Pro-Drop Parameter and L1 Transfer: A Study on Turkish Speakers of English

Adıl Düşmesi Değiştirgeni ve Birinci Dil Aktarımı: İngilizce Öğrenen Türk Öğrenciler Üzerine Bir Çalışma

Safiye İpek KURU GÖNEN[*]

Abstract

Interlanguage development of foreign/second language learners has taken great interest in the Second Language Acquisition (SLA) domain. Whether these learners have access to the principles and parameters; that is, whether Universal Grammar (UG) is available to them have been a controversial issue for researchers. One of the parameters is the pro-drop parameter which allows subject pronouns to be omitted in certain languages such as Japanese and Turkish. However, studies on Turkish, a [+ pro-drop] language, are rare. This study aims at investigating whether native speakers of Turkish reset their L1 pro-drop parameter value when they learn a [- pro-drop] language such as English and whether these learners have access to UG in the initial, intermediary and advanced levels of their interlanguage development. The findings of the study has put forward how parameter setting takes place not only in the initial state but also in the later stages of interlanguage development.

Key Words: Interlanguage, Pro-Drop parameter, L1 transfer

Özet

Yabancı dil/İkinci dil öğrenenlerin ara dil gelişimleri İkinci Dil Edinimi alanında oldukça ilgi çeken bir konudur. Bu öğrenicilerin dil genellemelerine ve dile özgü değiştirgenlere, yani Evrensel Dilbilgisine (ED) ulaşımı olup olmadığı ise araştırmacılar için tartışmaya açıktır. Dile özgü değiştirgenlerden birisi de Japonca ve Türkçe gibi dillerde kişi zamirinin cümleden düşürülmesine izin veren adıl düşmesi değiştirgenidir. Fakat, adıl düşmesi değiştirgenine müsaade eden dillerden biri olan Türkçede bu konu üzerine yapılan çalışmalar sınırlıdır. Bu çalışmanın amacı, ana dili Türkçe olan öğrenicilerin birinci dillerine özgü olan adıl düşmesi değiştirgenini, bu özelliğe izin vermeyen İngilizce gibi bir dili öğrenirken bırakıp bırakmadıklarını ve ED' ye ara dillerinin başlangıç, orta ve ileri düzeylerinde erişimleri olup olmadığını araştırmaktır. Çalışmanın sonuçları, değiştirgen kullanımının ara dil gelişiminin sadece başlangıç düzeyinde değil daha sonraki seviyelerde de nasıl yerleştiğini ortaya koymaktadır.

Anahtar Kelimeler: Ara dil, Adıl düşmesi değiştirgeni, Birinci dil aktarımı

---

[*] Öğr. Gör., Anadolu Üniversitesi, ipekkuru@anadolu.edu.tr

Introduction

Human language, its characteristics and especially the so-called miraculous process of its acquisition have always been an area of interest dating back to the ancient times. With the increasing number of second language learners who learn different languages for various purposes, recent years have witnessed growing research on the interlanguage development of these learners (O'Grady, 1991; Schwartz, 1991; Smith, Tsimpli and Ouhalla, 1993; Kanno, 1998; Montrul and Garavito, 1999; Wakabayashi, 2002; Zushi, 2003; Oshita, 2004; Gutman, 2004). The term interlanguage is first defined by Selinker (1972, as cited in Maclaughlin, 1987) to refer to the interim grammars constructed by second language learners on their way to the target language. Interlanguage is assumed to be different from both the learners' first language and from the target language. Thus, understanding how second language learners acquire a language that is different from their native language is crucial for second language researchers (White, 2003a).

Whether interlanguage grammars are like other grammars and the role of Universal Grammar (UG) in the interlanguage development have been an issue of debate (Eubank, 1993/94; Schwartz and Sprouse, 1996; Epstein, Flynn and Martohardjono, 1996; Vainikka and Young Scholten, 1996). The Chomskyan generative grammar approach assumes that the first language learner is endowed with an innate, specifically designed linguistic system or UG (Maclaughlin, 1987). UG is part of an innate biologically endowed faculty involving linguistically significant principles which are inherent for all natural languages, and parameters which are the properties of UG that vary across languages (Chomsky, 1965).Understanding how other languages work and how they are acquired is of crucial importance for researchers who take a generative grammar perspective (Montrul and Garavito, 1999).

It is proposed that UG is a part of an innate language faculty and "it places limitations on grammars, constraining their form as well as how they operate" (White, 2003b.p.20). Without these innate and specifically linguistic constraints on grammars, learners may not acquire language as some properties of language are too subtle and complex (Cook, 2003; White, 2003b). This view dates back to Plato and what is known as poverty of stimulus or the logical problem of language acquisition focuses on the mismatch between the primary linguistic data (PLD) the child is exposed to and the complex knowledge s/he acquires (Cook, 2003; White, 2003a, 2003b; MacWhinney, 2004, Isabelli, 2004). That is, learners go beyond the input they are exposed to in the acquisition process. With the help of UG, learners may acquire complex information that is difficult to learn with mere exposure to input. Similar to child's acquisition of L1, it has been assumed that poverty of stimulus argument may also be true for L2 learner. That is, some properties of L2 are too complex and subtle to acquire from the input these learners are exposed to.

Given the fact that L2 learners are in a foreign language environment in which L2 is not the medium of communication, it is difficult for learners to acquire some properties of L2 which cannot be deferred from the mere input. In this respect, UG may provide an explanation to how learners acquire complex properties of language. However, as underlined by many researchers in second language acquisition

(SLA), whether second language learners have access to the principles and parameters; that is, whether UG is available to these learners have been a controversial issue from the earliest applications of principles and parameters theory to the domain of SLA (Hawkins and Chan, 1997; Kanno, 1998; Haznedar, 2003).

There are four differing views about second language learners' access to UG. No Access Hypothesis assumes that UG is not available for L2 learners and these learners have to resort to more general problem-solving skills. On the contrary, Full Access Hypothesis pinpoints that UG is accessed directly in L2 acquisition and L1 and L2 are similar processes. The third view, Indirect Access Hypothesis claims that UG is not directly involved in L2 acquisition, but is indirectly accessed through learners' L1. The last view about the accessibility of UG for L2 learners is the Partial Access Hypothesis. According to this last hypothesis, principles might be available, but some parameter settings might not be available to L2 learners (Mitchell and Myles, 1998).

