SECOND LANGUAGE ACQUISITION OF WH-MOVEMENT BY MACEDONIAN LEARNERS OF ENGLISH[1]

Abstract: *The overall aim of this paper is to test the strong predictions of the Full Transfer/Full Access Hypothesis of second language acquisition. The general question addressed by the study is whether there is full transfer from the first language (L1) when it comes to functional projections and their parameters and whether there is parameter resetting in the process of second language acquisition (L2A).*

More specifically, this paper addresses the issue of wh-movement in Macedonian and English and its acquisition by Macedonian learners of English. Within the framework of the Principles and Parametres theory, it provides a description of multiple wh-movement and extraction out of wh-islands in English and Macedonian, putting special emphasis on the differences that hold between the two languages. These are then used as a basis for studying the acquisition of wh-movement in English as an L2 by learners whose mother tongue is Macedonian.

An experiment has been conducted among learners at different proficiency levels to test their knowledge of wh-movement in English as well as the constraints that are at play. The results are revealing of an acquisitional pattern and show that the predictions of the Full Transfer/Full Access Hypothesis have been fulfilled and its claims confirmed.

Key words: *wh-movement, multiple wh-questions, extraction of wh-islands, Macedonian learners of English.*

Résumé : *L'objectif global de cet article est de tester les fortes prévisions de l'hypothèse « Full Transfer/Full Access » dans l'acquisition d'une langue seconde. La question générale posée par l'étude est de savoir s'il y a un transfert complet de la première langue (L1) en ce qui concerne les projections fonctionnelles et leurs paramètres et s'il y a une réinitialisation des paramètres dans le processus d'acquisition d'une langue seconde (L2A).*

Plus concrètement, cet article traite la question du mouvement wh- en macédonien et en anglais et son acquisition par les apprenants macédoniens d'anglais. Dans le cadre de la théorie des principes et des paramètres, l'étude offre une description du mouvement wh- multiple et l'extraction des îlots wh- en anglais et en macédonien, en mettant un accent particulier sur les différences entre les deux langues. Celles-ci sont ensuite utilisées en tant que base pour étudier l'acquisition du mouvement wh- en anglais en tant que L2 par les apprenants dont la langue maternelle est le macédonien.

Une expérience a été menée auprès des apprenants de différents niveaux de compétences afin de tester leurs connaissances en mouvement wh- en anglais ainsi que les contraintes qui sont en jeu. Les résultats révèlent un schéma d'acquisition et montrent que les prédictions de l'hypothèse « Full Transfer/Full Access» ont été accomplies et que ses affirmations ont été confirmées.

Mots clés: *mouvement wh-, questions wh- multiples, extraction des îlots wh-, apprenants macédoniens d'anglais.*

1. Introduction

The primary aim of the paper is to examine and prove the claims of the second language acquisition (SLA) researchers supporting the Full Transfer/Full Access hypothesis (FT/FA).

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The general question addressed by the study is whether there is full transfer from the first language (L1) when it comes to functional projections and their parameters and whether there is parameter resetting in the process of second language acquisition (L2A). That is, whether at initial stages L2 learners' performance relies completely on their knowledge of the L1 and whether there is a process of restructuring going on during the acquisitional period as a result of successive L2 input analysis or full access to the Universal Grammar (UG).

In this paper based on data collected from a group of native Macedonian speakers learning English and their performance with respect to multiple wh-movement and extraction out of wh-islands, I will argue that there is full transfer from the mother tongue and that in the course of development L2 learners begin to reset their parameters to fit their L2 specification guided by UG.

The paper is organised as follows. In the introductory part of the paper I locate the problem, briefly present the theoretical framework on which the main discussion is based and outline the basic assumptions of the present study. I then proceed with a brief description of the characteristics of wh-movement in Macedonian and English. Following that is a section describing the experiment, i.e. the subjects, the tasks and the results. Finally, I conclude the paper with an overall discussion and concluding remarks.

1.1 The problem

For a long period now the discussion in the field of second language acquisition has centered around the notion and nature of transfer from the L1, parameter (re)setting in the L2 and the role of UG in L2A. Some of the more intriguing questions within a more general discussion have been what and to what extent transfers, whether there is parameter resetting in the L2 and whether interlanguage development is UG guided. Answering these questions might provide an understanding of the real nature of SLA.

The functional categories in the L2 learners' performance (from initial to the final state of acquisition) present a valuable area of research that may provide answers to some of the questions raised in this field. Different studies have offered conflicting interpretation of the linguistic evidence as to the role of L1 and the nature of transfer, the availability of functional categories and their feature specification, as well as the extent to which UG constrains interlanguage development (White 2000, 2003). Some claim that functional categories are subject to full transfer from the L1 (as is the whole grammar), while others offer different analysis claiming that there is no transfer of functional categories. A third view proposes transfer of functional categories but assumes underspecification of their features. Similar disagreement holds for the role of UG, with researchers claiming no UG access, partial UG guidance or full UG constraint on the L2 acquisitional process.

There are a number of questions that emerge and offer themselves as open topics for discussion and further research. What is the relation between L1 and L2 in the learners' mental representations? Is there transfer from the L1 and, if there is, to what extent is it realised? Is there parameter resetting in the L2 learners' grammar and, if there is, how do learners manage to restructure their system? Is L2A process UG constrained and, if it is, to what extent?

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The answers to these questions largely depend on the approach different researchers take when analysing the nature of language acquisition in general, and SLA in particular. The plausibility of the answers does not only depend on the plausibility of the approaches taken, but also, and in my view most crucially, on the degree to which data provided by crosslinguistic research support them.

1.2 Theoretical background

Almost all researchers and SLA theories agree on the issue of availability of the Universal Grammar (UG) in SLA[1]. However, they offer differing opinions about and answers to the questions raised above. Some researchers (Epstein et al 1998) claim that there is no transfer from the L1 while UG principles entirely guide L2 development. Others propose partial transfer and full access to UG, assuming transfer of lexical categories only (Vainikka & Young-Scholten, 1994) or transfer of functional categories with underspecified/inert features (Eubank 1993/94). Finally, there are researchers (Schwartz & Sprouse 1994, 1996) who assume that functional categories are subject to full transfer from the L1 (as is the whole grammar) and interlanguage representations are fully UG constrained. The discussion in this paper is based on the view held by this last group of researchers.

