# ISSUES IN SECOND LANGUAGE ACQUISITION

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**ABSTRACT** Tem sido proposto na literatura que o "problema lógico da aquisição da linguagem" para o aprendiz de L2 é o mesmo que o aprendiz de L1 enfrenta (White 1982, 1995).Este trabalho é uma análise do problema. Primeiramente, mostro as várias posições na literatura sobre a aquisição de L2. Em seguida, descrevo os resultados de uma pesquisa em andamento (Cyrino, 1996) cujo objetivo é investigar a acessibilidade da Gramática Universal para aprendiz de L2.

## INTRODUCTION

The question of adult foreign language acquisition has been the aim of several studies in the last few years[1]. Although there may be differences with respect to previous knowledge, if there is motivation, it is possible for an adult to acquire a foreign language if exposed to it. The process of L2 acquisition[2] has very often been considered similar to the process of L1 acquisition, and the theory developed by Chomsky (Chomsky 1981, 1986, 1992) has served as the basis for studies which focus on this point.

It has been proposed that the "logical problem of language acquisition" for the L2 learner is the same as the one the L1 learner faces (White 1982, 1995). That is, the adult acquires the language despite the data limitations in three levels: a) the data available to the L2 learner does not show only complete sentences; b) there is simplified language in the input; c) the data available are not sufficiently informative about the complexities of L2. Nevertheless, the L2 speaker, when proficient, has intuitions about what is and what is not grammatical in that language.

This paper is an analysis of the problem in the context of Brazilians learning English. First, I show the positions in the literature about adult L2 acquisition. Then, I

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[1] A shorter Portuguese version of this paper will be published in Anais do XI ENCONTRO NACIONAL DA ANPOLL, held in João Pessoa, Paraíba, in June 1996.

[2] In this paper, I use "L2" as standing for foreign language, assuming that other aspects may be at play in the acquisition of a second language, as is the case, for example, of children/adults in a bilingual country.

describe the results of an ongoing research (Cyrino, 1996) whose objective is to investigate the accessibility of Universal Grammar for L2 learners.


## 1. ADULT L2 ACQUISITION

Considering there is a biologically determined language faculty, many studies propose that Universal Grammar (UG) may underlie L2 acquisition somehow, assuming this faculty does not change over time. Will UG be still accessible for an adult learning an L2? Some papers suggest the possibility of that hypothesis (Flynn, 1983; White, 1982; Cyrino, 1986, among others). Other papers, however, reject this possibility and propose that UG is not accessible for the L2 learner after the Critical Period (Lenneberg, 1967) for language acquisition (Schachter, 1988; Bley-Vroman, 1989, among others).

The question of the critical period is always brought up in the case of adult L2 acquisition with the following arguments: a) everybody knows it is more difficult to learn an L2 in the adult age than in the childhood years; b) the majority of adults never dominates completely the L2.

However, in my point of view to say that adults never acquire an L2 successfully is an overgeneralization. The degree of success he obtains may be due to factors external to her capacity of acquiring a foreign language. Pinker (1994), for example, shows the cases of some adult immigrants who successfully dominate the L2: Joseph Conrad, one of the greatest English language writers of this century was born in Ucrania and his L1 was Polish. Vladimir Nabokov, another brilliant English language writer did not have English as his L1. It is true that the problem faced by these authors and other people, as Henry Kissinger (cf. Pinker, 1994), is the foreign accent, which never leaves them. But nobody can say they have not acquired English successfully.

The existence of a Critical Period seems to be confirmed by several cases of people who have gone through their infancy without learning their L1. These are rare cases, but they exist: the case of children found after puberty in the houses of psychotic parents who isolated them from social living. For example, the famous case "Genie"(related in Pinker, 1994 and Bickerton, 1990): the girl was found when she was thirteen and only had access to L1 after that. As a result, she only learned to produce "immature" sentences, in many aspects similar to pidgins:

(1)  MIKE PAINT SAUCE
     APPLESAUCE BUY STORE
     NEAL COME HAPPY; NEAL NOT COME SAD (see Pinker, 1994)


The girl became permanently incapable of dominating the complete grammar of the language.

However, another girl, Isabelle, who also suffered isolation when a child, managed to acquire L1, as opposed to what happened to Genie (Pinker, 1994). But Isabelle was six years old when she escaped from "prison" in her grandparents' house, where she

lived with her dumb, brain-damaged mother. The difference, therefore, seems to be in the fact that her contact with L1 occurred before the end of the critical period.

Pinker (1994) when talking about Genie, the girl who never really acquired her L1 after the critical period asks about other capacities of the person: were other aspects of her intelligence different as well? If that was the case, her incapacity to dominate the language could be related to other factors.

But the author immediately shows this may be not the relevant factor. He relates the case of Chelsea: the girl had an erroneous diagnostic as retarded, but she really was deaf, and so she grew up without developing L1. When she was 31 a neurologist corrected the mistake and gave her a hearing aid, and she could get in touch with spoken language. She has a normal level of intelligence. But, because her contact with L1 did not occur earlier, her syntax is strange, and it does not look like any human language:

(2)    THE SMALL A THE HAT
       BANANA THE EAT (see Pinker, 1994)

However, these are different situations from the case of adult L2 acquisition. The point, I think, is exactly this: syntax. In my view, the normal adult has already acquired an L1 when facing L2 and, therefore, he cannot be compared to a child only in terms of Critical Period. The adult is, in that sense, different from the child acquiring L1.

I understand that, as for phonology, adult L2 acquisition may not be perfect; other maturational causes related to the physical structure of the speech organs may be at play. But as for acquisition of syntax, it is possible that the mechanism of language acquisition is still available, for though the critical period has already ended that mechanism has been once activated. Language has already developed in the individual. Therefore, adult L2 acquisition is a different process from what occurred in Chelsea's case, for example. In both situations of language acquisition, the critical period had already passed, but in Chelsea's case the L1 had not developed, as opposed to a normal adult acquiring L2.