By taking all these assumptions into consideration, a major issue in second language (L2) acquisition research revolves around the status of functional categories in early stages of non-native grammars (Eubank, 1993/94; Lakshmanan, 1993/94; Schwartz and Sprouse, 1996; Vainikka and Young-Scholten, 1996; Grondin and White, 1996). How initial interlanguage representations are developed is discussed from different points in the SLA domain.

There are two broad views about the initial interlanguage representations. The first view claims that interlanguage representations conform to the properties of natural languages (White, 2003a, 2003b). With respect to this first view, Schwartz and Sprouse (1996) propose Full Transfer/Full Access (FTFA) Hypothesis which pinpoints that L1 grammar constitutes the initial state of interlanguage representations. According to this hypothesis, when the L1 grammar is insufficient to accommodate for the properties of L2 input, learners have access to UG including new parameter settings (e.g. head parameter, pro-drop parameter), functional categories (e.g. inflection, tense, agreement, etc) and feature values (e.g. strong and weak features). Thus, the resulting interlanguage grammars are UG constrained. On the contrary to Schwartz and Sprouse's FTFA hypothesis, Epstein, Flynn and Martohardjono's (1996) proposal within the first view of interlanguage representations claims that UG is the initial state and all functional categories and features are available to L2 learners via UG.

The second view about initial state claims that interlanguage representations differ from natural adult languages in fundamental respects (White, 2003a, 2003b). Within this view, Vainikka and Young Scholten (1996) propose Minimal Trees Hypothesis. According to their hypothesis, the initial state of interlanguage representations lack functional categories and only includes lexical categories (e.g. noun, verb, adjective, etc). These lexical categories are available for the L2 learner from his/her L1, but there is no transfer of functional categories from L1. However, functional categories gradually emerge after the initial state of interlanguage development. Another hypothesis, which can be considered in terms of the second view about interlanguage representations is the Valueless Features Hypothesis. Eubank (1993/4) pinpoints that the interlanguage initial state is a grammar, containing lexical and functional categories, along with features, drawn from the L1 grammar.

What is common among all these hypotheses in two domains of differing views is that interlanguage grammars will be UG-constrained in the course of language development. Moreover, all hypotheses assume that L2 functional properties will be present in later grammars (White, 2003b). However, to what extent these functional categories will be present and whether learners' hypotheses were constrained by UG in the later stages of interlanguage development is focus of interest for many SLA researchers in the recent years.

Whether parameters are reset from L1 to L2 and whether the parameters are loosely linked to principles or are involved in the operation of the principle itself has been an issue open to investigation (Cook, 2003). One of the mostly studied parameter is the pro-drop parameter which is a property of null-argumentative languages like Japanese, Spanish, Italian, Portuguese and Turkish (Yilmaz, 1996; Kanno, 1998; Zushi, 2003; D'Allesandro, 2009; Danon, 2009). Among these languages, research on Turkish as a null-argumentative language is quite limited. This study aims to fill in this gap by focusing on whether native Turkish speakers reset their parametric values related to the pro-drop parameter. In order to understand how this parameter takes place and whether L2 learners can reset these parameters depending on their L1, literature on this phenomenon should be reviewed.

Review of Literature

Pro-drop parameter (also known as null subject parameter) is specific to certain languages which allow subject pronouns to be omitted. These languages exhibit the [+pro-drop] value of the parameter (White, 1989). Languages like Japanese, Spanish and Turkish are among the pro-drop languages. On the other hand, other languages such as English and French always require lexical subjects; thus, they have [-pro-drop] value. That is to say, subject position in English cannot be empty, whereas it may in Turkish as shown in the following example:

English: She is a hardworking student

Turkish: Çalışkan bir öğrencidir

'*(she) is very hardworking'

Pro-drop parameter is assumed to emerge as a bundle and it includes a cluster of properties which determine two typological groups of languages: [+/- pro-drop], depending on whether they allow:

Null subjects as in (1a):

1. a. Turkish: Kitap okumayı severiz
    b. English:* (we) love reading book

Subject-verb inversion as in (2a):

2. a. Turkish: Geldi John okula
    b. English: * Came John to school

Absence of expletive pronouns as in (3a):

3. a. Turkish: Mutlu olduğu görünüyor
    b. English: * (it) Seems that he is happy

That-trace effect as in (4a):

4. a. Turkish: Sarah mutlu olduğunu söyledi

   b. English: * Sarah told that is happy

All these properties are associated with the pro-drop parameter. According to this parameter, [+pro-drop] languages allow null subjects, subject-verb inversion in declaratives and that-trace sequences, but [-pro-drop] languages do not. What is more, a general assumption is that [+pro-drop] languages have rich verbal inflections, so that the nature of the missing subject can easily be recovered compared to [-pro-drop] languages (White, 1989; Wakabayashi, 2002).

There are differing views in the literature about whether learners of pro-drop languages reset pro-drop parameter or learners of non-pro drop languages have access to this parameter especially in the initial stages. Various research has been conducted on learners of pro-drop languages like Spanish (White, 1986; Phinney, 1987; Montrul and Garavito, 1999; Liceras and Diaz, 1999; Isabelli, 2004), Italian (Torrego, 1998; Peverini, 2004), and Japanese (Kanno, 1997; Zushi, 2003) when they learn non-pro drop languages such as English and French.

Empirical Research on the Pro-Drop Parameter

Research in L2 acquisition about pro-drop parameter has followed the developments of linguistic theory and L1 acquisition (Liceras and Diaz, 1999). Early research on this issue focused on identifying the triggering effects or whether all the properties (e.g. null subject, subject-verb in version, absence of expletive pronouns, that-trace effect) of the parameter were simultaneously acquired (White, 1985; Phinney, 1987). Later research aimed at identifying whether access to UG guided the acquisition of pro-drop properties in L2 acquisition (Hilles, 1991; Lakshmanan, 1991; O'Grady, 1991). Moreover, research on pro-drop parameter has also been influenced by Jaeggli and Safir's Morphological Uniformity Principle (1989, cited in Liceras and Diaz, 1999) which states that only languages with uniform inflectional paradigms permit null subjects as in the case of Spanish.

