (38/670)	0,5 (4/730)	0,0 (0/80)
*Local and Long Distance	13,1 (88/670)	20,1 (147/730)	0,0 (0/80)
*Local and Disjoint	4,5 (30/670)	0,0 (0/730)	0,0 (0/80)
*Long Distance and Disjoint	5,5 (37/670)	1,4 (10/730)	0,0 (0/80)
*Local, Long Distance and Disjoint	5,2 (35/670)	1,2 (9/730)	0,0 (0/80)
*No antecedent	0,9 (6/670)	0,0 (0/730)	0,0 (0/80)
Missing data	6,1 (41/670)	4,0 (29/730)	0,0 (0/80)
Total	100 (670/670)	100 (730/730)	100 (80/80)

Note: * indicates unacceptable antecedents

Note: Missing data were not included in the analyses

The same statistical tests were used to analyze the scores in this task. In order to determine whether there were significant differences between elementary, upper and native groups according to the scores they obtained from the bi-clausal non-finite sentences in the Grammatically Judgment Task, the Kruskal-Wallis test was conducted. The obtained test statistics was 36.400 (p-value<0.0001), which showed that at least one group was different from others

at a 0.95 significance level. Moreover, the Mann-Whitney U tests were carried out to reveal which groups were different from each other. The results of Mann-Whitney U tests indicated that there was a statistically significant difference between elementary and upper groups (Mann-Whitney $U=1442.5$, $p\text{-value}<0.0001$); elementary and native groups (Mann-Whitney $U=12.0$, $p\text{-value}<0.0001$) and upper and native groups (Mann-Whitney $U=16.0$, $p\text{-value}<0.0001$).

As can be seen in the table above, the percentages of the correct antecedents in these types of sentences slightly decreased both in elementary and for the upper intermediate groups. Elementary students accurately preferred the *local antecedent only* option at a rate of 34,5 whereas this percentage was 55,5 for the upper intermediate group. The reason why the success of the students in both L2 groups decreased in these types of sentences may be attributed to the complexity of processing bi-clausal non-finite sentences compared to the bi-clausal finite ones. Nevertheless, this claim can only be substantiated and maybe confirmed if the analysis of the data for the story based truth value judgment task (SBTVJT) reveals a similar finding as well.

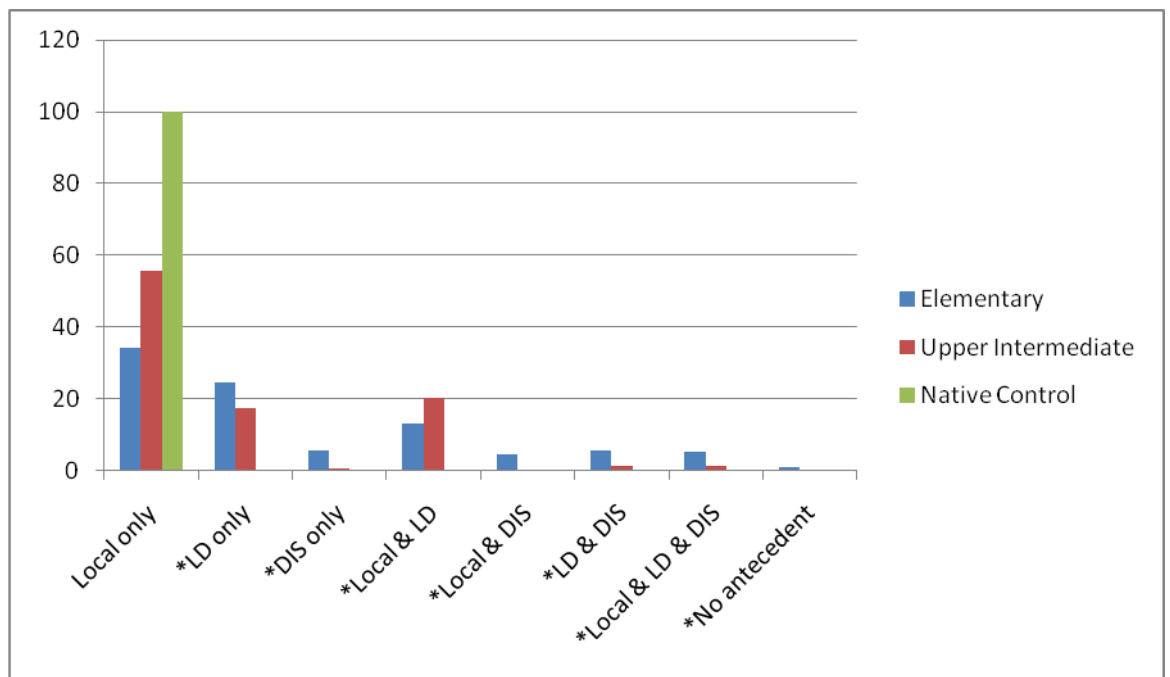
Different from the bi-clausal finite sentences, the second most preferred reading for the L2 groups was not the same in these sentences. While this was *the long distance only* option at a rate of 24,6% for the elementary group, it was the *local and the long distance* option at a rate of 20,1% for the upper intermediate group. Although the elementary group's preference for the *long distance only* option was significantly lower than their acceptance of the correct one, which is the *local antecedent only* option, the *LD only* option was quite high which may have stemmed from L1 interference at initial stages during L2 acquisition. The upper intermediate group also opted for the long distance only option at a considerably high rate of 17,3%. Furthermore, the elementary group preferred the *local and the long distance* option at a slightly lower rate than they did for bi-clausal finite sentences at a rate of 13,1 percent.

Both in the bi-clausal finite and non-finite sentences in the Grammaticality Judgment Task, the native control group consistently bound

reflexives to local antecedents at rates of 98,8 to 100% in these sentence types respectively. Moreover, there was no other option that they preferred.

The L2 groups differed greatly in *local*, *long distance* and *the disjoint* cases. The elementary group accepted the *local*, *long distance* and *the disjoint* antecedent at a rate of 5,2% while the acceptance rate of these antecedents for the upper intermediate group was only 1,2%. Similarly, the elementary group chose the *disjoint* only option at a rate of 5,7% whereas the percentage for the upper intermediate group was 0,5. These findings suggest a development and may mean that as students' L2 proficiency in English increases, they realize the fact that neither long distance nor the antecedents not salient in the discourse can be proper antecedents for English reflexives.

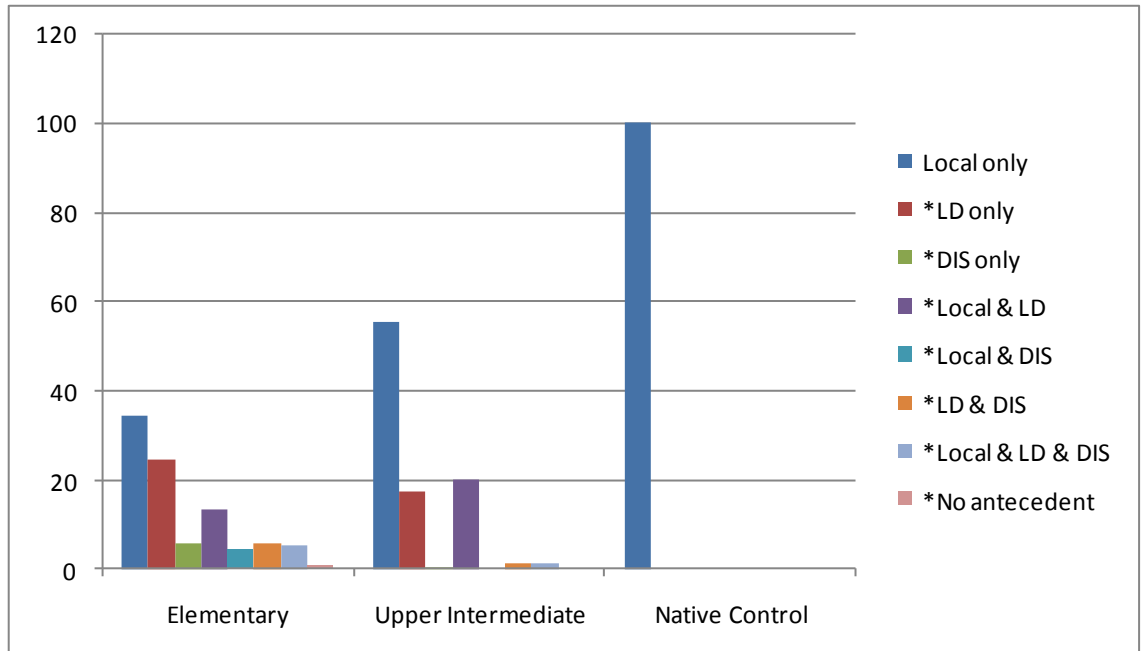
The overall results for the bi-clausal non-finite sentences can be seen in figure 3.



Note: * indicates unacceptable antecedents

Figure 3: GJT Results: Biclausal Non-Finite Sentences

The next figure indicates the same results with a focus on the differences between the groups.