Full transfer, full access, parameter resetting

According to the Full Transfer/Full Access Hypothesis (Schwartz and Sprouse 1994, 1996) L1 and L2 acquisition differ with regard to their point of departure but are pretty similar with respect to the availability of UG. They assume that the final state of L1 grammar is the initial state of L2 acquisition. On this model the whole of the L1 grammar transfers, however, the kind of transfer that is assumed does not include the surface characteristics of L1 (the surface realisation of lexical and morphological items), but rather their abstract underlying representations, such as functional categories, their feature specification and the syntactic consequences thereof, or the L1 specific parametric properties of universal principles.
As far as UG is concerned, this approach assumes full access to UG such that allows learners to have accessibility to UG properties that are not instantiated in their L1 grammar. Thus, initially when faced with L2 input, in order to account for it learners use their L1 representations. When the L1 grammar is unable to accommodate the target language (TL) input, the initial state of L2 is forced to change. This change, 'restructuring', takes place based on options of UG. Hence, in order to arrive at a system that is more appropriate to the L2 input, new functional categories and feature specification and new parameter setting are introduced[2].

[1] Bley-Vroman (1990), however, proposes a completely different view assuming that UG plays no role in SLA. Meisel (1997) takes a similar stance.
[2] White (1985a) proposes an earlier version of this view maintaining that at initial stages of L2 acquisition learners apply their L1 parameter specification to L2 data, subsequently resetting it as a response to L2 input.

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The Full Transfer/Full Access Hypothesis states that L1 is the initial L2 state but does not determine the time period this state holds and the time needed for a restructuring of the system to take place. In some cases, the changes take place more rapidly, in other more slowly depending on a number of factors, such as the initial state, the input or UG.

On this view convergence of the L2 grammar does not necessarily happen. The final outcome of L2 acquisition might never be the target language due to either absence of data needed to guide restructuring or complexity and rarity of positive data. UG and learnability principles being the same for L1 and L2 acquisition, the initial state is what accounts for such an outcome.

1.3 Basic assumptions

One of the reasons for undertaking the present study is to test the strong predictions of the Full Transfer/Full Access Hypothesis for the acquisition of English by Macedonian native speakers. More specifically, I will examine the predictions of FT/FA on the basis of the acquisition of wh-movement given the parametric differences between English and Macedonian in that respect. In doing so I would hopefully provide answers to my initial general questions: Are functional categories specified in accordance with learners' L1 or L2 specification? What is the role of L1 in L2 interlanguage development? Do learners manage to reset their parameters to fit the specification of the language they are acquiring? What is the role of UG in the acquisitional process? The acquisition of wh-movement seems to be an area of research suitable to provide answers to these general questions.

Following Chomsky (1986) both English and Macedonian have a strong feature value for the wh-movement parameter, i.e. they both allow movement of a wh-phrase from an A-position to an A'-position of a specifier of CP. However, following Adams (1986), Rudin (1988) and Haegeman (1994)[1] English and Macedonian differ on the basis of the mode of operation of wh-movement. Namely, English wh-movement operates through substitution, thus, when multiple wh-words are used, fronting only the first one and leaving all the others in-situ, whereas Macedonian wh-movement parameter operates through adjunction, thus allowing for multiple wh-fronting.

In addition, the two languages behave differently with respect to the wh-island constraint. Following Rizzi (1982), there are parametric differences in the bounding nodes, such that in English NP and IP are the bounding nodes resulting in the ungrammaticality of sentences in which wh-words are extracted from wh-islands, while in Macedonian[2] NP and CP are bounding nodes allowing for such extraction. Resulting from this is the fact that English disallows extraction of wh-words out of embedded questions and relative clauses, which is not the case with Macedonian[3] (these issues will be discussed in greater detail in section 2).

Bearing these differences in mind my basic research questions are the following: Do Macedonian learners acquiring the English parameter for wh-movement and its constraints transfer their mother tongue parameter setting at their initial stages of acquisition? Do they

[1] Adams, among others, addresses English, Rudin makes claims about English and other Slavic languages (those about Bulgarian are relevant to this study), while Haegeman uses English and Polish (another Slavic language) as languages of exemplification.

[2] Rizzi uses Italian as a language of exploration, but following my intuitions as a native speaker of Macedonian I assume that in this regard Italian and Macedonian are the same.

[3] Based on Hornsteins's (1995) account of Bulgarian.

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reset their parameter value in the course of development? Do higher-proficiency learners behave in a similar way as English native speakers with regard to wh-movement? Finally, is UG involved in the whole of this process?

On the basis of the differences between the two languages briefly outlined above and the general predictions of the Full Transfer/Full Access Hypothesis, the expectations for the acquisition of wh-movement by Macedonian learners of English would be the following. At initial stages of acquisition Macedonian learners of English transfer their mother tongue specification of CP and in their interlanguage accept wh-movement by adjunction (multiple wh-movement) and violations of the wh-island constraint (extraction of wh-phrases out of wh-islands). As a result of successive input or, if the L2 input (no matter whether in the form of natural production or classroom instruction) underdetermines these particular phenomena of L2 grammar, via direct access to UG, they advance their knowledge of English and reset their parameter to accommodate the specification of the target language. If these assumptions are correct it should be possible to observe a developmental pattern, i.e. at more advanced stages of interlanguage development Macedonian learners of English are expected to behave similarly to English native speakers practicing wh-movement by substitution and disallowing wh-extraction out of wh-islands.

2. Properties of wh-movement in English and Macedonian

The central topic addressed in this study is the parameter of wh-movement and the constraints on its operation as they are realised in English and Macedonian. The specific phenomena discussed are multiple wh-movement/fronting and extraction out of wh-islands. Therefore, a few notes about these phenomena and their realisation in English and Macedonian are in place.

A general observation about English and Macedonian is that a lot more restrictions are at play in the former than in the latter.

2.1 Multiple wh-movement/fronting

Following Boskovic (2000) it is generally assumed that there are four possibilities of wh-movement with regard to multiple question formation: only one wh-phrase moves (eg. English), all wh-phrases stay in situ (Chinese), both these options are available (French) and all wh-phrases move (Slavic languages, among which Macedonian)[1]. For the purposes of this paper only two types of languages as represented by English and Macedonian are relevant and will be discussed.

On Culicover's (1997) account of the Principles and Parameters Theory question formation in English is assumed to take place by moving a wh-phrase into an empty specifier position. From the structure-preserving principle, which postulates that syntactic structures must satisfy X'-theory at all levels of representation, it follows that nothing else can land in a position that is already filled. Thus, if one requires that wh-movement be structure-preserving, then one has to rule out multiple wh-movement in cases where there is a

[1] In earlier versions of the transformational grammar (Baker 1970, Chomsky 1964 in Wachowicz 1974) single wh-question movement was thought to be universal.