As one of the earliest studies on the phenomenon of pro-drop parameter, White (1986) investigated the role of transfer from learners' L1, but had an indecisive stance for partial or full transfer. The aim of this study was to identify whether Spanish and Italian learners of English transferred the L1 value of the pro-drop parameter to their L2. Three properties of the pro-drop parameter, null subject, subject-verb inversion and that-trace effect were investigated through a grammaticality judgment task and written question formation task with control and experimental groups. The results of the study showed that Spanish/Italian and French groups did not differ significantly in terms of subject-verb inversion and that-trace effect; but there were significant differences between both groups (control and experimental) in terms of the third property of pro-drop parameter: null-subjects. On the written question task, both groups showed evidence of ungrammatical that-trace sequences, but Spanish/Italian group made more errors compared to the French control group. Thus, the results of this study yielded that pro-drop parameter is transferred from L1 to L2, but only partially.

Another pioneering study on pro-drop parameter was conducted by Phinney (1987). She investigated the two properties of the parameter: the presence and absence of the overt subject pronouns and subject-verb agreement. This study investigated the phenomenon from both directions: adult English speakers learning Spanish and adult Spanish learners of English. The participants were required to write free compositions and these compositions were analyzed in terms of their use of subject pronouns and subject-verb agreement. The results of Phinney's (1987) study pinpointed that both groups were accurate in their use of verbal agreement. Moreover, Spanish learners of English omitted subjects as in their L1 Spanish and they tended not to use referential subject pronouns in both conjoined and embedded clauses. However, they were successful in using referential subject pronouns in sentence-initial positions. On the other hand, the English learners of Spanish correctly omitted both referential and subject pronouns in Spanish showing that they managed to reset the parameter to the L2 value. Phinney evaluates these differences in terms of markedness value of the form in the learners' L1 and claims that to what extent the learners will reset parameters in their L1 depends on which language their L1s are and which language they are learning as L2.

After the early research on pro-drop parameter, researchers' interest has increased on this phenomenon and many of them conducted studies to reveal whether different learners from various L1s had access to UG and whether they inclined on the parameters in their L1. Tsimpli and Roussou (1991) conducted a study aimed at investigating the effects of L1 transfer in resetting the pro-drop parameter. Greek learners of English participated in their study. Researchers tested whether learners will transfer L1 values of the parameter when the L2 differed from the L1. The L1 they investigated was Greek which is one of the [+pro-drop] languages like Spanish, Italian and Turkish. Null subject, subject-verb inversion and that-trace effect properties of the parameter were investigated by using a grammaticality judgment task, correction task and a translation task. All the participants in the study responded correctly to the test items in terms of null subject and subject-verb inversion properties of the parameter. They were also successful in the translation task about these properties. However, for the that-trace sequences, the subjects in all tasks assumed that 'that' is optional in English and most of them incorrectly failed to delete 'that' in their English translations of Greek sentences. As a result, Tsimpli and Roussou's (1991) study assumed that learners had full transfer from their L1 but had no access to UG to reset the parameters to L2 values.

In a study on Turkish and Spanish learners of English, Yilmaz (1996) investigated whether these learners transferred the L1 parametric values of the parameter into their L2. In her study, second language learning processes of two students whose L1 were [+ pro-drop] languages (Spanish and Turkish) were examined. The participants were administered a grammaticality judgment task which focused on the three properties of the pro-drop parameter; namely null subjects, that-trace effect and subject-verb inversion. The findings of Yilmaz's (1996) study showed that Spanish students transferred more of the [+ pro-drop] values of their L1 while learning English as their L2. Compared to the Spanish learners, Turkish learners in the study transferred less the pro-drop value of their L1, a result which was attributed to the amount of exposure of these learners to the target language. However, the findings clearly emphasized that transfer occurred more or less for both groups of

learners and these learners formed the pro-drop value of the target language representations based on the pro-drop values in their own L1s.

Chomsky's Minimalist Theory (Chomsky, 1995, cited in Mitchell and Myles 1998) which attributed parametric variation to the strength of functional features affected the interpretation of parameters and influenced the studies conducted in the 90's. In a study from a minimalist perspective investigating learners coming from various L1 backgrounds, Liceras, Diaz and Maxwell (1999) examined adult L2 learners of Spanish. In this study, learners from [+ pro-drop] languages such as Chinese, Korean and Japanese, and learners from [- pro-drop] languages such as English, French and German participated. All of them were intermediate learners of Spanish and their natural production was elicited through a narrative task. The results of this study showed that all the participants from [+ pro-drop] and [- pro-drop] languages used null subjects in conjoined and embedded clauses and only Japanese learners and one French learner differed in their use of more overt subject pronouns compared to the native speakers of Spanish. Liceras et al. (1999) concluded that the abstract features of the parameter were not accessible to the learners, but null subjects were made available to them via UG.

In a rather recent study by Wakabayashi (2002), the acquisition of non-null subjects in English was investigated from a minimalist account. In this study, the focus was on the relationship between transfer and non-null subjects. The participants were coming from [+ pro-drop] languages of Japanese and Spanish and they were learning English as their L2. Native speakers of English were also included as a control group. Subjects were required to read a text on the monitor screen, answer a comprehension question and do a grammaticality judgment task. In these tasks, reading time of each word and grammaticality judgments of the learners were examined for analysis. The results of this study showed that Japanese learners acquired the obligatory value of overt subjects in English earlier than Spanish learners and Spanish learners had a more difficult time acquiring the target form because they had to reset the pro-drop parameter. Thus, Wakabayashi (2002) concluded that cross-linguistic effects did not exist at the initial stage of development but might emerge gradually in the course of L2 development.

A careful investigation of the literature on pro-drop parameter has illuminated various results of learners' resetting of their L1 value of pro-drop parameter when they are learning L2. It has been shown that learners' L1 make quite important difference on to what extent they reset their L1 value and have access to UG. It has been a controversial issue whether these learners have partial or full access to UG or whether they transfer their L1 pro-drop value fully or partially. As it has been clear from the literature, various [- pro-drop] languages such as English, French and German and [+ pro-drop] languages such as Japanese, Spanish, Korean and Italian were investigated. However, studies on Turkish, a [+ pro-drop] language, were rare and there is a need to investigate whether native Turkish learners reset their L1 pro-drop parameter value when they learn a [- pro-drop] language such as English and whether these learners have access to UG in the initial, intermediary and advanced levels of their interlanguage development.