Note: * indicates unacceptable antecedents

Figure 4: GJT Results: Bi-clausal Non-Finite Sentences (with a focus on the differences between the groups)

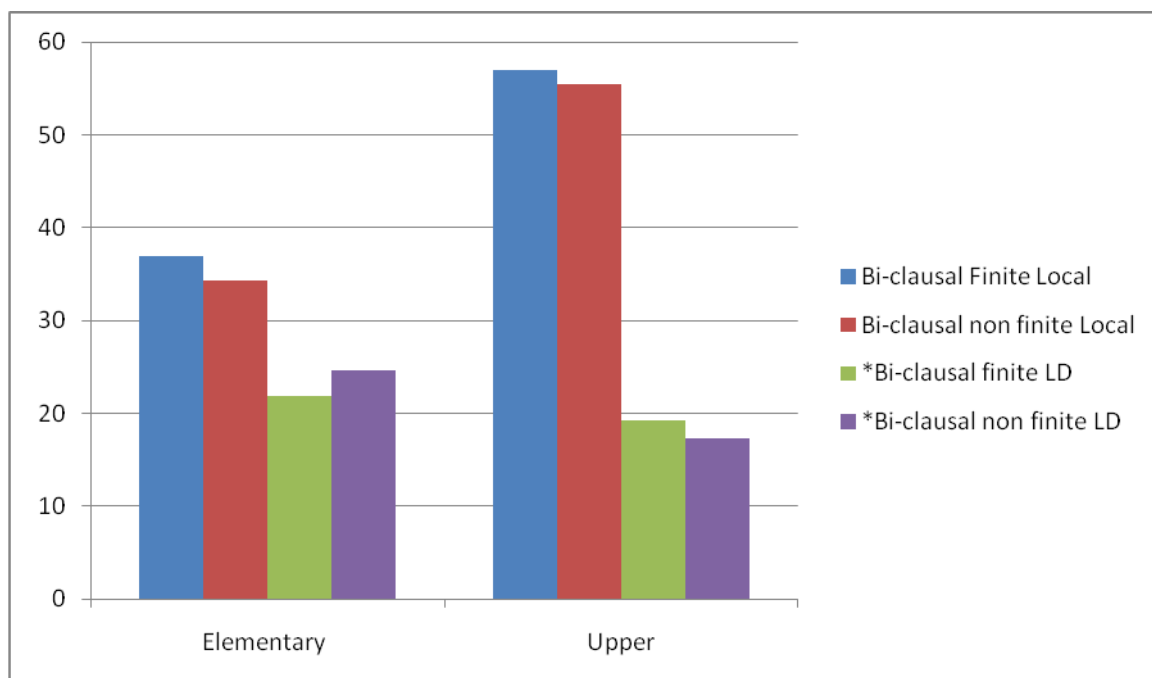
The figure above clearly shows that, similar to the results obtained in bi-clausal finite sentences, there is again a substantial development in the upper intermediate group.

The Issue of Convergence on an Intermediate Grammar in GJT

In order to reveal whether the L2 learners, as in the findings of certain studies (Finer & Broselow, 1986; Finer, 1991; Hirakawa, 1990, MacLaughlin, 1998), accepted LD antecedents more in infinitival clauses than they did in tensed clauses, new statistical tests were carried out. This was very significant since it could have indicated the L2 learners indeed accepted LD antecedents more in infinitival clauses, which may be interpreted as moving from L1

towards L2. The Mann-Whitney U tests were used to reveal whether the L2 groups chose certain antecedents significantly more in different sentence types. The within group statistics revealed that in the elementary group, there was not a significant difference in their acceptance of the local antecedent only, LD, and local and LD options in bi-clausal finite and non-finite sentences. The important issue here is that among elementary learners, there was not significant difference (Mann-Whitney $U=1564.5$, $p\text{-value}<0.0001$) in the way they preferred the LD only antecedent in bi-clausal finite and non-finite sentences. Thus, it could be argued that they did not converge on an intermediate GCP value (value c). In other words, they did not allow LD antecedents significantly more in non-finite clauses than in finite ones.

The exact same result was observed with the upper intermediate group when their preferences for the bi-clausal finite and non-finite sentences were analyzed. The Mann-Whitney U tests indicated that there was not a significant difference in their acceptance of the local antecedent only, LD, and local and LD options in bi-clausal finite and non-finite sentences. Among the upper intermediate learners, there was not a significant difference (Mann-Whitney $U=1742.5$, $p\text{-value}<0.0001$) in the way they preferred the LD only antecedent in bi-clausal finite and non-finite sentences. Hence, they cannot be said to be converging on an intermediate GCP value. The findings of these new statistical tests can be summarized in the figure below:



Note: * indicates unacceptable antecedents

Figure 5: L2 groups' acceptance of Local and LD antecedents in different sentence types in GJT (to address the issue of an Intermediate Grammar)

As can be interpreted by the figure, neither of the L2 groups allowed LD binding significantly more in infinitival clauses than they did in tensed ones. Thus, convergence on an intermediate GCP value is not the case.

IV.IV.II. Story Based Truth Value Judgment Task

It should be recalled that the SBTVJT consists of 4 different sentence types. For each of these sentence types, 5 stories have been created by the researcher. The sentence types that are tested are:

- a- Bi-clausal finite sentences forcing Local antecedents:

Sentences constructed for this part of the task force the participants to bind the reflexives to local antecedents, which are the grammatical ones in English. The numbers of the stories in this category are 1, 4, 6, 14, and 19 (see Appendix 2).

- b- Bi-clausal non-finite sentences forcing Local antecedents: Sentences constructed for this part of the task force the participants to bind the reflexives to local antecedents, which are the grammatical ones in English. The numbers of the stories in this category are 3, 7, 9, 11, and 18 (see Appendix II).

- c- Bi-clausal finite sentences forcing Long Distance antecedents: Sentences constructed for this part of the task force the participants to bind the reflexives to long distance antecedents, which are the ungrammatical ones in English. The numbers of the stories in this category are 8, 10, 12, 15 and 16 (see Appendix II).

- d- Bi-clausal non-finite sentences forcing Long Distance antecedents: Sentences constructed for this part of the task force the participants to bind the reflexives to long distance antecedents, which are the ungrammatical ones in English. The numbers of the stories in this category are 2, 5, 13, 17, and 20 (see Appendix II).

Bi-clausal finite sentences forcing Local antecedents

The following table shows the overall acceptance rates of the different antecedents for these types of sentences.

Table 6: SBTVJT Results: Biclausal Finite Sentences forcing local antecedents

Potential antecedents	Elementary Group (n=67)	Upper Intermediate group (n=73)	Control (n=8)	Group
Local (forced)	66,3 (222/335)	84,9 (310/365)	95 (38/40)	
*Long Distance	21,2 (71/335)	7,4 (27/365)	5 (2/40)	
Missing data	12,5 (42/335)	7,7 (28/365)	0 (0/40)	
Total	100 (335/335)	100 (365/365)	100 (40/40)	

Note: * indicates unacceptable antecedents

Note: Missing data were not included in the analyses

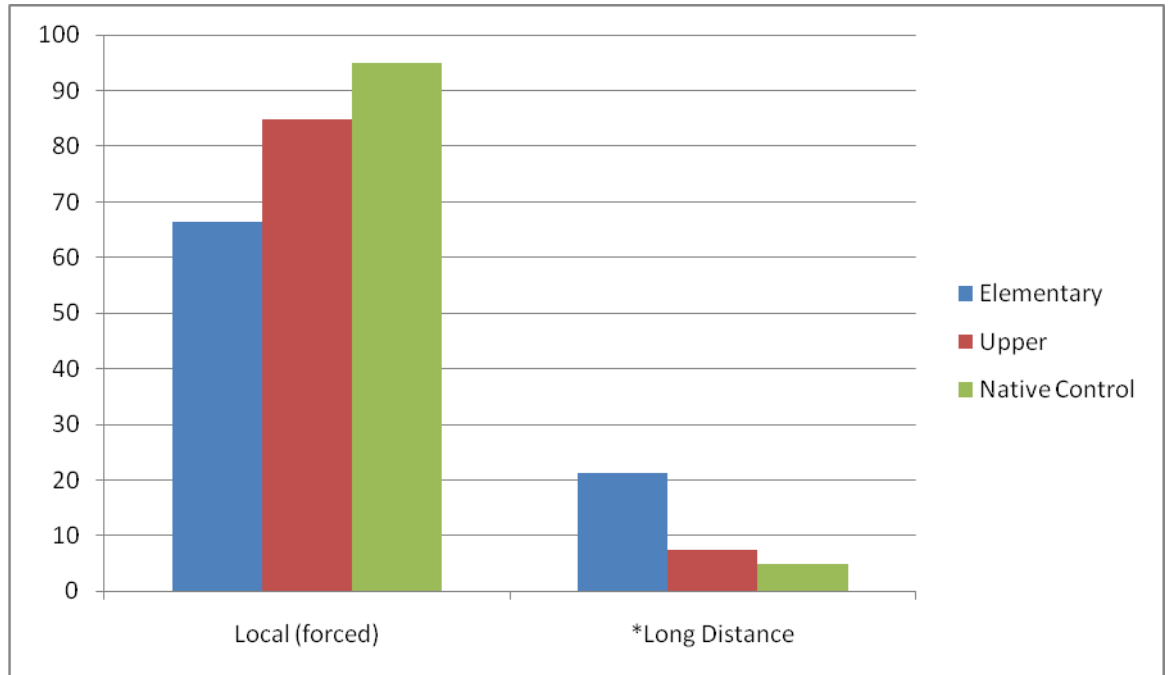
To decide whether the differences were significant between the elementary, upper intermediate and the native control groups according to the scores they had from the bi-clausal finite sentences forcing local antecedents in the story based truth value judgment task, the Kruskal-Wallis test was conducted. The obtained test statistic was 22.067 ($p\text{-value} < 0.0001$). It indicated that at least one group was different from others at a 0.95 significance level. In addition, Mann-Whitney U tests were carried out to find out which groups were different from each other. The results of Mann-Whitney U tests revealed that there was a statistically significant difference between elementary and upper groups (Mann-Whitney $U=1501.5$, $p\text{-value} < 0.0001$); and elementary and native control groups (Mann-Whitney $U=103.0$, $p\text{-value}=0.003$). However, the upper intermediate and the native control groups did not differ significantly from each other (Mann-Whitney $U=210.5$, $p\text{-value}=0.141$).