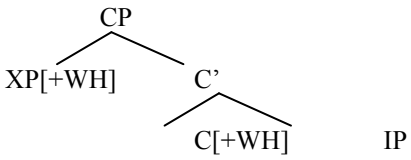
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landing site only for one wh-phrase. This accounts for the ungrammaticality of sentences of the type exemplified in (1).

(1) *Who whom saw?

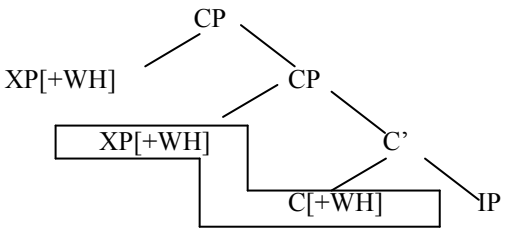
Besides obeying the above-mentioned principle, according to Culicover (ibid.), wh-movement must also fulfill the licensing condition of Spec-head agreement, according to which a specifier must agree in features with its head[1]. In these terms when wh-movement applies the fronted wh-phrase in the specifier position of CP, [Spec, CP], agrees with the head of the interrogative phrase C, which is specified [+WH], yielding the following S-structure:

(2)



If multiple wh-phrases are fronted, on the assumption that C [+WH] agrees with only one specifier, only the first wh-phrase will be licensed by Spec-head agreement, leaving all the others unlicensed, as Culicover (ibid.) shows in the following configuration:

(3)



However, despite the fact that there is no multiple wh-fronting in English, there are multiple wh-questions where the first wh-phrase is fronted (in accordance with the above-given conditions), while all other wh-phrases are left in situ, allowing for sentences of the type:

(4) Who saw whom?

The structure of such sentences at the level of Logical Form (LF) is illustrated in (5):

(5) whom who saw?

[1] A more precise version of the condition is the WH-Criterion specified by Rizzi (1996:64) as:
'A: A WH-operator must be in a Spec-head configuration with X^o [+WH]
B: An X^o [+WH] must be in a Spec-head configuration with a WH-operator'.

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This shows that at certain level of grammatical representation multiple wh-movement/fronting is allowed in English. An explanation of this phenomenon is provided if one assumes Rudin's (1988) condition of SpecCP adjunction[1], which stipulates that nothing may be adjoined to SpecCP at level X of the grammar. Namely, Rudin (ibid.) accounts for the ungrammaticality of (1) and the grammaticality of (4) by stating that in English the condition of SpecCP adjunction operates at S-structure, but not at the level of the LF.

To sum up, in English at the level of syntax adjunction is blocked and wh-movement operates through substitution into an empty node. There is no multiple wh-fronting and when several wh-words are used only one is fronted while all the others are left in situ. At the level of LF, on the other hand, adjunction applies freely.

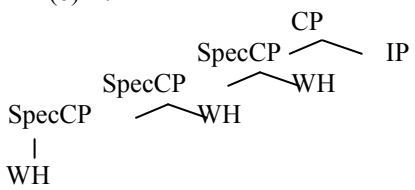
Macedonian offers a different picture. Based on Rudin's (ibid.) account of Bulgarian[2], the condition of SpecCP adjunction does not operate at any level. Thus, in Macedonian multiple wh-movement/fronting is possible and, in fact, obligatory. In accordance with this, the Macedonian counterpart of the English sentence (1) is:

(1') Koj kogo vide?
Who whom see (3p past)

Sentences with one fronted wh-expression and all others in-situ are only marginally acceptable.

On her account languages of this type derive multiple wh-word sentences by substituting the first wh-phrase into the SpecCP position and then adjoining all the others to the right of SpecCP, as shown in (6)[3] [4]:

(6)



2.2 Extraction out of wh-islands

It is universally known that particular types of construction behave as islands with respect to movement in that it is impossible to extract elements out of them. According to White (1988) object noun complements, subject noun complements, complex NPs and wh-clauses are such structures out of which wh-elements cannot be extracted. In this section I will

[1] A modified version of Adams's (1984) condition of COMP adjunction.

[2] In the absence of relevant literature on the structure of Macedonian, considering that both Bulgarian and Macedonian belong to the group of South Slavonic languages and that of all languages from this group Bulgarian is the closest one to Macedonian, in this paper it is assumed that Macedonian and Bulgarian are the same with respect to the topics discussed.

[3] In an earlier version of her account Rudin (1986) assumed a flat structure.

[4] Why some languages allow multiple wh-fronting, while other do not is an open question (Culicover 1997), but it goes beyond the limits of this study and will not be addressed.

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illustrate only those island constructions that are relevant to the present study, that is, those with regard to which English and Macedonian behave differently.

In English it has been observed that due to the principle of subjacency, which stipulates that moved elements may cross only one bounding node, where NP and IP (S) are bounding nodes (Chomsky 1977)[1], it is impossible to extract wh-elements out of certain embedded questions and relative clauses. Sentences (7) and (8) are examples of grammatical and ungrammatical extractions, respectively:

(7) [$_{CP1}$What$_i$ did [$_{IP1}$people wonder [$_{CP2}$ t_i [$_{IP2}$ political parties agreed on t_i at the meeting]]]]?

(8) *[$_{CP1}$About whom$_i$ do [$_{IP1}$you wonder [$_{CP2}$what$_k$ [$_{IP2}$the international representatives said t_k t_i]]]]?

Following Haegeman (1994) in (7) *what* is extracted from the lower IP2 and moves in the higher [Spec, CP1]. Although it seems that it has crossed two IPs, thus violating the subjacency condition, this is not the case. The movement of *what* does not take place in one single step, rather it is a sequence of successive movements/cycles, each in itself legitimate. First, it moves from its base-generated position into [Spec, CP2], crossing only one bounding node (IP2) and obeying subjacency. Then, it moves into [Spec, CP1], again crossing only one bounding node and not violating subjacency. In (8), on the other hand, *about whom* cannot escape through [Spec, CP2], which is already filled (by *what*). Instead, it is forced to move directly from IP2 to [Spec, CP1] crossing two bounding nodes (IP1, IP2) and violating the subjacency condition.