Based on the lacking point in the literature on this issue, the present study tried to find the answers of the following research questions:

1. Do adult Turkish speakers of English reset [+ pro-drop] value of their L1 to [-pro-drop] value of English in the initial state of their interlanguage development?
2. Are there any differences among the initial, intermediary and advanced stages of interlanguage development in terms of pro-drop values of their L1 and L2?

Methodology

Subjects

A total of 60 students who were enrolled in the School of Foreign Languages at Anadolu University, Turkey participated in the study. These students had various academic majors and were native speakers of Turkish learning English as their L2. They were coming from three different proficiency levels of English: elementary, intermediate and advanced. Participants' proficiency levels were determined officially by the school administration using a Michigan Placement test. Proficiency levels were represented by equal number of students: 20 students from the elementary level, 20 from the intermediate and 20 from the advanced level. Participants in the study were randomly selected and they constitute a typical sampling in which subjects were typical to those unfamiliar with the situation (Creswell, 2005).

All students from each level were exposed to intensive English lessons over 20 hours a week. Informal interviews with their teachers revealed that neither [+pro-drop] value of their native language nor [-pro-drop] value of the target language English were mentioned in the classroom and the students received no formal instruction about how they would reset their L1 parameter value into L2 parameter value. What is more, the course books used in the courses did not include any information about the differences between students' L1 or L2 in terms of the properties of the pro-drop parameter.

In addition to the actual sampling group of the study, a control group consisted of 25 native speakers of English were participated in the study. These speakers were all living in the Unites States of America and all of them were freshmen in various academic majors similar to the Turkish students in this study. The purpose of including a control group was not to compare the performance of non-native speakers with that of native speakers since it would lead to a comparative fallacy (Bley-Vroman, 1983; cited in White, 2003a). The actual purpose was to see how native speakers and non-native L2 speakers of the target language differed in their use of the target language parametric values.

Instruments

In order to elicit the participants' recent knowledge about the pro-drop parametric value, a grammaticality judgment task was used. Although this type of task was reported to have some lacking aspects, it is still one of the most popular tools to interpret the parametric values of various languages

(Mandell, 1999). This task was developed by the researcher based on the parametric variations of pro-drop value between Turkish and English.

Four properties of the pro-drop parameter were included: null subject, subject-verb inversion, absence of expletives and that-trace effect. Moreover, overt pronoun constraint was taken as a property to be investigated by considering its relevance with the purposes of the study. The Overt Pronoun Constraint (OPC, Montabelli, 1983; cited in White, 2003a) proposes that in [+null argument] languages (languages allowing both null and overt pronouns) such as Spanish, an overt pronoun cannot receive abound variable interpretation. In other words, it cannot have a quantified expression such as everyone, no one, someone or a wh-phrase (who, which) as its antecedent. Since Turkish is a [+null argument] language and English a [-null argument] language, Turkish learners of English may have difficulty in resetting the values in their L1 related to OPC while learning L2. That's why; this property was decided to be included in the instrument as it is related to the pro-drop parameter investigated in this study. Specific attention was given to present all items in contexts to avoid giving them as isolated entities. The examples of each property in the grammaticality judgment task were as in the following:

1. Null subject

Mother: Have you finished your homework?

Daughter: *^No time, but ^ will do after dinner

2. Absence of expletives

Jack: What's wrong with Freddy?

Jonathan: *I don't know, but ^ seems that he is unhappy

3. Subject-verb inversion

Hotel manager: Did anyone check-in the hotel?

Receptionist: *Arrived ^ a boy, but I don't know his name

4. That-trace effect

Michael: Gosh! What's this crowd for?

Sally:* Professor Jenkins announced that^ invented a new machine

5. Overt pronoun constraint

Justin: *Who said that ^ bought a car?

Christina: It was Albert. He bought a Volvo last month.

The participants were asked to read each statement in the task carefully and decide among the three options: 'Grammatical', 'Not Grammatical' or 'Not Sure'. A total of 25 items in the grammaticality judgment task were checked by an expert in linguistics and three native speakers of English, who give lectures to Turkish students and are qualified foreign language instructors, for validity and reliability.

Data Collection Procedures

After the reliability and the validity of the grammaticality judgment task was checked, the final version of the task was administered to the participants. Participants in the actual data sampling, Turkish students, were instructed in their native language to ease their filling in the task and all of the subjects

were told that their grades would not be affected by their responses in this study. Moreover, confidentiality of their responses was guaranteed and it was acknowledged that this study was conducted for a scientific research and their contribution to it was very valuable. No time limit was put for the task in order not to create anxiety on the learners' behalf.

Data Analysis Procedures

In order to find an answer to whether adult Turkish speakers of English in this study reset [+pro-drop] value of their L1 to [-pro-drop] value of English in the initial state of interlanguage development, elementary level students' responses to the grammaticality judgment task were analyzed by using simple descriptive statistics. The items in the tasks were analyzed one by one to see whether elementary level students were able to reset their L1 parametric value into L2. The frequencies of these students' responses for all the properties of the pro-drop parameter were measured to investigate to what extent they gave correct responses for the target language values.

For the second research question, which asked whether there were any differences among the initial, intermediary and advanced stages of interlanguage development in terms of pro-drop values of their L1 and L2, a chi-square statistical analysis was computed. Chi-square analysis was appropriate for the purposes of the study as it allows group comparison between two categorical variables (Creswell, 2005). Since the task had three options such as 'Grammatical', 'Not Grammatical' or 'Not Sure', and there were three levels being searched, a three by three (3x3) chi-square analysis was conducted for each item in the grammaticality judgment task. Thus, this analysis helped to see significant differences among learners from different levels of proficiency in terms of five parametric properties.