The results indicate a significant improvement from the elementary to the upper intermediate level

As for the upper intermediate group, they can be said to be highly successful in interpreting reflexives correctly in these types of sentences

because there was no statistically significant difference between this group and the native control group.

The overall results for the bi-clausal finite sentences forcing local antecedents are also given in figure 6.



Note: * indicates unacceptable antecedents

Figure 6: SBTVJT Results: Bi-clausal Finite Sentences forcing local antecedents

Bi-clausal Non-Finite Sentences forcing local antecedents

The overall results for the bi-clausal non-finite sentences forcing local antecedents are also given in table 7.

Table 7: SBTVJT Results: Biclausal Non - Finite Sentences forcing local antecedents

Potential antecedents	Elementary Group (n=67)	Upper Intermediate group (n=73)	Control Group (n=8)
Local (forced)	60 (201/335)	82,7 (302/365)	95 (38/40)
*Long Distance	26,9 (90/335)	7,9 (29/365)	5 (2/40)
Missing data	13,1 (44/335)	9,3 (34/365)	0 (0/40)
Total	100 (335/335)	100 (365/365)	100 (40/40)

Note: * indicates unacceptable antecedents

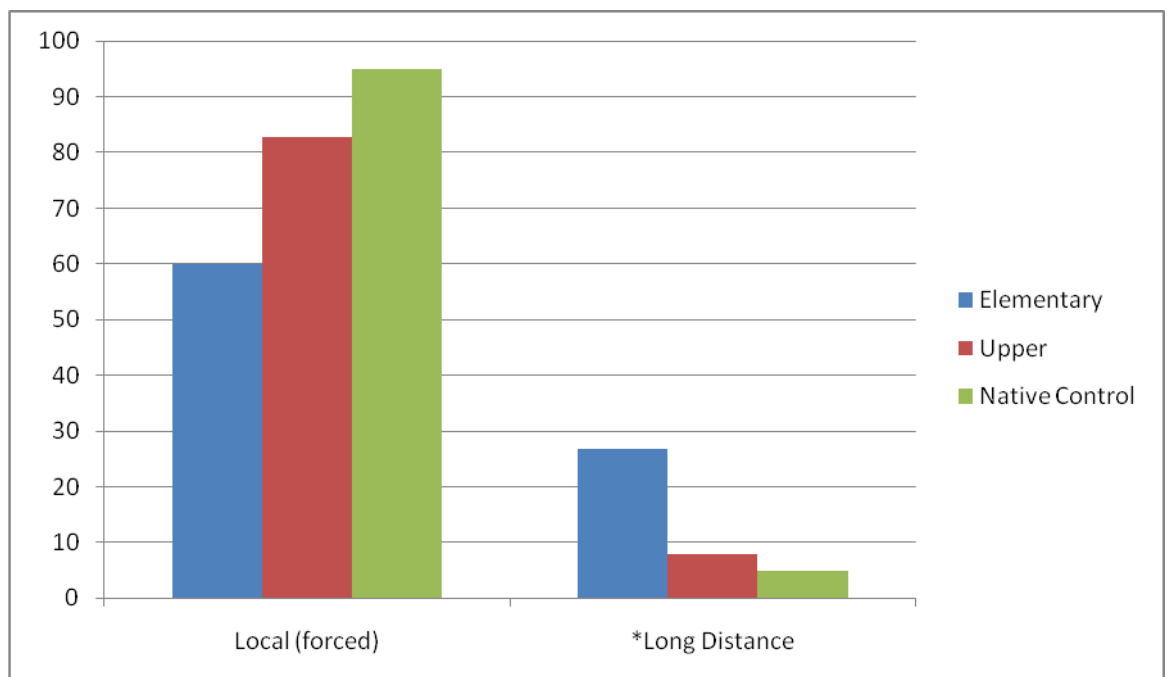
Note: Missing data were not included in the analyses

The same data analysis procedure was applied for this task also. First of all, in order to determine whether there were significant differences between elementary, upper and native groups according to the scores they obtained from the bi-clausal non-finite sentences forcing local antecedents in the story based truth value judgment task, the Kruskal-Wallis test was applied. The obtained test statistics was 25.755 (p-value<0.0001) showing that at least one group differed from others at a 0.95 significance level. Furthermore, Mann-Whitney U tests were carried out to see which groups were different from each other. The results of the Mann-Whitney U tests indicated that there was a statistically significant difference between elementary and upper intermediate groups (Mann-Whitney U=1413.0, p-value<0.0001); elementary and native groups (Mann-Whitney U=90.0 p-value=0.002). The upper intermediate and the native groups did not differ significantly from each other (Mann-Whitney U=205.5, p-value=0.121).

The results for these kinds of sentences were almost the same as the results for the bi-clausal finite sentences forcing local antecedents for the upper

and the native control groups. Their correct acceptance rates for the forced local antecedents were 82,7 and 95% for these groups respectively. However, there was a slight decline of the correct antecedents at a rate of 6,3% for the elementary group compared to the results they obtained from the bi-clausal finite sentences forcing local antecedents. The rate of the correct interpretation of reflexives for the elementary group was only 60%, which may be attributed to the fact that the non-finite sentences may have given these L2 learners fewer clues as to what the proper antecedents for the reflexives in such sentences had to be. The results of both the elementary and the upper intermediate groups are parallel to those they obtained from the first instrument, i.e. Grammaticality Judgment Task in that the percentages of the correct answers were higher in bi-clausal finite sentences than the non-finite ones, in that task as well.

The overall results for the bi-clausal non-finite sentences forcing local antecedents can also be seen in figure 7.



Note: * indicates unacceptable antecedents

Figure 7: SBTVJT Results: Bi-clausal Non - Finite Sentences forcing local antecedents

It can be claimed based on the figure above that L2 learners accepted local option more and LD option less as their proficiency in L2 increased, which again shows a clear developmental pattern.

Bi-clausal Finite Sentences forcing long distance antecedents

Below is a table with the overall scores the groups obtained in this part of the SBTVJT task.

Table 8: SBTVJT Results: Biclausal Finite Sentences forcing long distance antecedents

Potential antecedents	Elementary Group (n=67)	Upper Intermediate group (n=73)	Control Group (n=8)
Local	39,1 (131/335)	65,8 (240/365)	92,5 (37/40)
*Long Distance (forced)	46,3 (155/335)	21,6 (79/365)	7,5 (3/40)
Missing data	14,6 (49/335)	12,6 (46/365)	0 (0/40)
Total	100 (335/335)	100 (365/365)	100 (40/40)

Note: * indicates unacceptable antecedents

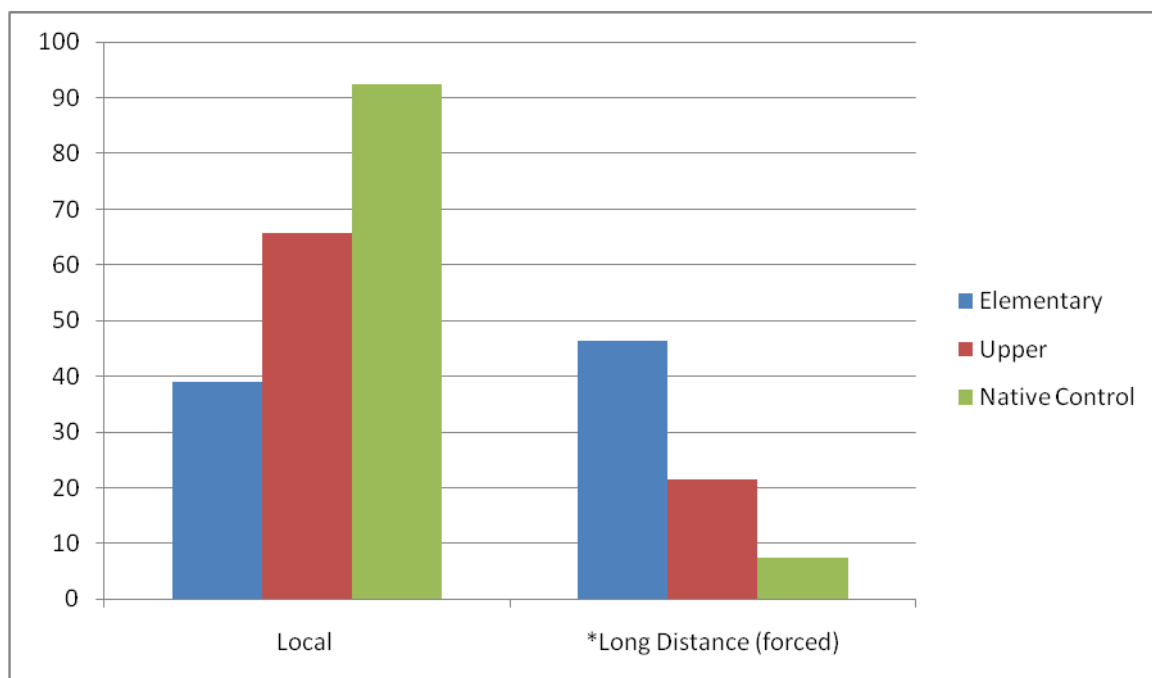
Note: Missing data were not included in the analyses