Following Rizzi's (1982) account the principle of subjacency in Macedonian operates in a freer manner. Namely, CP rather than IP acts as a bounding node. As a result, some cases of extraction from wh-islands which are impossible in English are possible and grammatical in Macedonian. Hence, the following sentence is an acceptable counterpart of the ungrammatical English one given in (8):

(8') [$_{CP1}$Za	kogo$_i$	[$_{IP1}$se	prasuvas	[$_{CP2}$ t_i sto$_k$	[$_{IP2}$rekoa
about	whom	reflex pro	wonder 3p	what	said 3p pl
megunarodnite		pretstavnici		t_k t_i]]]]?	
International-the		representatives			

Sto moves freely without crossing any bounding node, while *za kogo* crosses only one bounding node (CP2) without violating subjacency. *Za kogo* also moves through and leaves a trace in [Spec, CP2], which already contains a wh-word (s*to*). Following Corovoski's line of reasoning (1986) this is related to the phenomenon of multiple wh-fronting and multiple wh-elements in SpecCP (see section 2.1).

A general observation referring both to English and Macedonian is that there is an interrogative-relative asymmetry, that is, island violations made in questionning are more severe than those made in relativisation (Rudin 1988).

[1]The subjacency condition was reformulated in terms of the notion barrier in Chomsky (1986). Since the theoretical considerations of this principle are not the primary aim of this paper, for the sake of simplicity the account of subjacency in terms of bounding nodes has been adopted here.

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3. The experiment

Given the parametric differences with regard to wh-movement and its underlying features, English and Macedonian seem to be an appropriate object of a study which focuses on acquisition and aims to give an insight into the more general phenomena of transfer, parameter setting and UG access in L2A.
In order to be able to fulfill this aim, taking into account the theoretical presumptions adderessed in the introduction, I constructed a study investigating L2 learners' representations of CP features and the principle of subjacency.

3.1 Subjects

The experiment was carried out in a foreign language teaching school in Skopje, Republic of Macedonia. All subjects were native Macedonian speakers learning English and attending courses at different levels of proficiency. The study included a total number of 50 subjects: 22 learners at a pre-intermediate level of proficiency, 17 intermediate learners and 11 upper-intermediate ones[1]. To control for accuracy the results obtained were compared against those of a group of 10 native English speakers.
The age range of all subjects was 14-21 years.
Learners at pre-intermediate level have been studying English for four years in average now. They have had four English classes per week.
The intermediate learners have been studying English for six years on a 4-class per week basis.
The upper-intermediate learners have been studying English for seven years with a pace of four classes per week.

3.2 Tasks

Taking into consideration the complexity and rarity of the structures representing the phenomena addressed in this study, natural and elicited production data seemed to be inappropriate. Namely, following White (1985b, 1990) failure to produce constructions exemplifying multiple wh-questions or subjacency violations would not necessarily tell one something about L2 learners' mental grammar. In addition, production of ungrammatical sentences illustrating the phenomena mentioned above could be interpreted as a performance error and might not be illustrative of learners' real linguistic competence.
Therefore, in order to investigate L2 learners' linguistic competence in a systematic and controlled way, I used standard testing techniques, such as, acceptability judgement tasks and preference tasks. These tasks were used to give subjects an opportunity to express their opinions about both grammatical and ungrammatical sentences. Following Hawkins (2001) to be able to draw reliable conclusions about learners' relevant syntactic representations,

[1] Before embarking on a course they have been tested by the school to determine their level of proficiency. I adopted the classification made by the school.

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one first has to establish that they have acquired the type of movement involved. That is, for one to be in a position to test learners' sensitivity to constraints on movement operations, learners should not only accept grammatical sentences as such, but they should also reject the ungrammatical ones.

In the light of all these considerations I used two tasks: an acceptability judgement task and a preference task. They were given to the subjects as part of one test where the acceptability judgement task preceded the preference task.

Bearing in mind the comparative rarity of these constructions in everyday communication, as well as the restrictions on the contexts in which they can appear, I am of the opinion that more reliable data would have been produced if each testing item had been placed in a certain context. However, due to limitations in time and space I was not in a position to provide such conditions. Instead, more extensive overall instructions were used with a purpose to set a common ground for the sentences used in both tasks (Parodi in personal communication; See Appendix 1).

In essence, both tasks tested the same phenomena. However, the acceptability judgement task was used to study the effects of transfer from the L1, whereas the preference task was used to provide information about learners' underlying representation and their parameter setting at that particular moment of acquisition.

3.2.1 Acceptability judgement task

The acceptability judgement task consisted of thirty sentences out of which ten were distractors (see Appendix 1). Before being given to the subjects they were organised in groups according to the aspects I wanted to test. In addition, they were randomised to prevent subjects from getting a clear idea of what my real interests and intentions with the experiment were.

Most sentences tested subjects' reactions and opinions about wh-movement and the way different conditions influence their decisions. Ten of the sentences (five grammatical and five ungrammatical) tested multiple wh-movement and another ten (five grammatical and five ungrammatical) tested subjects' intuitions about the operation of the wh-island constraint.

The sentences testing multiple wh-movement were grouped according to two sub-conditions. In order to see if the subjects base their decisions on cues such as argument structure of the verb, I divided the sentences in two sub-groups. In one group the wh-words referred only to verb arguments, while in the other group information was being asked both about arguments and adjuncts. Thus, there were five (two grammatical and three ungrammatical) sentences of the type argument-argument (ARG-ARG) and five (three grammatical and two ungrammatical) sentences of the type argument-adjunct (ARG-ADJ).

As for the sentences testing the wh-island constraint there were also two sub-conditions. To investigate if there was any influence of the type of clause from which wh-words were extracted, I tested extraction of wh-words out of embedded questions (EmQ) and relative clauses (RC). Therefore, five (three grammatical and two ungrammatical) sentences were examples of sentences containing embedded questions, whereas five (two grammatical and three ungrammatical) were sentences containing relative clauses.

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The subjects were asked to judge every sentence on a scale of 1 to 5, where 1 was defined as 'totally unacceptable' and 5 as 'completely acceptable'[1]. A five point scale was used to show the level of uncertainty of L2 learners and the lower acceptability of certain sentences on the part of native speakers and possibly higher level L2 learners.

3.2.2 Preference task

The preference task consisted of fifteen pairs of sentences, five out of which were fillers (see Appendix 1). The organisation of the sentences according to conditions was the same as in the acceptability judgement task. Basically there were two conditions, multiple wh-movement and wh-island constraint, subdivided in two sub-conditions: argument-argument and argument-adjunct; and embedded questions and relative clauses, respectively.
There were five pairs of sentences in each major condition. In the first one (multiple wh-movement) two pairs were an illustration of the argument-argument sub-condition and another three presented the argument-adjunct sub-condition. In the second major condition (wh-island constraint) three pairs were examples of sentences with embedded questions and two pairs contained relative clauses.
For each pair of sentences the subjects were asked to mark the sentence they preferred.