Results and Discussion

Results

In order to answer the first research question which asked whether adult Turkish speakers of English reset [+ pro-drop] value of their L1 into [- pro drop] value of English in the initial state of their interlanguage development, frequencies of these learners' responses to each of the properties in the grammaticality judgment task were calculated. Figure 1 shows the distribution of the frequencies of elementary level students' correct responses, who are in their initial state of interlanguage development, according to the pro-drop properties of that-trace effect, absence of expletives, subject-verb inversion, overt-pronoun constraint and null subjects.
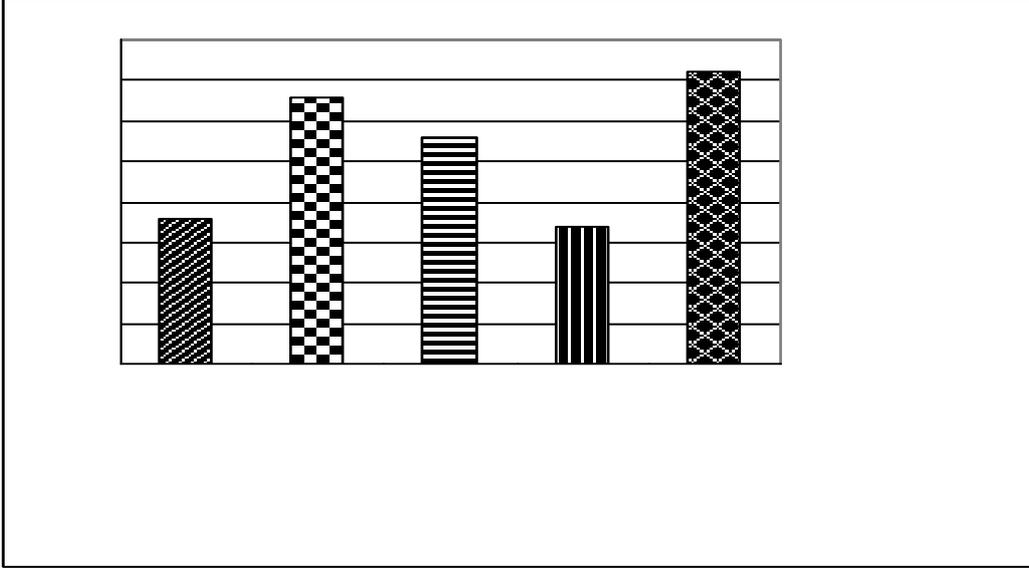
Figure 1. Distribution of the Frequencies of Initial State Students' Correct Responses

As can be clearly seen from Figure 1 above, students in the initial state of interlanguage development are not able to reset the [+ pro-drop] values of Turkish when they learn English, a language which has [- pro-drop] values. When each property is analyzed in detail, it is seen that these students gave 18.3% correct responses to the items related to the that-trace effect, 33.3% correct responses to items related to expletives, 28.3% correct responses to subject-verb inversion items, 17.2% correct responses to the items related to overt pronoun constraint, and 36% correct responses to the items related to null subjects. Thus, it may be assumed that these students are still affected by the [+ pro-drop] parametric values of their L1 and cannot easily reset these values when they are learning English. They may think that English allows for null subjects in sentences, overt pronouns do not receive bound variable interpretations and that they do not have a quantified expression (e.g. everyone, someone, no one) or a wh- phrase (.e.g. who, which) as their antecedents. Moreover, with respect to the pro-drop value in their L1, these students may consider English similar to Turkish which lacks expletives. Turkish allows for subject-verb inversion and the results suggest that students consider English as having similar allowance for subject-verb inversion. Hence, they are highly affected by the pro-drop values of their L1 and cannot reset these values appropriately into the L2 values.

To see how native speakers of English consider the [- pro-drop] values of their L1 while responding to a grammaticality judgment task, the frequencies of native speakers were calculated. Figure 2 shows the distribution of the frequencies of the native English speakers' correct responses according to the five properties of the pro-drop parameter.
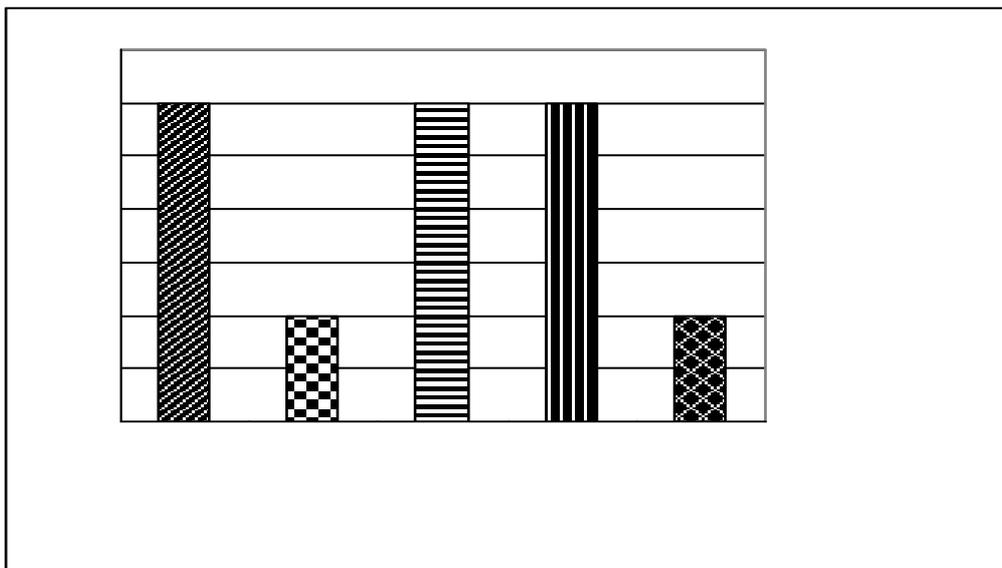
Figure 2. Distribution of the Frequencies of the Native English Speakers' Correct Responses

As illustrated in Figure 2, native speakers know the [- pro-drop] parametric values of their L1. They gave 100% correct responses to the items related to the *that*-trace effect, 96% correct responses to items related to expletives, 100% correct responses to the items related to subject-verb inversion, 100% correct responses to the items related to overt pronoun constraint, and 96% correct responses to the items related to null subjects. The reason for presenting the native speaker frequencies is not to compare the native speaker data to the non-native speaker data, but to show how native speakers have the [- pro-drop] parametric values of their own L1.