To analyze these scores, Kruskal-Wallis test was carried out to determine whether there were significant differences between elementary, upper intermediate and the native control groups with respect to the scores they obtained from the biclausal finite sentences forcing long distance antecedents in the story based truth value judgment task. The obtained test statistics was 31.820 (p-value<0.0001), which indicated that at least one group was different

from others at a 0.95 significance level. Furthermore, Mann-Whitney U tests were carried out to find out which groups were different from each other. The results of the Mann-Whitney tests indicated that there was a statistically significant difference between elementary and upper intermediate groups (Mann-Whitney U=1350.5, p-value<0.0001); elementary and native groups (Mann-Whitney U=43.5 p-value<0.0001) and the upper intermediate and native groups (Mann-Whitney U=130.0, p-value=0.008).

It should be remembered that these paragraphs forced the co-indexation of the reflexive with a long distance antecedent, which is not sanctioned in English. Thus, the participants were expected to say *False* for the True – False questions including reflexives since these sentences deliberately led them to say *True* and bind the reflexives to long distance antecedents. For this reason, the L2 groups scored significantly lower than they did for the stories forcing local antecedents. The rates of the overall correct percentages for this task (the correct answer was the False option) were 39,1%; 65,8%; and 92,5% for the elementary, upper intermediate and the native control groups respectively.

Figure 8 below shows the overall acceptance rates of possible antecedents for these types of sentences in the SBTVJT.



Note: * indicates unacceptable antecedents

Figure 8: SBTVJT Results: Bicausal Finite Sentences forcing long distance antecedents

Based on the figure above, L2 learners accepted local option more and LD option less as their proficiency in L2 increased, which again suggests a clear developmental pattern.

Bi-clausal Non-Finite Sentences forcing long distance antecedents

Below are the overall scores the groups obtained in this part of the task.

Table 9: SBTVJT Results: Bi-clausal Non - Finite Sentences forcing long distance antecedents

Potential antecedents	Elementary Group (n=67)	Upper Intermediate group (n=73)	Control Group (n=8)
Local	38,8 (130/335)	66 (241/365)	92,5 (37/40)
*Long Distance (forced)	47,5 (159/335)	22,7 (83/365)	5 (2/40)
Missing data	13,7 (46/335)	11,2 (41/365)	2,5 (40/40)
Total	100 (335/335)	100 (365/365)	100 (40/40)

Note: * indicates unacceptable antecedents

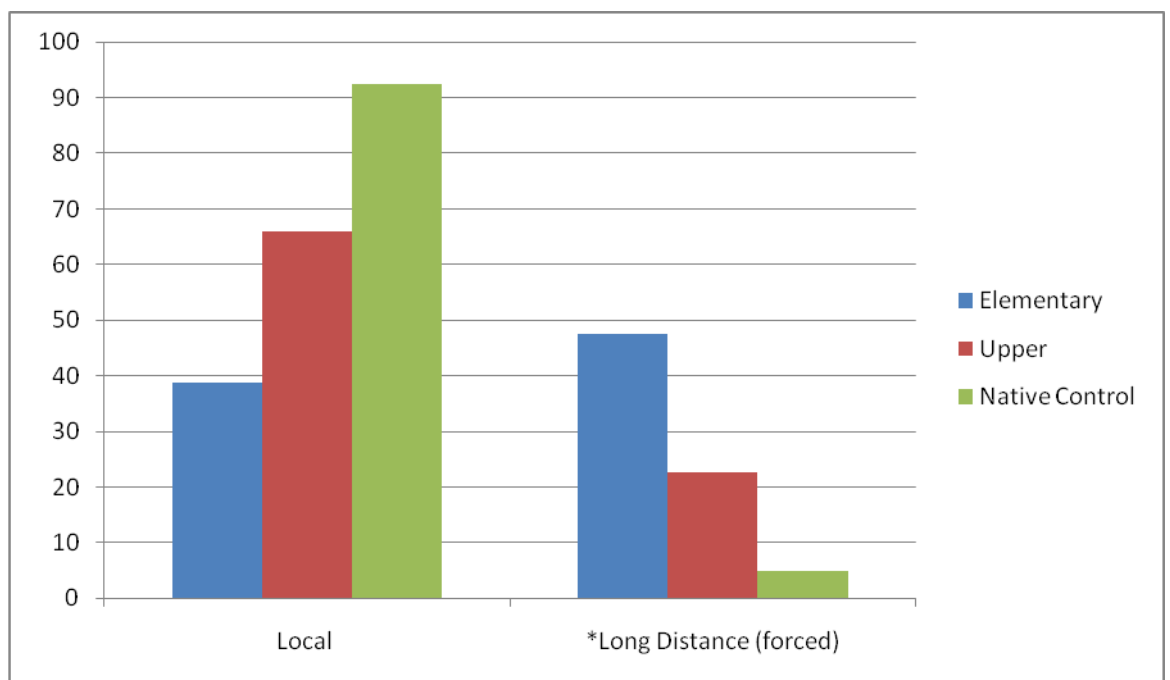
Note: Missing data were not included in the analyses

The same data analyses process was also used for these sentences. Initially, so as to determine if there were significant differences between elementary, upper intermediate and native control groups regarding the scores they obtained from the bi-clausal non - finite sentences forcing long distance antecedents in the story based truth value judgment task, the Kruskal-Wallis test was used. The obtained test statistics was 36.351 (p-value<0.0001) suggesting that at least one group was different from others at a 0.95 significance level. Moreover, Mann-Whitney U tests were carried out to reveal which groups were different from each other. The results of Mann-Whitney U tests indicated that there was a statistically significant difference between elementary and upper intermediate groups (Mann-Whitney U=1256.0, p-value<0.0001); elementary and native control groups (Mann-Whitney U=25.5 p-value<0.0001) and the upper intermediate and native control groups (Mann-Whitney U=140.5, p-value=0.013).

Similar to the results they obtained from the previous task forcing the co-indexation of the reflexives with long distance antecedents, an option not

acceptable in English in line with the principle A of the Binding Theory, the L2 groups; namely the elementary and the upper intermediate groups were not very successful in this task since they rejected LD antecedents, that is answered the questions forcing LD antecedents as *False* (which was the correct option), only at a rate of 38,8 and 66% respectively. These scores significantly differed from those obtained by the native control group for they rejected LD antecedents even when the stories forced such antecedents at a rate of 92,5%. However, there was still a developmental pattern since the upper intermediate group rejected LD option significantly more than the elementary group did.

The overall results for the bi-clausal non-finite sentences forcing long distance antecedents can also be seen in figure 9.



Note: * indicates unacceptable antecedents

Figure 9: SBTVJT Results: Bicausal Non - Finite Sentences forcing long distance antecedents

The Issue of Convergence on an Intermediate Grammar in SBTVJT

Similar to the new statistical tests carried out for the GJT, in this part, some more tests were again carried to illuminate the issue of converge on an intermediate grammar in L2. In order to find out whether the L2 learners did significantly better in either the bi-clausal finite and non-finite sentences forcing local or long distance antecedents, The Mann-Whitney U tests were used. They revealed that there was no significant difference in either of the L2 groups' acceptance of the local antecedent only, LD, and local and LD options in bi-clausal finite and non-finite sentences within themselves. In the LD option between bi-clausal finite and non-finite sentences forcing local antecedents, there was not a significant difference for the elementary group (Mann-Whitney $U=1522.5$, $p\text{-value}<0.0001$). For the different sentence types forcing LD antecedents, the result was the same since it was again not significant (Mann-Whitney $U=1610$, $p\text{-value}<0.0003$).

The exact same result was observed with the upper intermediate group when their preferences for the bi-clausal finite and non-finite sentences forcing local and LD antecedents were analyzed. The Mann-Whitney U tests indicated that there was not a significant difference in their acceptance of the local antecedent only, LD, and local and LD options in bi-clausal finite and non-finite sentences. Similar to the elementary group, among the upper intermediate learners, there was not a significant difference in the way they preferred the LD only antecedent in bi-clausal finite sentences forcing LD antecedents (Mann-Whitney $U=1765.5$, $p\text{-value}<0.0001$) and bi-clausal non-finite sentences forcing LD antecedents (Mann-Whitney $U=1684.5$, $p\text{-value}<0.0002$). Hence, they cannot be said to be converging on an intermediate GCP value.