3.3 The results

The results for both tasks were obtained by calculating the mean values of the marks given in every condition across the three levels of proficiency and comparing them to those obtained from the native speakers judgements. In addition, in order to see if there was a significant difference between learners' and native speakers' judgements or preferences in both tasks, and if learners were performing below or above chance level in the preference task, statistical analysis in SPSS was carried out.

3.3.1 Acceptability judgement task

The acceptability judgement task basically revealed the pattern of acquisition predicted in 1.3.
A general observation that can be made initially is that the results show all subjects' (natives and non-natives) low level of acceptability of grammatical sentences for both sub-conditions of the multiple wh-question type and for extraction out of embedded questions. The observation indicates that such constructions are not very common in everyday communication and when in a position to convey such meanings people resort to other means of expression.

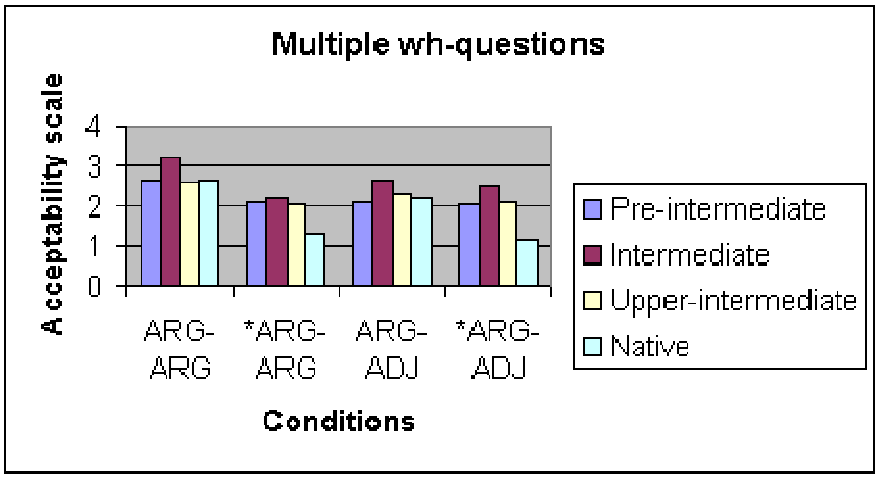
[1] Following White (2003) a scale entirely on the positive side (1 to 5) was used instead of a scale with positive and negative values (say, -2 to +2) to avoid the difficulties of interpretation of the judgements of 0.

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Multiple wh-questions

Chart 1 below presents the rates for multiple wh-questions (including the two sub-conditions) made by all groups of learners and the native speakers. The results show an interesting pattern – learners at all levels of proficiency make indeterminate judgements about the (un)grammaticality of questions with multiple wh-expressions.

Chart 1



Overall there is no significant difference between judgements on grammatical and ungrammatical sentences in learners at all levels, as opposed to the difference existing in native speakers' judgements on the same sentences (ARG-ARG $t(9) = 5.83$, $p<0.001$; ARG-ADJ $t(9) = 3.43$, $p<0.01$).

This result alone already suggests the existence of full transfer effects from learners' L1. But, before drawing definite conclusions let us look at the results in greater detail.

Recall that, following White (1988) & Hawkins (2001), grammatical sentences were included in the study to see if learners have reached an appropriate level of knowledge of the constructions tested at which it is normal to expect them to be aware of the constraints on movement. On the other hand, ungrammatical sentences were used to test whether subjects are sensitive to the structures in which these constraints operate.

Now, if one looks at the results in the two sub-conditions for the grammatical sentences only, one can see that all learners (even those at a pre-intermediate level of proficiency) have shown a level of acceptability identical or comparable to the level of acceptability displayed by native speakers. They have also behaved in a targetlike fashion in judgeing grammatical sentences of the type ARG-ARG more acceptable than grammatical sentences of the type ARG-ADJ. There is no significant difference between learner groups and natives in this respect, which suggests that learners have a good command of the constructions in question and it is reasonable to expect them to behave in a nativelike manner when it comes to ungrammatical sentences as well.

However, the results do not seem to show this. Namely, as the chart above shows and the statistical analysis confirms, there is a significant difference between learners at all levels of

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proficiency and native speakers in their judgements of ungrammatical sentences in the two sub-conditions. In the ARG-ARG type of constructions the pre-intermediate ($t(29.43) = 3.76$, $p<0.01$), intermediate ($t(25) = 3.58$, $p<0.01$) and upper-intermediate ($t(14.22) = 2.51$, $p<0.03$) groups of learners differ significantly in their performance from the native speakers. Similar results are obtained in the ARG-ADJ sub-condition with all groups of learners performing significantly differently from the controls (preintermediate $t(29.50) = 4.22$, $p<0.001$; intermediate $t(21.51) = 5.16$, $p<0.001$; and upper-intermediate $t(13.25) = 3.35$, $p<0.01$).

As for the variation between learner groups themselves, the statistical analysis shows that the differences between learners at preintermediate and intermediate level, and those at intermediate and upper-intermediate level, respectively, are not significant in both sub-conditions, suggesting lack of development.

Yet, the rates learners at intermediate level of proficiency give to grammatical and ungrammatical sentences in the ARG-ARG type are significantly different ($t(16) = 4.24$, $p<0.002$). Considering that they make completely indeterminate judgements about the sentences of the ARG-ADJ type, it is premature to claim that they have a clear idea about the constraints on multiple wh-fronting in English. Perhaps a process of restructuring is at its beginnings.

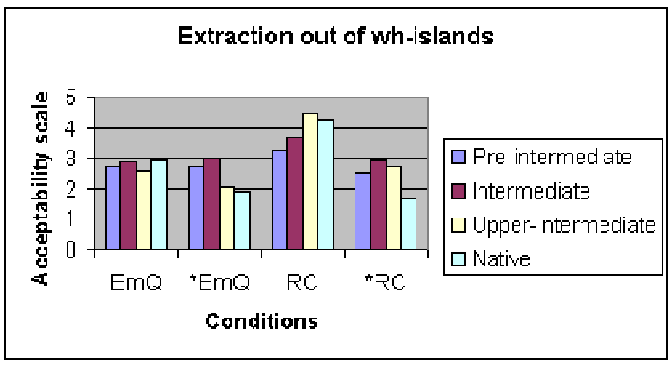
These results are pretty revealing. It seems that Macedonian learners of English transfer their mother tongue parameter setting in their L2 and have difficulties resetting it to fit their target language specification. The pattern observed shows no difference between lower and higher proficiency learners. This type of outcome is consistent with the predictions of the working hypothesis of this paper.