The second research question focused on investigating whether there are any differences among the initial, intermediary and advanced stages of interlanguage development in terms of resetting [+ pro-drop] values of their L1 into the [- pro-drop] values of L2. The chi-square analysis conducted for each item and the interlanguage development stages of the learners have shown that there are statistically significant differences among different development stages of the learners in terms of three properties of the pro-drop parameter: *that*-trace effects, absence of expletives and subject-verb inversion. Descriptive statistics presented in Table 1 shows the number of the students from each development stage according to the items of the *that*-trace effect.

Table 1. The Distribution of the Correct Answers according to the 'That-Trace Effect' Items

That Trace Effect	Elementary	Intermediate	Advanced
Item 8	5	11	13
Item 14	3	6	14
Item 19	3	9	11

It is clear from Table 1 that very few students in the initial stage of interlanguage development, namely elementary level students, gave correct responses to the items related to the *that*-trace effect.

However, when students progress in their interlanguage, the number of the correct responses increases. This is true for all three items related to this property:

Item 8: Sarah and Martin claimed that ^ never went to a school party.

Item 14: John explained that ^ was not guilty.

Item 19: Michael: Gosh! What's this crowd for?

Sally: Professor Jenkins announced that ^ invented a new machine.

In Turkish, there is no that-trace effect. As a property of [+ null argument] languages such as Turkish, subjects can be post-verbal indicates that the subject trace can be properly governed and thus there are no that-trace effects (Szczegielniak, 1999).The descriptive statistics illustrated that students in the initial state may still persist the absence of that-trace effect in Turkish while learning English, a language which has a that-trace effect value. However, throughout the development of the interlanguage, students may have access to this property of English and thus give more correct responses to the items related to the that-trace effect property.

Other property of the pro-drop parameter in which significant differences among different interlanguage development stages observed is the absence of expletives. Table 2 shows the number of the students from each development stage according to the items of the expletives.

Table 2. The Distribution of the Correct Answers according to the 'Expletives' Items

Expletives	Elementary	Intermediate	Advanced
Item 3	6	10	14
Item 12	7	10	13
Item 20	7	11	16

Similar to the that-trace effect, Turkish lacks the use of expletives. As shown on the Table 4.2, most of the students in the initial state of interlanguage development did not give correct responses to the items related to the use of expletives in English sentences. However, when they progress in the target language, it is seen that they are able to give more correct responses to the following items:

Item 3: Claire: How is the weather outside?

Don: It's cloudy. ^ Seems that it is going to rain.

Item 12: Jack: What's wrong with Freddy?

Jonathan: I don't know, but ^ seems that he is unhappy.

Item 20: Bruce: What do you think about Microsoft's new policy?

Cybill: Well, ^appears to me that Microsoft won't spend money for customers.

It can be assumed from these results that students in the initial state may still consider the lack of expletives in their native language while responding to the items related to the expletives. However,

more correct responses in the intermediary and advanced levels suggest that students may reset the [+ pro-drop] value of their L1 into the [- pro-drop] value of the L2 about the use of expletives.

The final property in which significant differences among the learners of different stages of interlanguage development observed is the subject-verb inversion. Table 3 presents the number of the students from each development stage according to the items of the subject-verb inversion.

Table 3. The Distribution of the Correct Answers according to the 'Subject-Verb Inversion' Items

Subject-Verb Inversion	Elementary	Intermediate	Advanced
Item 4	6	10	13
Item 21	5	12	15
Item 23	6	11	17

Similar to the results related to the that-trace effect and the absence of expletives, Table 3 illustrates that students in the initial state reserve to the subject-verb inversion value of their L1. Students' correct responses to the following items increase parallel to the increase in their proficiency of the target language:

Item 4: Hotel manager: Did anyone check-in the hotel?
Receptionist: *Arrived a boy, but I don't know his name.
Item 21: Celine: How was the book fair?
Lenny: Fine! *Bought a book Jack and a dictionary John.
Item 23: In the middle of the show, all of a sudden *cried a boy.

Turkish, as a [+null argument] language allows for the inversion of subjects and verbs on the contrary to English which allows for subjects only in the head initial position. Subject-verb inversion does not take place in English; however, students in the initial stage may assume that English allows for this property similar to Turkish. Hence, they may not reset this [+ pro-drop] parametric value of their L1 while they are learning English. Due to the developments in their interlanguage. they may have an access to the [- pro-drop] value of English.

Other than the descriptive statistics related to the participants' correct responses, chi-square analysis revealed that there are significant differences among the learners from three development stages related to the that-trace effects, expletives and subject-verb inversion. As for the other properties, namely overt pronoun constraint and null subjects, no statistically significant differences were computed in the 3x3 chi-square analysis. Table 4 illustrates the results of the chi-square analysis related to the three properties of the pro-drop parameter.

Table 4. Chi-Square Analysis Results Related to the Properties of the Pro-drop Parameter

That Trace Effect		Subject-Verb Inversion		Expletives	
Item Number	Chi-Square	Item Number	Chi-Square	Item Number	Chi-Square
8	0,013*	4	0,045*	3	0,022*
14	0,001*	21	0,031*	12	0,048*
19	0,040*	23	0,027*	20	0,037*

* Significant at the p < 0.05 level

As can be seen from Table 4.4, there are significant differences between students from initial, intermediary and advanced stages of interlanguage development in terms of the three properties: that-trace effect, subject-verb inversion and the absence of expletives. For other properties, the statistical analysis did not suggest a significant difference. That is to say, for the three properties presented in Table 1, differences were observed among the proficiency levels. When the students' interlanguage development stages increased, they had access to the [- pro-drop] values of the target language. For other properties, there were no statistically significant differences between students' correct responses to the items and their stages of the interlanguage development.

Discussion

A major issue in SLA revolves around the access of second language learners to the parameters of UG in the initial and beyond the initial states of language acquisition (White, 2003a; Cook, 2003). Since learners' L1 makes a difference in to what extent L2 learners will reset the parameters in their L1 into the L2 values, investigation of such issue is of crucial importance as it may illuminate the way SLA researchers understand how parameter setting takes place in the interlanguage of the learners (Kanno, 1998; Wakabayashi, 2002; Oshita, 2004).