Summary of the Results

To sum up, this thesis investigated the L2 acquisition of the binding properties of English reflexives by Turkish L2 learners of English. 67 elementary and 73 upper intermediate L2 learners of English took part in this study. In addition, there were 8 native speakers of English acting as the native control group. The participants were required to complete two tasks; namely a

Grammaticality Judgment Task and a Story Based Truth Value Judgment Task. The results of the Grammaticality Judgment Task indicated that both in bi-clausal finite sentences and in non-finite ones, there were significant differences between both the L2 groups themselves, and the L2 groups and the native control group. In that respect, Turkish L2 learners of English seemed to diverge from the native English norms. However, the upper intermediate group clearly showed a developmental pattern since they interpreted reflexives in a correct way significantly more than the elementary group in both of the sentence types in GJT.

In conclusion, the results indicated that the L2 learners of English allowed LD or disjoint antecedents for reflexives despite the fact that such constructions are not allowed in English grammar. Especially in both of the sentence types in the GJT, there were significant differences in the acceptance rates of the local antecedents by both of the L2 groups. The native control group scored significantly better than the L2 groups in this task.

As in the case of bi-clausal finite sentences, in bi-clausal nonfinite sentences in GJT, both of the L2 groups, unlike the native control group, failed to consistently choose the local antecedent option for the reflexives, which requires English reflexives to be bound by an argument in the same clause. That is, they did not seem to behave in line with the binding properties of L2 English reflexives.

However, the elementary and the upper intermediate groups differed from each other in the two tasks and the subsections of those two tasks with the upper intermediate group better interpreting the reflexives and thus being more successful. Hence, it has to be emphasized that there was clearly a remarkable development from the elementary to the upper intermediate level.

Regarding the overall results of the SBTVJT, it can be argued that the L2 students were quite proficient in the interpretation of reflexives when the stories and the sentences including the reflexives forced them to bind these reflexives to local antecedents. It should be noted here that although there were significant differences between the elementary and the upper intermediate groups; and between the elementary and the native control groups, the upper

intermediate and the native control groups did not differ significantly in their interpretation of reflexives in stories with bi-clausal finite and non-finite sentences forcing local antecedents. Thus, it was observed that the upper intermediate learners of L2 English converged on the grammar of native speakers of English with respect to reflexive binding. In other words, like the native controls, most of the upper intermediate students preferred only local antecedents for English reflexives, which is in line with the Binding Principle A.

However, the stories including bi-clausal finite and non-finite sentences forcing local antecedents required the participants to say *True*, and accept the sentence, which was the correct option. In other words, the stories in the first two parts of the SBTVJT necessitated the participants to accept something which was true. Yet, in the c, and d story types (including bi-clausal finite and non-finite sentences forcing LD antecedent) statements, the semantic truth value of the sentences forced the L2 learners to bind reflexives by LD antecedents. Thus, apparently, it was far more difficult for both L2 groups to reject a statement and say *False*, since the success rates of both of the L2 groups were greatly reduced in the final two tasks which forced the participants to bind reflexives to LD antecedents and thus give a wrong answer.

CHAPTER V

CONCLUSION AND DISCUSSIONS

The first research question of the thesis was the availability of the Subset Principle and UG in second language acquisition. Let us review the subset principle and the related research question in the thesis.

Within the Principles and Parameters approach to UG, children may sometimes make a mistake in setting the correct parameter but UG will always guide them. In cases where the target language instantiates a subset value and the learner incorrectly chooses the superset value, there will be no positive evidence to guide him to re-set the parameter. His grammar will overgenerate. The subset principle has been formulated to solve this problem. It states that in such a situation, the learner is forced to choose the subset value and hence circumvents the problem. Whether or not this principle is operative in second language acquisition, i.e. whether second language learners set the parameters of the target language with the help of UG or are forced to transfer from their L1 has been debated in the acquisition literature. This thesis aimed to tackle this question by examining the acquisition of reflexive binding by Turkish learners of L2 English. The starting point of the thesis was that a learner of English whose native language is Turkish would face the subset principle problem as English instantiates the subset value and Turkish the superset value of reflexive binding. The Subset Principle suggests that, if it is operative in L2, L1 Turkish learners of L2 English would start with the most restrictive grammar, i.e. the English pattern of reflexive binding. If, on the other hand, the subset principle is not operative, they would over-generalize the Turkish pattern (i.e. long-distance binding), and since there would not be negative evidence in the data guiding them to restrict their choice to the subset value (i.e. local binding), their end-state grammar will differ from L1 English speakers. The results of the study suggest that L1 Turkish learners of L2 English did not start with the English pattern, the subset value. Therefore, regarding the first research question, we are led to conclude that the subset principle is not at work in L2 acquisition. The

fact that both of the L2 groups differed significantly from the native control group in their acceptance of the local antecedent only option in the Grammaticality Judgment Task (GJT, p.52, 58), and that as the L2 learners' proficiency in L2 increased so did their correct interpretations of reflexives led us to this conclusion. However, because there was a significant difference between the L2 groups themselves and there was probably no negative evidence (the reason why negative evidence plays a crucial role is that without negative evidence, it may be almost impossible for an L2 learner, having a superset language as L1, to constrict the grammar and understand that the relevant structure (LD binding in this study) is disallowed in the L2) to lead them in the language acquisition process, a question arises as to what phenomenon is at work to account for the developmental pattern observed from the elementary to the upper intermediate level. According to the literature, one answer to that question might lie in the partial availability of UG. As White (1989) argues, it cannot be determined for sure whether the L2 learners have the necessary level of L2 proficiency to demonstrate if a specific principle is operating in their interlanguage grammar. Many of the principles identified by UG grammarians include complex sentences, and thus they can only be expected to manifest themselves in later stages of development. White states that it is critical to make sure that the L2 learners are able to deal with the necessary structures. Otherwise, they may violate a universal rule not because of the non-availability of UG, but because the structure in question is beyond their capacity. In our case, lower proficiency learners made more mistakes than the higher proficiency learners in choosing the right option in the Grammaticality Judgment Task (GJT). In other words, low proficiency learners were sometimes unable to deal with reflexive binding and made the wrong choice. On the other hand, we might claim that because higher proficiency learners were better at dealing with the necessary structure, they made fewer errors, i.e., they were closer to setting the subset value correctly. The significant difference between the L2 groups themselves might seem to corroborate White's (1989) claim, i.e., it is not the UG or the Subset Principle that is not available. It is rather the fact

that the learners L2 capacity is well below to understand certain structures in L2.

Another explanation of the difference between lower proficiency and higher proficiency L2 learners might be found in Full Transfer Full Access hypothesis (FTFA) (Schwartz, & Sprouse, 1994, 1996). According to this hypothesis, L1 grammar including L1 parameter settings constitutes the initial state of the L2 acquisition (full transfer) but L2 learners have full access to UG at all times during the acquisition process (full access), and parameter resetting is usually possible. In line with this theory, it could be argued that lower proficiency English L2 Turkish learners who started with the superset value of their L1 still had access to UG through the L1. Thus, they had L1 transfer at the initial state. But as the significant development at the later stages indicates, they had full access to UG, which is why higher proficiency learners could reset the parameter correctly at later stages. However, this thesis does not fully support this hypothesis, as the answers to the second research question and the following discussion show.

Regarding the second research question, which was the question of how reflexives develop in the interlanguage of L2 learners of native Turkish students and whether there is any development in terms of the interpretation of English reflexives as L2 learners' proficiency level increases in English, the following comments could be made. There was a substantial improvement in the interpretation of reflexives in all the parts of the instruments in the higher proficiency L2 group. This improvement could partly be attributed, as White (1989) suggests, to the fact that at initial stages, the L2 learners may arrive at ungrammatical language structures not because of the unavailability of UG but due to the fact that they are not proficient enough to grasp and interpret certain grammatical structures. However, if the less proficient learners were unable to grasp and understand certain structures, how could they arrive at a correct grammar at a rate of almost 35% in the first instrument (Grammaticality Judgment Task, p.52, 58) and 50% in the second one (Story Based Truth Value Judgment Task p. 54, 68). This cannot be attributed to the chance of guessing,

either. Moreover, considering the fact that all the items in both of the instruments had almost the same difficulty level in terms of the language used, it can no longer be argued that low level L2 learners could not be as successful as the high level L2 learners since the language used in the instruments was far beyond their comprehension. At this point a challenging question arises as to what may account for the improvement in the upper intermediate level? This issue forces us to make another proposal rather than supporting what White (1989) proposed. The Full Transfer Full Access model (FTFA) provides one explanation, where high proficiency learners were able to re-set the parameter with positive evidence alone. However, since higher proficiency learners in this study did not fully converge with native speakers, it is not tenable, either.

Based on my experience as a language teacher, I would like to propose yet another possibility. It seems to me that the more proficient L2 group was indeed exposed to negative evidence in certain ways, i.e. in class or through explicit instruction, but the low level L2 learners were not. I propose that the low level L2 learners may be making use of the Avoidance Strategy (Dörnyei & Scott, 1995a, 1995b). This strategy manifests itself in two ways. The first one is referred to as 'Message Abandonment', which is leaving a message unfinished because of some language difficulty. The second one is 'Message reduction (topic avoidance)', and it means to reduce the message by avoiding certain language structures or topics considered problematic language-wise or by leaving out some intended elements because of a lack of linguistic resources (Dörnyei & Scott, 1995a, 1995b). If the low level L2 learners are making use of such strategies, they may not get negative evidence. Since these low level learners are not much proficient in reflexives, they may intentionally avoid using them (Message Abandonment) or use some substitute words (Message reduction or Topic avoidance) for them when they have to use reflexives. This prevents low-level L2 learners from making mistakes and thus they are not corrected. Consequently, it might be through the use of these Avoidance strategies that the low level L2 learners never get negative evidence. On the other hand, the high level L2 learners are exposed to the target language more.