Bearing in mind the results presented above, let us look further and see how learners behave with respect to other structures involving movement and its constraints.

Extraction out of wh-islands

Chart 2 displays the ratings on extraction out of wh-islands (extraction of wh-words out of embedded questions and relative clauses) obtained from all subjects. The results generally confirm the results of the previous condition, although the picture for the upper-intermediate group of learners is slightly different.

Chart 2



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The ratings of the learners at all levels of proficiency for the grammatical sentences only are more or less similar to those provided by the native speakers. In addition, all learners, in a targetlike manner and in accordance with the theoretical claims about the interrogative-relative asymmetry (cf. 2.2), judge grammatical extraction out of relative clauses to be more acceptable than grammatical extraction out of embedded questions. This suggests that they have reached a level of development of their interlanguage grammar at which it is sensible to expect the constraints on extraction from wh-islands to operate.

However, the results show a different development. Learners at pre-intermediate and intermediate levels of proficiency are quite indeterminate in their judgements of the ungrammatical sentences. Their ratings of grammatical and ungrammatical sentences in each sub-condition are more or less the same and do not show that they have become aware of the constraints on extraction operations. The more so because the statistical analysis shows a significant difference between these groups of learners' judgements on ungrammatical sentences in both sub-conditions, on the one hand, and the ones made by native speakers, on the other (in the embedded question sub-condition: pre-intermediate $t(30) = 2.19$, $p<0.04$; intermediate $t(25) = 3.91$, $p<0.01$; in the relative clause sub-condition: pre-intermediate $t(30) = 3.21$, $p<0.01$; intermediate $t(24.67) = 3.90$, $p<0.01$).

The picture of the upper-intermediate judgements in both conditions is somewhat different. There is no significant difference between them and the native speakers in the embedded question sub-condition and it appears that they are able to distinguish (un)grammaticality. The difference in the ratings they give to grammatical and ungrammatical sentences is significant ($t(10) = 2.60$, $p<0.03$) and based on this one can conclude that they are aware of the constraints on extraction. The clustering of the upper-intermediate group together with the lower proficiency groups on the judgements of ungrammatical sentences in the relative clause sub-condition (see chart 2) and the statistically significant difference between this group and the native speakers ($t(19) = 3.03$, $p<0.01$) may lead one to conclude that learners at this level have not become familiar with constraints on extraction of wh-words from relative clauses. However, this observation is apparent and not real because from the rates they give to grammatical (4.45 in average) and ungrammatical (2.7) extractions out of relative clauses, it is obvious that they are sensitive to constraints on movement, this difference being statistically significant ($t(10) = 6.07$, $p<0.001$).

These results generally confirm the results of the multiple-wh-question condition. There seems to be transfer from the first language. However, the results from the upper-intermediate learners obtained in the wh-island extraction condition appear to shed new light. It looks like there is some sort of restructuring going on. It seems that at upper-intermediate level learners are beginning to reset their parameters and no longer fully transfer the feature specification from their L1. The transfer effects displayed by this group for the first condition may be attributed to the fact that in Macedonian constructions with multiple wh-movement are more common in everyday communication than constructions with extraction from wh-islands.

3.3.2 Preference task

The results of the preference task confirm and supplement the results of the acceptability judgement task. The developmental pattern of acquisition becomes more evident here, as can be seen from the trends presented in the tables and charts below. In addition, the task

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shows learners' underlying representations of the phenomena in question and their parameter (re)setting, which is particularly revealing at the upper-intermediate level of proficiency.

Multiple wh-questions

Table 1 below shows the results of the preference task on multiple wh-questions in both sub-conditions. At first sight the results seem to contradict the results from the acceptability judgement task and appear to indicate that when given two versions (grammatical and ungrammatical) of the same sentence, learners are more inclined to select the grammatical one.

Table 1: Correct preferences for the multiple wh-question condition in percentage

Conditions	Pre-Intermediate	Intermediate	Upper-Intermediate	Native
ARG-ARG	28/44 (63.6%)	16/34 (47%)	18/22 (81.8%)	19/20 (95%)
ARG-ADJ	47/66 (71.2%)	34/51 (66.6%)	27/33 (81.8%)	28/30 (93.3%)

However, before making any conclusions let us first look further into the results. In order to see if learners are performing above or below chance level when making preferences for the grammatical sentences in both sub-conditions, a statistical analysis was carried out. The results show that learners at pre-intermediate level perform round chance level in the ARG-ARG sub-condition ($t\ (21) = 2.03$, $p<0.06$) and just above chance level in the ARG-ADJ sub-condition ($t\ (21) = 2.54$, $p<0.02$). This might suggest that a process of restructuring is under away in their mental grammars, but it is not enough to conclude that learners at this level have a clear-cut idea about multiple wh-question formation and its constraints in English.

Learners at intermediate level of proficiency are clearly below chance in the type ARG-ARG ($t\ (16) = -0.29$, $p<0.8$) and round chance in the ARG-ADJ type ($t\ (16) = 2.05$, $p<0.06$) suggesting that their underlying representations of the L2 structures are not distinct from their mental representations of the L1 structures.

Finally, learners at upper-intermediate level undoubtedly perform above chance level both in constructions in which information about arguments is requested ($t\ (10) = 4.18$, $p<0.003$) and in those in which information about an argument and an adjunct is sought ($t\ (10) = 3.39$, $p<0.01$). Combined with the fact that there is no significant difference between them and the native speakers (ARG-ARG $t\ (16.99) = -1.45$, $p<0.2$; ARG-ADJ $t\ (19) = -0.37$, $p<0.8$), this indicates that they are becoming aware of the differences between movement operations and their constraints in their native language and the language they are acquiring and are in the process of resetting their parameters.

The figures above and, more clearly, chart 3 below present a gentle developmental pattern of acquisition across learner groups.

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Chart 3



Taking these considerations into account let us look into the results on the wh-island constraint.

Extraction out of wh-islands

Table 2 shows the preferences of all groups of subjects in the wh-island condition. The results seem to support the results of the acceptability judgement task. In addition, they seem to show a slight developmental pattern.