The findings of this study revealed that Turkish learners in the initial state of interlanguage development may not reset the [+ pro-drop] value of their L1 into [- pro-drop] value of the target language they are learning. This finding is in consistency with Schwartz and Sprouse' (1996) Full Transfer/Full Access (FTFA) Hypothesis which proposes that L1 constitutes the interlanguage initial state. As shown in the results, initial state learners in this study inclined to the parametric values of their L1 and transferred the [+ pro-drop] value of Turkish into their L2 English. According to FTFA, interlanguage representation may or may not converge on the L2 grammar in the later stages of development. In this study, L2 learners in the later stages displayed an increase in their correct responses related to the properties of the pro-drop parameter. Especially, for three properties, namely that-trace effect, absence of expletives and subject-verb inversion, it has been observed that when learners progressed in the target language, they were able to form [- pro-drop] value of the target language and that less transfer from their L1 occurred as a result. Hence, it may be assumed that L2 learners in this study may not have access to L2 pro-drop parametric values in the initial state and thus transfer from their L1, but they may have access to these values in the later stages of development. These findings are also consistent with Eubank (1993/94) who claims that L1 grammar constitutes a major part of the initial state.

On the contrary to Schwartz and Sprouse's (1996) and Eubank's (1993/94) ideas, the findings of this study are not in collaboration with what Epstein et al.(1996) proposes. They claim that L1 grammar is not implicated in the initial interlanguage representation and that UG is the initial state. Epstein et al.'s (1996) argument implies that early grammar representations of the learners has all available functional categories, features and feature values from UG and that learners in the initial state can construct target language values without recourse to values from their L1. Given it was the case, the students in this study should immediately reset the [+ pro-drop] parametric value of their L1 into the [- pro-drop] value of L2. However, it is clear from the findings of this study that L2 learners did not initially form [-pro-drop] values of the target language.

When we compare the findings of the study with the studies on pro-drop parameter, White's (1986) study suggests that pro-drop parameter is partially transferred from L1 to L2. That is not all properties of the parameter are transferred as in the case of subject-verb agreement. The findings of the present study supports the findings of White (1986) as transfer occurred especially in the initial state but the learners in the later stages displayed a partial transfer as they gave more correct answers compared to the learners in the initial state. Similarly, in the case of Spanish learners Phinney (1987) proposes that learners carry the L1 [+ pro-drop] value of the parameter into their L2. The findings of the study is in parallel with Phinney's (1987) findings in that initial state learners have transferred their L1 [+ pro-drop] value into their L2.

As for the later studies on pro-drop parameter, this study has consistent results with Tsimpli and Roussou's (1991) study for initial state learners that these learners had full transfer from their L1 but had no access to UG to reset the parameters to L2 values. Moreover, Liceras et al. (1999) pinpointed that the abstract features of the parameter were not accessible to the learners, but null subjects were made available to them via UG. This finding shows some parallelism with the findings of this study as learners not in the initial stage but in later stages accessed to the null subjects without transfer from their L1 values. Considering all three stages of interlanguage development, this study revealed that learners gradually reset the [+ pro-drop] values of their L1. This finding supports Wakabayashi' (2002) claims that cross-linguistic effects do not exist at the initial stage of development but might emerge gradually in the course of L2 development.

Yilmaz's study (1996) on Turkish and Spanish learners have yielded similar results in that both Turkish and Spanish learners have transferred the [+ pro-drop] value of their L1 into L2, English. However, in her study it was found that Spanish learners have transferred more of the values in the L1 compared to the Turkish learners which may be attributed to the historical closeness of Spanish and English. In the present study, Turkish learners were found to transfer L1 values of the pro-drop parameter in the initial state; however they gradually reset the [+ pro-drop] value to [- pro-drop] value of the target language in the course of their interlanguage development.

All in all, the findings of the study yielded similar results with previous studies that learners may transfer the values of the pro-drop parameter into their L2 especially in the initial state. Thus, this

study has shed a considerable light on the pro-drop parameter by investigating whether learners transferred their L1 values and whether there were differences in terms of parameter resetting when learners progressed in the interlanguage.

Conclusions

In SLA research, a number of different parameters have been investigated in L2 acquisition context and research has underlined the importance of parameter setting and resetting in the acquisition process (Torrego, 1998; Gutman, 2004; Cummins and Roberge, 2005). Among the parameters, the pro-drop parameter has received much attention especially in the last two decades and was investigated in different L2 settings. It has been assumed that learners' L1 plays a crucial role in resetting the parameters of L1 into L2. Although the pro-drop parameter comes within a bundle of properties, all of them may not be acquired simultaneously (Wakabayashi, 2002). The findings of this study have supported this view that learners may not have reset the pro-drop values of their L1 for all properties of the parameter.

This study has tried to enlighten the issue of pro-drop parameter setting for Turkish learners of English. In this respect, it has clarified how parameter setting takes place not only in the initial state but also in the later stages of interlanguage development. Turkish is a language which opens to investigation in terms of parameters and understanding how and to what extent Turkish learners are able to reset the parametric values of their L1 is of crucial importance to be able to find an answer to the logical problem of language acquisition. This study has revealed that Turkish learners of English has transferred the [+ pro-drop] value of their L1 into the L2 and in the initial state, learners may not be able to reset the parametric value of their L1. However, they may gradually reset this parametric value into [- pro-drop] value of the target language when they go beyond the initial state. As a conclusion, the findings of this study may illuminate further research on Turkish learners of other languages in terms of pro-drop parameter.

References

Chomsky, N. (1965). *Aspects of the theory of syntax.* Cambridge, MA: MIT Press.

Cook, V. (2003). The poverty of the stimulus argument and structure dependency in L2 users of English. *International Review of Applied Linguistics, 41*, 201-221.

Creswell, J. W. (2005). *Educational research: planning, conducting, and evaluating quantitative and qualitative research.* New Jersey: Pearson Merrill Prentice Hall.

Cummins, S. and Roberge, Y. (2005). A modular account of null objects in French. *Syntax, 8*(1), 44-64.

D'Allesandro, R. (2009). Parameters of linguistic variation. Retrieved on June 20, 2010 from http://www.robertadalessandro.it/Wednesday.pdf.

Danon, G. (2009). Comparative syntax: pro-drop. Retrieved on June 20, 2010 from http://faculty.biu.ac.il/~danong1/courses/2009-2010/588/slides/5.pro-drop-4x2.pdf

Epstein, S., Flynn, S. & Martohardjono, G. (1996). Second language acquisition: Theoretical and experimental issues in contemporary research. *Brain and Behavioral Sciences,19*, 677-758.