In addition, because of their proficiency and confidence in L2, they never or seldom make use of such strategies. Hence, they use reflexives, make mistakes and get corrected. In this way, they get direct or indirect negative evidence that the low level L2 learners do not. In short, what I am proposing is that negative evidence and increased exposure to the target language might be candidate explanations for high proficiency L2 learners' better performance in this study.

As for the third research question regarding the similarity between the acquisition of English reflexives by Turkish, Chinese, Japanese, or Korean learners, there is both a similarity and a difference. The similarity is that, compared to L2 learners of English in certain studies (Yip & Tang, 1998; Akiyama, 2002; Bennett, 1994) outlined in chapter III, Turkish L2 learners of English also show a similar developmental pattern since they bind reflexives to LD antecedents at initial stages but there is a tremendous development at later stages as the students' proficiency in L2 increases. Thus, there is a positive direction in the interpretation of reflexives as the learners get more proficient in L2.

There is also a difference between Turkish, Chinese, Japanese, and Korean L2 learners of English. In some studies regarding the acquisition of reflexives in English (Finer & Broselow, 1986; Finer, 1991; Hirakawa, 1990, MacLaughlin, 1998), it was revealed that L2 learners allowed LD binding in infinitival clauses more than they did in finite ones, which according to Governing Category Parameter (GCP, p. 12) is an intermediate value found in languages, an example of which is Russian. The L2 learners in these studies had such an interpretation of reflexives even though neither of their L1 or L2 had such an intermediate value, allowing reflexives to be bound in infinitival clauses but not in tensed ones. The significance of this finding was that L2 learners were moving from the least restrictive Governing Category Parameter value (1e, the least restrictive GCP value, p. 14) in their L1 towards a more restrictive one (1c, an intermediate GCP value, p. 13) and maybe the next stage in this developmental pattern was for the learners to arrive at the most restrictive value (1a, the most restrictive GCP value, p. 13) in L2, which was the only acceptable option in English.

So as to address such a question, namely the question of whether each of the L2 groups followed such a pattern within themselves and allowed LD antecedents for reflexives significantly more in infinitival clauses than in tensed ones, additional statistical tests were run to analyze the data. It was revealed that such a pattern was never the case for either of the L2 groups in either of the instruments since there was no significant difference in the way the learners interpreted reflexives in bi-clausal finite or non finite sentences. Thus, the L2 groups in this study did not converge on an intermediate Governing Category Parameter value (1c, p.13) as was the case for the studies mentioned above.

In conclusion, in addition to FTFA and White's explanations, it may be proposed that, for Turkish students to acquire the reflexives fully, they need to be exposed to negative evidence. I claim that this is the case because even though there is development in the use of reflexives as proficiency level increases, the learner groups tested in this study did not converge fully with English native speaker's use of reflexives. However, further studies should be carried out, preferably with an advanced and an end state L2 group, to better explain the developmental pattern the L2 students have in the interpretation of reflexives.

As a final word, it can be argued that there is certainly some universal knowledge and intuitions regarding the grammatical aspects of L2 in the learners' minds. However, this knowledge and intuitions have to be stimulated by a great amount of input in the L2 in order to emerge. Only this can account for the improvement of certain structures in a second language considering the lack of explicit teaching of these structures, but exposure to the target language need not undermine negative evidence in cases where the target language is predominantly learnt in the classroom rather than the social environment, as is the case in this study.

Limitations of the study

One of the limitations of the study was that there could have been another instrument such as a Picture Based Truth Value Judgment Task, which could have improved the reliability of the findings.

Another limitation can be attributed to the lack of an advanced and an end state L2 group. If there had been such a third and a fourth group of L2 learners, they could have been compared with the native control group to see whether they converged with the native group in their interpretations of reflexives. Moreover, this could shed more light on the issue of development; that is to say, it would help to answer the question ‘Does the proficiency level in L2 always have a positive correlation with the success in the interpretation of reflexives in L2?’

Yet another limitation of the study concerned the L2 learners’ rejection of other options in the GJT once they said ‘YES’ to a particular option. The potential problem was that it may have been possible for the L2 learners to set up a certain kind of strategy and assume that if the reflexive is bound by a certain antecedent, no matter whether it is a local, LD, or a disjoint one, then they were required to say ‘YES’ to that option and automatically eliminate the other options. In order to learn about such preferences of the L2 learners in the study, an informal follow-up interview was carried out with 8 upper intermediate and 7 elementary students. They all said that they did not eliminate the other options once they said ‘YES’ to a question. Thus, they still thought that the reflexives could be bound by some other arguments and went on with the questionnaire. This could have been a confounding factor but it did not affect the results. Nevertheless, further studies should carefully factor out such a probability.

Implications of the study

The overall results showed that the L2 groups differed greatly from the native control group although in some tasks the upper intermediate group had a native-like interpretation of reflexives. On the other hand, even a cursory examination of English textbooks and curricula shows that binding facts of English and how they differ from the facts of Turkish are seldom taught in schools in Turkey. Hence, if the aim is to teach a foreign language in a location where the target language is not spoken as a native language, where the students rarely have the opportunity to use the target language outside the classroom, it

is vital that there be syntax courses teaching such issues explicitly, rather than expecting the students to understand them without being taught.

In conclusion, I believe it has to be emphasized that what the L2 learners need is as much positive evidence as possible but this should not undermine the importance of negative evidence. The reason why negative evidence is vital, as Özçelik (2009) suggested, may be because of the fact that when the L2 of learners' is in a subset – superset relation with the L1 (e.g. L1 being the superset, and L2 the subset as in our case), the L2 learners face a learnability problem since their task is to constrict their grammar, which does not seem plausible based solely on positive evidence. Thus, they need explicit instruction in such cases. Through such input in the target language, and with the support of syntax courses, L2 learners could be closer to native speakers in their interpretations in L2.

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APPENDICES

APPENDIX A

Language Background Questionnaire

(Adopted from Gürel, 2002)

I agree to participate in this study:

Signature:

Name: (Please print): _____

Date:

I. PERSONAL INFORMATION (Will Remain Confidential)

Last Name, First Name:

Telephone Number:

E-mail address:

Sex: Female

Male

Date of Birth:

Place of Birth: City:

Country:

Occupation:

Highest Level of Schooling:

Secondary

High school

University

II. LINGUISTIC INFORMATION

Mother Tongue:

Language of Education:

Primary School:

Secondary School:

High School:

University:

Age & Place of first exposure to English:

How often do you use English?

Where do you generally use English?

Home:

Work:

Social:

Have you lived in an English-speaking country before? If so, how long did you stay there?

Country (1)

Age of arrival:

Length of stay:

Country (2)

Age of arrival:

Length of stay:

III. ENGLISH LANGUAGE PROFICIENCY

Have you ever taken a course in Linguistics or English Syntax? If yes, when and where?

How would you rate your linguistic ability in English in the following areas?

	Beginner	Intermediate	Advanced	Near-Native
Reading				
Writing				
Speaking				
Listening				
Overall Competence				

IV. SECOND FOREIGN LANGUAGE(S): (besides English)

	Beginner	Intermediate	Advanced	Near-Native
Reading				
Writing				
Speaking				
Listening				
Overall Competence				

APPENDIX B

Instruments

I – Grammaticality Judgment Task

There are 40 statements and 3 questions for each statement below. Read the statements below and answer **ALL OF THE QUESTIONS** under each statement by circling either the YES or the NO option.

1- Julia knows that Susan admires her.

- | | | | |
|----|------------------------------------|-----|----|
| a- | Does 'her' refer to Julia? | YES | NO |
| b- | Does 'her' refer to Susan? | YES | NO |
| c- | Does 'her' refer to somebody else? | YES | NO |

2- Claire thinks that Helen does not respect herself.

- | | | | |
|----|--|-----|----|
| a- | Does 'herself' refer to Claire? | YES | NO |
| b- | Does 'herself' refer to Helen? | YES | NO |
| c- | Does 'herself' refer to somebody else? | YES | NO |

3- Maggie knew that Sue shot her.

- | | | | |
|----|------------------------------------|-----|----|
| a- | Does 'her' refer to Maggie? | YES | NO |
| b- | Does 'her' refer to Sue? | YES | NO |
| c- | Does 'her' refer to somebody else? | YES | NO |

4- Patrick wanted Bruce to draw a picture of himself.

- | | | | |
|----|--|-----|----|
| a- | Does 'himself' refer to Patrick? | YES | NO |
| b- | Does 'himself' refer to Bruce? | YES | NO |
| c- | Does 'himself' refer to somebody else? | YES | NO |

5- Ross wanted Leonard to criticize him.

- | | | | |
|----|------------------------------------|-----|----|
| a- | Does 'him' refer to Ross? | YES | NO |
| b- | Does 'him' refer to Leonard? | YES | NO |
| c- | Does 'him' refer to somebody else? | YES | NO |

6- Monica knew that Susan blamed her.

- | | | | |
|----|------------------------------------|-----|----|
| a- | Does 'her' refer to Monica? | YES | NO |
| b- | Does 'her' refer to Susan? | YES | NO |
| c- | Does 'her' refer to somebody else? | YES | NO |

7- Nancy reminded Sarah to take care of herself.