Table 2: Correct preferences for the wh-island condition in percentage

Conditions	Pre-Intermediate	Intermediate	Upper-Intermediate	Native
EQ	21/66 (31.8%)	24/51 (47%)	19/33 (57.6%)	24/30 (80%)
RC	28/44 (63.6%)	27/34 (79.4%)	15/22 (68.2%)	17/20 (85%)

Here, too, in order to see whether learners have clear intuitions about the structures studied or their answers reflect their random choices, statistical measures were used in the data analysis. Thus, it was confirmed that learners at pre-intermediate level perform below chance level in both sub-conditions: extraction out of embedded questions ($t(21) = -3.28$, $p<0.5$) and extraction out of relative clauses ($t(21) = 2.03$, $p<0.06$). These results imply that they do not differentiate between grammatical and ungrammatical extractions in their L2 and apply the rules from their mother tongue in the target language constructions.

The picture is slightly different for the intermediate group of learners. While making choices for the embedded question sub-condition that are below chance ($t(16) = -1.15$, $p<0.3$), they seem to be aware of the rules at play in the relative clause sub-condition performing above chance level ($t(16) = 4.78$, $p<0.001$). This might indicate that some sort of restructuring is taking place. However, on the basis of such results one cannot conclude that learners have clear representations about movement and its constraints.

An opposite development is observed in the upper-intermediate group. They select their choices above chance level in the relative clause sub-condition ($t(10) = 2.39$, $p<0.04$) and round chance level in the embedded question one ($t(10) = 0.7$, $p<0.5$). In addition, their

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preferences in both sub-conditions are not significantly different from those made by native speakers (EQ t (19) = -1.19, p<0.3; RC t (19) = -0.89, p<0.4). These results suggest that it is reasonable to conclude that they are in a process of restructuring their mental L2 system, slowly approaching native speakers.

The data in Table 2 and the graph in Chart 4 show a clear line of development from pre-intermediate to upper-intermediate level.

Chart 4



The patterns observed in the preference task confirm the results from the acceptability judgement task in that learners at pre-intermediate and intermediate level of proficiency seem to transfer the parameter setting from their first language. In addition, they supplement the results from the acceptability judgement task in that the upper-intermediate learners appear to be approaching native English speakers in their discrimination between grammatical and ungrammatical constructions, so that a mild developmental pattern can be perceived.

4. Discussion

To return now to the aims and expectations of the study: the main intention of the paper was to examine and hopefully prove the claims of a group of second language acquisition researchers supporting the Full Transfer/Full Access hypothesis. The general question posed by the study has been whether there is full transfer from the first language with regard to functional projections and their parameters and whether there is parameter resetting in the process of second language acquisition. That is, whether at initial stages of acquisition L2 learners' performance relies entirely on their L1 knowledge and whether a process of restructuring is going on during the acquisitional period as a consequence of constant L2 input analysis or full access to the Universal Grammar. The more specific research questions of the paper have been whether Macedonian learners acquiring the English parameter of wh-movement and its constraints transfer their mother tongue parameter setting at their initial stages of acquisition, whether they reset their parameter value in the course of development with an effect that higher-proficiency learners behave in a similar way as English native speakers and, finally, whether UG is involved in the whole of this process.

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Based on the above-mentioned approach, my claim in this paper has been that indeed there is full transfer from the first language and that in the course of development a process of parameter resetting takes place in L2 learners' mental grammars guided by UG.

The expectations of the study specified in section 1.3 have been largely fulfilled, as can be seen from the data presented above.

The most basic expectation about transfer effects seems to be borne out by the data. The results from learners at lower proficiency levels show that they make indeterminate judgements about (un)grammaticality and tend to prefer sentences which are consistent with their mother tongue parameter setting. Notably, when faced with multiple wh-questions, irrespective of the types of constituent being asked about (ARG-ARG or ARG-ADJ), they assume that in English, as in Macedonian, the condition of SpecCP adjunction does not operate at any level. Failing to see that it does operate at the level of syntax in English, in their second language they continue to apply adjunction - that being the operation they 'know' from their native language - in cases where substitution would be the grammatical and acceptable solution. As for the violations of the wh-island constraint, both in embedded questions and relative clauses, the effects of transfer in the pre-intermediate and intermediate groups are also clear cut. Following their Macedonian intuitions about CP being a bounding node, learners assume it is the case in English too. Therefore, sentences that are clear violations of subjacency in English (remember that this is not the case in Macedonian) are perfectly acceptable to them.

The second prediction of the study referred to the possibility of parameter resetting in the L2. Although the results from the lower proficiency groups give some indication, the data obtained from the upper-intermediate group of learners are especially relevant in this respect. When it comes to multiple wh-questions, learners provide mixed results. Their results on the acceptability judgement task imply that they, too, transfer the functional categories and their specification from the L1. However, the results from the preference task suggest that one cannot confidently draw such a conclusion. Rather, on the basis of such results, it is more reasonable to suppose they indicate that some sort of restructuring is taking place. Any doubts are refuted when one looks at the data on the wh-island constraint. From the results on both tasks it is obvious that upper-intermediate learners have definite intuitions about what is grammatical and acceptable in English and what is not. Such data show that learners at a higher proficiency level are restructuring their mental system, i.e. resetting their parameters and gradually approaching native speakers (though it is not guaranteed that they will eventually reach that level of development). In addition, the results show that the prediction about the developmental pattern of L2 acquisition has been fulfilled.

Finally, the prediction about UG involvement in the process of parameter resetting is also borne out by the data. The low level of acceptability of the grammatical sentences shown by the native speakers suggests that those structures are not usually used in everyday communication. This in turn implies that learners cannot have massive access to such constructions when exposed to L2 input. Moreover, classroom instructions do not normally include teaching such forms and the rules by which they are governed. However, despite the fact that the input, no matter whether in the form of natural production or classroom instruction, underdetermines these structures, learners at the highest level of proficiency have shown a considerable awareness of the principles according to which they operate. Bearing in mind that in this particular case L1 and L2, i.e. Macedonian and English, have different parametric values for the phenomena in question, UG seems to be the only

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sensible source of constraints guiding L2 learners' acquisition. Thus, the data seem to support the part of the theory claiming full access to UG during the whole process of second language acquisition.

There are several other observations in favour of the theory. Recall that the Full Transfer/Full Access Hypothesis claims that L1 is the initial L2 state but does not make any commitments as to the time period this state holds and the time needed for system restructuring to take place. In some cases, the changes take place more rapidly, in other more slowly, depending on a number of factors. The data presented here seem to support the latter position. Namely, the L1 state holds in learners at pre-intermediate and intermediate levels although they have studied English for four or six years, respectively, and the process of restructuring is observed in learners at upper-intermediate level who have been exposed to English input for seven years. This slow development may be attributed to L1 influence or input underdetermination, either case being entirely consistent with the claims of the theory.