Eubank, L. (1993/4). On the transfer of parametric values in L2 development. *Language Acquisition, 3,* 183-208.

Grondin, N. and White, L. (1996). Functional categories in child L2 acquisition. *Language Acquisition, 5*, 1-34.

Gutman, E. (2004). Third person null subjects in Hebrew, Finnish and Romanian: An accessibility-theoretic account. *Journal of Linguistics, 40,* 463-490.

Hawkins, R. and Chan, Y. C. (1997). The partial availability of universal grammar in second language acquisition: the "failed features" hypothesis. *Second Language Research,13*, 187-226.

Haznedar, B. (2003). The status of functional categories in child second language acquisition: evidence from the acquisition of CP. *Second Language Research, 19,* No. 1, 1-41.

Hilles, S. (1991). Access to universal grammar in second language acquisition. In: Eubank, L. (Ed.). *Point counterpoint: universal grammar in the second language.* Amsterdam/Philadelphia: John Benjamins Publishing Company.

Isabelli, C. A. (2004). The acquisition of null subject parameter properties in SLA: Some effects of positive evidence in a natural learning context. *The Effects of Positive Evidence on SLA,* 1-16.

Kanno, K. (1997). The acquisition of null and overt pronominals in Japanese by English speakers. *Second Language Research, 13*(3), 265-287.

Kanno, K. (1998). Consistency and variation in second language acquisition. *Second Language Research. 14*(4), 376-388.

Lakshmanan, U. (1991). Morphological uniformity and null subjects in child second language acquisition. : Eubank, L. (Ed.). *Point counterpoint: universal grammar in the second language.* Amsterdam/Philadelphia: John Benjamins Publishing Company.

Lakshmanan, U. (1993/94). 'The Boy for the cookie'- Some evidence for the nonviolation of the case filter in child second language acquisition. *Language Acquisition, 3*, 55-91.

Liceras, J. M., Díaz, L. and Maxwell, D. (1999). The Spanish L2 of Chinese, English, French, German, Japanese and Korean speakers. In: Klein, E.C. Martohardjono, G. (Eds.) *The development of second language grammars.* Amsterdam/Philadelphia: John Benjamins

Liceras, J. M. & Diaz, L. (1999). Topic-Drop versus pro-drop: Null subjects and pronominal subjects in the Spanish L2 of Chinese, English, French, German and Japanese speakers. *Second Language Research, 15*(1), 1-40.

MacLaughlin, B. (1987).*Theories of second-language learning*. Great Britain: Edward Arnold.

Macwhinney, B. (2004). A multiple process solution to the logical problem of language acquisition. *Journal of Child Language, 31*(4), 883-914.

Mitchell, R. & Myles, F. (1998). *Second language learning theories*. London: Edward Arnold.

Montrul, S. and Garavito, J. B. (1999). The L2 acquisition of Spanish: Generative perspectives. *Second Language Research, 15*(2), 111-114.

O'Grady, W. (1991). Language acquisition and the "pro-drop" phenomenon: A response to Hilles. : Eubank, L. (Ed.). *Point counterpoint: universal grammar in the second language*. Amsterdam/Philadelphia: John Benjamins Publishing Company.

Oshita, H. (2004). Is there anything there when there is not there? null expletives and second language data. *Second Language Research, 20*(2), 95-130.

Peverini, C. (2004). Pro-Drop and the Italian subjunctive: An areal investigation. *The Italianist. 24*, 107-114.

Phinney, M. (1987). The Pro-Drop parameter in second language acquisition. In: Roeper, T. and Williams, E. (Eds.), *Parameter setting.* Dordrecht: Reidel.

Schwartz, B. (1991). Conceptual and empirical evidence: A response to Meisel. : Eubank, L. (Ed.). *Point counterpoint: Universal grammar in the second language.* Amsterdam/Philadelphia: John Benjamins Publishing Company.

Schwartz, B. & Sprouse, R. (1996). L2 Cognitive states and the full transfer/full access model. *Second Language Research,12*, 40-72.

Smith, N. V., Tsimpli, L. M. & Ouhalla, J. (1993). Learning impossible: The acquisition of possible and impossible languages by a Polyglot savant. *Lingua, 91,* 279-347.

Szczegielniak, Adam. (1999). 'That-t effects' crosslinguistically and successive cyclic movement. Retrieved on May 12, 2008 from http://66.102.9.104/search?q=cache:vzXWxSDMi8wJ: web.mit.edu/norvin/www/24.956/handout4.pdf+Szczegielniak(1999)&hl=tr&ct=clnk&cd=8&gl=tr.

Torrego, E. (1998). Nominative subjects and Pro-Drop INFL. *Syntax,1*(2), 206-219.

Tsimpli, I. M. and Roussou, A. (1991). Parameter resetting in L2. *UCL Working Papers in Linguistics, 3*, 149-169.

Vainikka, A. and Young-Scholten, M. (1996). Gradual development of L2 phrase structure. *Second Language Research,12*, 7-39.

Wakabayashi, S. (2002). The Acquisition of non-null subjects in English: A minimalist account. *Second Language Research,18*(1), 28-71.

White, L. (1986). Implications of parametric variation for adult second language acquisition: an investigation of the 'pro-drop' parameter. In: V. Cook (Ed.), *Experimental approaches to second language acquisition.* Oxford: Pergamon.

White, L. (1989). *Universal grammar and second language acquisition*. Amsterdam/Philadelphia: John Benjamins Publishing Company.

White, L. (2003a). On the nature of interlanguage representation: universal grammar in the second language. In: Doughty, C. J. And Long, M. H. (Ed.), *Second language acquisition*. Oxford: Blackwell Publishing Ltd.

White, L. (2003b). *Second language acquisition and universal grammar*. Cambridge: CUP

Yilmaz, N. (1996). Ara dilde adıl düşmesi değiştirgeni. *Anadolu Üniversitesi Eğitim Fakültesi Dergisi*, *6*(2), 137-145.

Zushi, M. (2003). Null arguments: The case of Japanese and Romance. *Lingua,113*, 559-604.