- | | | | |
|----|--|-----|----|
| a- | Does 'herself' refer to Nancy? | YES | NO |
| b- | Does 'herself' refer to Claire? | YES | NO |
| c- | Does 'herself' refer to somebody else? | YES | NO |

8- Alicia gave Rachel good news about herself.

- | | | | |
|----|--|-----|----|
| a- | Does 'herself' refer to Alicia? | YES | NO |
| b- | Does 'herself' refer to Rachel? | YES | NO |
| c- | Does 'herself' refer to somebody else? | YES | NO |

9- Philip sent Brad a letter about him.

- | | | | |
|----|------------------------------------|-----|----|
| a- | Does 'him' refer to Philip? | YES | NO |
| b- | Does 'him' refer to Brad? | YES | NO |
| c- | Does 'him' refer to somebody else? | YES | NO |

10- Jane wanted Rachel to forgive her.

- | | | | |
|----|------------------------------------|-----|----|
| a- | Does 'her' refer to Jane? | YES | NO |
| b- | Does 'her' refer to Rachel? | YES | NO |
| c- | Does 'her' refer to somebody else? | YES | NO |

11- Amanda felt that Cindy believed in herself.

- | | | | |
|----|--|-----|----|
| a- | Does 'herself' refer to Amanda? | YES | NO |
| b- | Does 'herself' refer to Cindy? | YES | NO |
| c- | Does 'herself' refer to somebody else? | YES | NO |

12- Annie told Janice about her.

- | | | | |
|----|------------------------------------|-----|----|
| a- | Does 'her' refer to Annie? | YES | NO |
| b- | Does 'her' refer to Janice? | YES | NO |
| c- | Does 'her' refer to somebody else? | YES | NO |

13- Jason reminded Ben to write a story about himself.

- | | | | |
|----|--|-----|----|
| a- | Does 'himself' refer to Jason? | YES | NO |
| b- | Does 'himself' refer to Ben? | YES | NO |
| c- | Does 'himself' refer to somebody else? | YES | NO |

14- Gary asked Kirk about him.

- | | | | |
|----|------------------------------------|-----|----|
| a- | Does 'him' refer to Gary? | YES | NO |
| b- | Does 'him' refer to Kirk? | YES | NO |
| c- | Does 'him' refer to somebody else? | YES | NO |

15- Ray knew that Ben hated himself.

- | | | | |
|----|--|-----|----|
| a- | Does 'himself' refer to Ray? | YES | NO |
| b- | Does 'himself' refer to Ben? | YES | NO |
| c- | Does 'himself' refer to somebody else? | YES | NO |

16- John thought that Jack praised him.

- | | | | |
|----|------------------------------------|-----|----|
| a- | Does 'him' refer to John? | YES | NO |
| b- | Does 'him' refer to Jack? | YES | NO |
| c- | Does 'him' refer to somebody else? | YES | NO |

17- Kathy wanted Sue to look at her in the mirror.

- | | | | |
|----|------------------------------------|-----|----|
| a- | Does 'her' refer to Kathy? | YES | NO |
| b- | Does 'her' refer to Sue? | YES | NO |
| c- | Does 'her' refer to somebody else? | YES | NO |

18- Elizabeth expected Melinda to protect herself.

- | | | | |
|----|------------------------------------|-----|----|
| a- | Does 'herself' refer to Elizabeth? | YES | NO |
| b- | Does 'herself' refer to Melinda? | YES | NO |

c- Does 'herself' refer to somebody else? YES NO

19- Matt was happy that Albert cured himself.

a- Does 'himself' refer to Matt? YES NO

b- Does 'himself' refer to Albert? YES NO

c- Does 'himself' refer to somebody else? YES NO

20- Bill showed Jack a poster of him.

a- Does 'him' refer to Bill? YES NO

b- Does 'him' refer to Jack? YES NO

c- Does 'him' refer to somebody else? YES NO

21- William wanted Paul to have confidence in himself.

a- Does 'himself' refer to William? YES NO

b- Does 'himself' refer to Paul? YES NO

c- Does 'himself' refer to somebody else? YES NO

22- Bruce will not want Duncan to boast about himself.

a- Does 'himself' refer to Bruce? YES NO

b- Does 'himself' refer to Duncan? YES NO

c- Does 'himself' refer to somebody else? YES NO

23- Jack gave Dave a picture of her.

a- Does 'him' refer to Jack? YES NO

b- Does 'him' refer to Dave? YES NO

c- Does 'him' refer to somebody else? YES NO

24- Jason wanted Nathan to introduce himself.

a- Does 'himself' refer to Jason? YES NO

b- Does 'himself' refer to Nathan? YES NO

c- Does 'himself' refer to somebody else? YES NO

25- Tim said that Jim liked him.

- | | | | |
|----|------------------------------------|-----|----|
| a- | Does 'him' refer to Tim? | YES | NO |
| b- | Does 'him' refer to Jim? | YES | NO |
| c- | Does 'him' refer to somebody else? | YES | NO |

26- Alice wanted Mary to take care of her.

- | | | | |
|----|------------------------------------|-----|----|
| a- | Does 'her' refer to Alice? | YES | NO |
| b- | Does 'her' refer to Mary? | YES | NO |
| c- | Does 'her' refer to somebody else? | YES | NO |

27- Susan did not want Sue to criticize herself.

- | | | | |
|----|--|-----|----|
| a- | Does 'herself' refer to Susan? | YES | NO |
| b- | Does 'herself' refer to Sue? | YES | NO |
| c- | Does 'herself' refer to somebody else? | YES | NO |

28- Lucy asked Carol to introduce her.

- | | | | |
|----|------------------------------------|-----|----|
| a- | Does 'her' refer to Lucy? | YES | NO |
| b- | Does 'her' refer to Carol? | YES | NO |
| c- | Does 'her' refer to somebody else? | YES | NO |

29- Mary begged Christine to think about herself.

- | | | | |
|----|--|-----|----|
| a- | Does 'herself' refer to Mary? | YES | NO |
| b- | Does 'herself' refer to Christine? | YES | NO |
| c- | Does 'herself' refer to somebody else? | YES | NO |

30- Mary showed Anna a photograph of her.

- | | | | |
|----|------------------------------------|-----|----|
| a- | Does 'her' refer to Mary? | YES | NO |
| b- | Does 'her' refer to Anna? | YES | NO |
| c- | Does 'her' refer to somebody else? | YES | NO |

31- Josh was sure that Jack mentioned himself.

- | | | | |
|----|-------------------------------|-----|----|
| a- | Does 'himself' refer to Josh? | YES | NO |
|----|-------------------------------|-----|----|

- b- Does 'himself' refer to Jack? YES NO
c- Does 'himself' refer to somebody else? YES NO

32- Mary felt that Claire liked herself.

- a- Does 'herself' refer to Mary? YES NO
b- Does 'herself' refer to Claire? YES NO
c- Does 'herself' refer to somebody else? YES NO

33- Roy told Steven a story about him.

- a- Does 'him' refer to Roy? YES NO
b- Does 'him' refer to Steven? YES NO
c- Does 'him' refer to somebody else? YES NO

34- David was happy that Jack hid himself.

- a- Does 'himself' refer to David? YES NO
b- Does 'himself' refer to Jack? YES NO
c- Does 'himself' refer to somebody else? YES NO

35- Michael gave Tim good news about him.

- a- Does 'him' refer to Michael? YES NO
b- Does 'him' refer to Tim? YES NO
c- Does 'him' refer to somebody else? YES NO

36- Stephen is writing Bill a paragraph about himself.

- a- Does 'himself' refer to Stephen? YES NO
b- Does 'himself' refer to Bill? YES NO
c- Does 'himself' refer to somebody else? YES NO

37- Richard was sure that Jack defended himself.

- a- Does 'himself' refer to Richard? YES NO
b- Does 'himself' refer to Jack? YES NO
c- Does 'himself' refer to somebody else? YES NO

38- Susan wanted Sue to think about her.

- | | | | |
|----|------------------------------------|-----|----|
| a- | Does 'her' refer to Susan? | YES | NO |
| b- | Does 'her' refer to Sue? | YES | NO |
| c- | Does 'her' refer to somebody else? | YES | NO |

39- Nancy said that Natalie cut her.

- | | | | |
|----|------------------------------------|-----|----|
| a- | Does 'her' refer to Nancy? | YES | NO |
| b- | Does 'her' refer to Natalie? | YES | NO |
| c- | Does 'her' refer to somebody else? | YES | NO |

40- Nelly expected Sue to explain herself.

- | | | | |
|----|--|-----|----|
| a- | Does 'herself' refer to Nelly? | YES | NO |
| b- | Does 'herself' refer to Sue? | YES | NO |
| c- | Does 'herself' refer to somebody else? | YES | NO |

II- Truth Value Judgment Task

There are 20 paragraphs and 3 questions for each paragraph below. Read the paragraphs below and answer **ALL OF THE QUESTIONS** under each paragraph by circling either the TRUE or the FALSE option. If there is no information about the sentence, circle FALSE.

1- Diana has a daughter, Amy. Amy is a very intelligent high school student, so her mother is proud of her. Although Amy is one of the best students in her class, she sometimes says 'Why cannot I be the best student? I got only 85 on the last exam. Why did I not study more? I could have got 100'. Diana does not like the fact that Amy makes such comments.