The data also show that, although approaching native speakers, high proficiency learners never really reach them. This outcome is either a result of absence of data or the complexity and rarity of positive data available. Whatever the reason, the result is compatible with the claim that complete convergence of the L2 grammar does not necessarily take place.

The patterns of development from lower to higher proficiency levels observed in this study seem to support the claims and predictions made here. In this respect then, the claims of the Full Transfer/Full Access Hypothesis have been confirmed.

5. Conclusion

By taking the phenomenon of wh-movement and its different realisations in English and Macedonian as a good illustration of the parametric differences between the two languages, in this study I attempted to test the strong predictions of the Full Transfer/Full Access Hypothesis of second language acquisition. General questions about transfer, parameter (re)setting and the role of UG in SLA were addressed on the basis of data collected from Macedonian learners of English at different proficiency levels. The results appear to support the most general predictions of the theory. At initial stages of acquisition learners' L1 grammar constitutes their L2 state. There is full transfer from the L1 and in their English learners accept the mode of operation of wh-movement and violations of the wh-island constraint typical of Macedonian. In the course of development as a result of constant UG guidance learners gradually reset their parameters to accommodate features of the L2 input. Due to L1 influence and input underdetermination complete convergence of the L2 grammar is not achieved. On the basis of such results the predictions of the Full Transfer/Full Access Hypothesis have been fulfilled and its claims confirmed.

Bibliography

Adams, M., 1984, "Multiple Interrogation in Italian", *The Linguistic Review* 4, pp. 1-27.

Baker, C. L., 1970. "Notes on the Description of English Questions: The Role of an Abstract Question Morpheme", *Foundations of Language* 6, pp. 197-219.

Bley-Vroman, R., 1990, "The Logical Problem of Foreign Language Learning", *Linguistic Analysis* 20/1-2, pp. 3-49.

Boskovic, Z., 2000, "What is Special about Multiple Wh-Fronting?", *Proceedings of the North East Linguistic Society* 30, pp. 83-107.

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Chomsky, N., 1977, "On Wh-Movement", In Culicover, P.W., Wason, T. & Akmajian, A. (eds.), *Formal Syntax*, Academic Press, Inc., pp. 71-132.
Chomsky, N., 1986, *Barriers*, Cambridge, Mass., MIT Press.
Comorovski, I., 1986, "Multiple Wh-Movement in Romanian", *Linguistic Inquiry* 17, pp. 171-177.
Culicover, P.W., 1997, *Principles and Parameters: an Introduction to Syntactic Theory* New York, Oxford University Press, Inc.
Eubank, L., 1994, "Optionality and the Initial State in L2 Development", In Hoekstra, T. & Schwartz, B. D. (eds.), *Language Acquisition Studies in Generative Grammar,* Amsterdam/Philadelphia, John Benjamins Publishing Company, pp. 369-388.
Epstein et al., 1998, "The Strong Continuity Hypothesis: Some Evidence Concerning Functional Categories in Adult L2 Acquisition", In Flynn, S., Martohardjono G. & O'Neil, W. (eds.), *The Generative Study of Second Language Acquisition, Mahwah*, NJ, Lawrence Erlbaum Associates.
Haegeman, L., 1994, *Introduction to Government and Binding Theory* (2nd Edition), Oxford, UK & Cambridge, USA, Blackwell Publishers.
Hornstein, N., 1995, *Logical Form: From GB to Minimalism*, Oxford, UK & Cambridge, USA, Blackwell Publishers.
Hawkins, R., 2001, *Second Language Syntax: a Generative Introduction*, Oxford, UK & Cambridge, USA, Blackwell Publishers.
Meisel, J., 1997, "The Acquisition of the Syntax of Negation in French and German: Contrasting First and Second Language Development", *Second Language Research* 13, pp. 227-263.
Parodi, T., 2004, *Personal Communication.*
Rizzi, L., 1982, "Violations of the Wh-Island Constraint and the Subjacency Condition", In Rizzi, L. *Issues in Italian Syntax*, Dordrecht, Holland & Cinnaminson, USA, Foris Publications.
Rizzi, L., 1996, "Residual Verb Second and the Wh-Criterion", In Belletti, A. & Rizzi, L. (eds.), *Parameters and Functional Heads: Essays in Comparative Syntax*, Oxford & New York, Oxford University Press, pp. 63-90.
Rudin, C., 1986, *Aspects of Bulgarian Syntax: Complementizers and Wh Constructions*, Slavica Publishers,Inc.
Rudin, C., 1988, "On Multiple Questions and Multiple Wh Fronting", *Natural Language and Linguistic Theory* 6, pp. 445-501.
Schwartz, B. D. & Sprouse, R. A., 1994, "Word Order and Nominative Case in Non-Native Language Acquisition, In Hoekstra, T. & Schwartz, B. D. (eds.), *Language Acquisition Studies in Generative Grammar*, Amsterdam/Philadelphia, John Benjamins Publishing Company, pp. 317-368.
Schwartz, B. D. & Sprouse, R. A., 1996, "L2 Cognitive States and the Full Transfer/Full Access Model", *Second Language Research* 12/1, pp. 40-72.
Vainikka, A. & Young-Scholten, M., 1994, "Direct Access to X'-Theory: Evidence from Korean and Turkish Adults Learning German", In Hoekstra, T. & Schwartz, B. D. (eds.), *Language Acquisition Studies in Generative Grammar*, Amsterdam/Philadelphia, John Benjamins Publishing Company, pp. 264-316.
Wachowics, K. A. 1974, „Against the Universality of a Single Wh-Question Movement", *Foundations of Language* 11, pp. 155-166.
White, L., 1985a, „The Pro-Drop Parameter in Adult second Language acquisition", *Language Learning* 35, pp. 47-62.
White, L. 1985b, „The Acquisition of Parameterized Grammars: Subjacency in Second Language Acquisition", *Second Language Research* 1, pp. 1-17.
White, L., 1988, „Island Effects in Second Language Acquisition", In Flynn, S. & O'Neil, W. (eds.), *Linguistic Theory in Second Language Acquisition*, Dordrecht/Boston/London: Kluwer Academic Publishers.
White, L., 1990, „Second Language Acquisition and Universal Grammar", *Studies in Second Language Acquisition* 12, pp. 121-133.
White, L., 2000, „Second Language Acquisition: From Initial to Final State", In Archibald, J. (ed.), *Second Language Acquisition and LinguisticTheory*, Oxford, Blackwell, pp. 130-155

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White, L., 2003, *Second Language Acquisition and Universal Grammar*, Cambridge: Cambridge University Press.

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