- | | | | | |
|----|---|------|---|-------|
| a- | Diana is unhappy that Amy criticizes herself. | TRUE | / | FALSE |
| b- | Diana is unhappy that Amy criticizes her. | TRUE | / | FALSE |
| c- | Diana is Amy's daughter. | TRUE | / | FALSE |

2- Eliza took the driving exam 3 times but she failed each time. Therefore, she asked her friend, Norah, to help her so that she could pass the driving exam. Norah accepted it, and Eliza finally passed the exam.

a- Eliza wanted Norah to prepare herself for the exam. TRUE / FALSE

b- Eliza wanted Norah to prepare her for the exam. TRUE / FALSE

c- Norah did not want Eliza to help her at the beginning. TRUE / FALSE

3- Ava and her friends went out. While Ava was driving, a car hit Ava's car. Fortunately, no one was badly hurt; however, Ava's friend Sandra slightly hurt her arm. Sandra told Ava not to feel bad. Sandra also said that it was the other driver that caused the accident.

a- Sandra didn't want Ava to blame herself for the accident. TRUE / FALSE

b- Sandra didn't want Ava to blame her for the accident. TRUE / FALSE

c- Sandra thought that the accident was no one's fault. TRUE / FALSE

4- Arnold was an average student in class and everyone thought that he was not very clever. As a final assignment in his science class, his teacher gave them an assignment, which required the students to use their creativity, imagination, and intelligence. When the results of the assignment were announced, it was revealed that Arnold got the highest grade. Arnold's best friend, Curt, was really happy for Arnold.

a- Curt was glad that Arnold proved himself to be intelligent. TRUE/FALSE

b- Curt was glad that Arnold didn't disappoint him. TRUE/FALSE

a- Arnold was very happy that he got the highest grade. TRUE / FALSE

5- Monica and Rachel are good friends. Rachel is a teacher. Monica is a chef but she does not like the restaurant that she works for. Rachel knows the owner of a good restaurant, which is looking for a chef. Monica learns this and asks for a favor from Rachel.

a- Monica wanted Rachel to recommend herself for the position. TRUE/FALSE

b- Monica wanted Rachel to recommend her for the position. TRUE/FALSE

c- Monica is sure that she is going to get the position easily. TRUE /FALSE

6- Although Victor was a brilliant basketball player, he was never satisfied with his accomplishments. Whenever he had an important match, he felt uncomfortable but eventually his team would always win. Victor's father Richard knew that Victor did not have self confidence.

- a- Richard knows that Victor underestimates himself. TRUE / FALSE
- b- Richard knows that Victor underestimates him. TRUE / FALSE
- c- Victor feels uncomfortable when he is with Richard. TRUE / FALSE

7- Owen is a first year student in the Physics department. He has many exams the following week. One of his friends, Nigel, knows that the exams are really difficult and he tells Owen to study hard.

- a- Nigel wanted Owen to prepare himself for the exams. TRUE / FALSE
- b- Nigel wanted Owen to prepare him for the exams. TRUE / FALSE
- c- Owen is very interested in his department: Physics. TRUE / FALSE

8- Anthony and Edwin are both politicians and they have been friends for over 10 years. Even though Anthony is more successful than Edwin, Edwin always criticizes Anthony. However, Anthony is not happy with this situation.

- a- Anthony is unhappy that Edwin criticizes himself. TRUE / FALSE
- b- Anthony is unhappy that Edwin criticizes him. TRUE / FALSE
- c- Anthony and Edwin have been in politics for 10 years. TRUE / FALSE

9- Oliver is taking violin courses and he is by far the best student in class. He can play songs that he has only heard once. His friend Ralph is very happy for Oliver. However, Oliver has a bad habit of talking about and exaggerating his success. His friend Ralph told Oliver that talking about his success all the time was not appropriate.

- a- Ralph did not want Oliver to praise himself. TRUE / FALSE
- b- Ralph did not want Oliver to praise him. TRUE / FALSE
- c- Oliver finds it quite easy to play the violin. TRUE / FALSE

10- Gloria is an antisocial and introverted student who does not like to talk or make comments in class. However, she is the cleverest girl in class. As she always keeps her ideas to herself, no one knows that she is in fact intelligent. She is even writing a book about psychology and human relationships. Recently, her friend Nelly showed Gloria's book to the class and everyone was impressed by it, and Gloria really liked that.

- a- Gloria is happy that Nelly proved herself to be intelligent. TRUE /FALSE
- b- Gloria is happy that Nelly didn't disappoint her. TRUE /FALSE
- c- Nelly helped her friend by showing everyone the book. TRUE /FALSE

11- Andrew is a very rich businessman but he drives a car which is very cheap. Andrew's best friend is Michael. Whenever his friend Michael sees Andrew, he tells him, 'You should buy a better car.'

- a- Michael tells Andrew to get himself a better car. TRUE / FALSE
- b- Michael tells Andrew to get him a better car. TRUE / FALSE
- c- Andrew is not very willing to get a better car. TRUE / FALSE

12- Although Belinda is an active girl who always gets high grades and participates in class discussions, her teacher Georgia does not think that Belinda is a promising student and Belinda is sad because she knows her teacher's feelings about her. There is an important exam, and Georgia thinks Belinda is not going to pass this exam.

- a- Belinda knows that Georgia underestimates herself. TRUE / FALSE
- b- Belinda knows that Georgia underestimates her. TRUE / FALSE
- c- Belinda will pass the exam very easily. TRUE / FALSE

13- Samantha had an accident last week and her car is useless now. She told her mother Naomi, 'Mom, please buy me a new car.'

- a- Samantha told Naomi to get herself a new car. TRUE / FALSE
- b- Samantha told Naomi to get her a new car. TRUE / FALSE
- c- Naomi won't buy a new car for her daughter. TRUE / FALSE

14- John and Steve are best friends. John is the most successful student in their class but Steve is a very bad student. Whenever an exam result is announced, John usually gets 90 while Steve usually gets 40. John always talks about his high grades and Steve does not like this.

- a- Steve is not happy that John boasts about himself. TRUE / FALSE
- b- Steve is not happy that John boasts about him. TRUE / FALSE
- c- John and Steve have been friends for many years. TRUE / FALSE

15- Wendy was a brilliant student in geography classes and her geography teacher Rosemary always said that Wendy was the best student. However, Wendy would always get embarrassed when her teacher said good things about her. Therefore, Wendy politely asked Rosemary not to do that.

- a- Wendy did not like the fact that Rosemary praised herself. TRUE/FALSE
- b- Wendy did not like the fact that Rosemary praised her. TRUE /FALSE
- c- Wendy's favorite subject in school was Geography. TRUE/ FALSE

16- Cindy and Stephanie are working on an environmental project together. Cindy is very creative and always comes up with excellent ideas. On the other hand, Stephanie is usually not as creative as Cindy. Whenever they are in a meeting, Stephanie talks about the brilliant ideas Cindy comes up with and this embarrasses Cindy.

- a- Cindy dislikes that Stephanie boasts about herself. TRUE / FALSE
- b- Cindy dislikes that Stephanie boasts about her. TRUE / FALSE
- c- Cindy is more creative than Stephanie. TRUE / FALSE

17- Raymond and his friend Peter are very good swimmers. They went swimming last week but something unfortunate happened. Peter got cramp in his legs and he shouted for help but Raymond thought that Peter was just joking. Luckily, Peter was able to make it to the beach. After that, Peter did not talk to Raymond because Raymond did not help him. Raymond was really sorry and he told Peter the reason why he did not help him.

- a- Raymond did not want Peter to blame himself for the accident. TRUE/FALSE
- b- Raymond did not want Peter to blame him for the incident. TRUE/FALSE
- c- Raymond was really sorry for not helping Peter immediately. TRUE/FALSE

18- Rosalie lived in New York for five years but she had to move to Texas for her studies. She had a really hard time in Texas because everything was different there. Seeing that Rosalie was having problems with her new life, her teacher, Martha gave Rosalie some advice about how she could make things easier and she told Rosalie that she had to get used to living in Texas.

- a- Martha wanted Rosalie to adapt herself to the new life. TRUE / FALSE
- b- Martha wanted Rosalie to adapt her to the new life. TRUE / FALSE
- c- Rosalie had some difficulty adapting to the new life. TRUE / FALSE

19- Martin and Jack are best friends and graduate students at a university. Their professor is looking for an assistant. As Jack has a part time job, he does not want this position. Martin wants this position very much and he has got lots of qualifications but he is shy, and he does not go and talk to the professor. Jack tries to encourage his friend to go and tell the professor what he wants.

- a- Jack hopes Martin will recommend himself for the position. TRUE /FALSE
- b- Jack hopes Martin will recommend him for the position. TRUE/FALSE
- c- Martin wants the position more than Jack wants it. TRUE/FALSE

20- When Samuel moved to his new neighbourhood, he could no longer see his friends. He missed them a lot but there was nothing he could do. When Samuel realized that he could not deal with the problems of this new life, he asked for help from his father, Theodore. Theodore helped his son to get over the difficulties.

- a- Samuel wanted Theodore to adapt himself to the new life. TRUE/FALSE
- b- Samuel wanted Theodore to adapt him to the new life. TRUE/FALSE
- c- Samuel did not like his new neighborhood at all. TRUE /FALSE