Actually, adults may even be superior to children in a situation of L2 acquisition. For example, Cook (1977) reports that L2 acquisition by children is not different from L2 acquisition by adults: Asher & Price (1967) discovered that, in the same methodological situation, adults were superior to children aged 10 and 14, who were superior to children aged 8 when learning Russian. Cook concludes, through reports of his own experiments, that the more learning is dependent on general cognitive processes, the bigger the difference between L1 and L2 acquisition.

Nevertheless, Schachter (1988), for example, denies that there may be success in adult L2 acquisition and points out the characteristics that differentiate the L2 speaker from the native speaker:

a)    completeness - the child manages to get a perfect knowledge of the language to which she is exposed to, as opposed to an adult L2 learner.

b)   equipotentiality - the child is "equipotential" to any language, that is, the child learns any language to which she is exposed. The adult, however, is not equipotential, according to Schachter - she argues that a Spanish speaker would have more difficulties in learning English than French would.

c)   previous knowledge - the child does not have any language as previous knowledge, and the adult has his L1. That would be a handicap for the adult acquiring L2 in relation to the child acquiring L1.

d)   fossilization - in the production of the L2 learner, but not in the production of the child learning L1, there are some linguistic structures (stemming from lack of acquisition) which could have already been eradicated.

For Schachter, L2 acquisition is cognitive learning only, that is, there is no access to UG.

Some other studies focus on this point, but from different perspectives. Bley-Vroman (1989) argues that there are differences between L1 and L2 acquisition because the Language Acquisition Device (the Chomskyan LAD) is not operative any more - acquisition proceeds through L1 knowledge and also through problem-solving strategies, both serving as imperfect UG "substitutes".

Undoubtedly, L2 acquisition by adults is, in many aspects, different from L2 acquisition by children. But maybe we cannot thoroughly assume a similarity between L2 acquisition and L1 acquisition. In other words, it is possible that different cognitive systems are at play in L1 acquisition and in L2 acquisition by an adult.

Felix (1987), for example, proposes that UG is still accessible, but what happens is that adults, besides UG, have already developed the ability to deal with abstract systems. I summarize his proposal below.

We know that language is a complex system, and that children do not yet have the ability to deal with complex and abstract systems (following Piaget). Children, however, develop language - which indicates, according to Felix, that there is a "Language Specific Cognitive System", LSC, and that is the only existing cognitive module fit to deal with language - which would be the CHOMSKYAN LAD. However, in puberty, we have the development of the ability to deal with abstract systems, which Felix proposes be the Problem-solving Cognitive System, PSC. Thus, from that period on, the human being has two systems competing in language data analysis. The PSC, as opposed to the LSC, is not specifically related to language acquisition. However, the adult in language learning can use it. Therefore, the decline in the language acquisition ability after puberty can be attributed to the development of another system that competes with the first system.

Felix proposal is appealing for two reasons: first, the distinction between LSC and PSC can be correlated with the Krashen (1982)'s distinction between "acquisition" vs. "learning". Although this proposal has received much criticism since it has been put forward, Zobl (1995) shows that the predictions of such a distinction are supported by two kinds of evidence:

a)   evidence stemming from studies which reinforce the epistemological distinction between the two systems, that is, the procedural and representational differences between *implicit knowledge* (resulting from the operation of a cognitive module whose computation are specifically related to the processing of primary linguistic data - UG + LAD, and which also derives abstract representations of primary data) and *explicit knowledge* (resulting from central processes as: analogy, induction, and inference - they form and test hypothesis in the search of a rule);

b)   evidence stemming from studies which tests the distinction between "acquisition" and "learning". Zobl shows that the several studies about these two kinds of evidence seem to confirm the distinction between the two learning modules.

In the first case, Zobl reports the behavioral consequences brought by the assumption of the distinction (that is, encyclopedic/explicit knowledge and implicit knowledge are mentally represented by two distinct "codes"). The author reports the results of studies which show that: a) the dissociation between implicit linguistic knowledge (grammaticality judgements) and the justification given by the learners for their performances; b) the difference in the susceptibility to forgetfulness (implicit vs. explicit memory). Related to this latter point is the case of the evidence coming from bilingual aphasia. Zobl reports the interesting results in Paradis (1995), that show that there was a selective recovery or loss in favor of L2 (and not L1) in a subject who learned L2 in a formal situation, with the help of a prescriptive grammar.

In the second case, Zobl reports the results of studies that focus on the morpheme acquisition order, on the consequences of different methodologies as the communicative/functional approach and the process and product L2 analysis (learning and overgeneralization). All the studies seem to confirm the distinction between the two modules of learning (see also Ellis, 1995).

The second reason why Felix's proposal is appealing is that, contrary to Bley-Vroman's proposal, it explains certain research results. In the study reported in Zobl (1986) it is clear that the acquired L2, that is the interlanguage, reflects the acquisition of the L2 grammar, which occurs before the acquisition of marked pragmatic-semantic aspects of L2. The results show that L2 learners are sensitive to principles that define central traits of the L2, as word order. The fact that L1 has a different order does not lead to the transfer of central traits. Therefore, the learner cannot rely on the knowledge of the L1, as Bley-Vromam suggests it would be the case. On the other hand, in relation to the acquisition of marked solutions of word order, adult L2 learners are not successful: it looks like the accessibility to UG is related to "central traits". Felix's proposal can be seen to predict that marked aspects of L2 ("periphery" in Chomsky, 1986) depend on the PSC, while central traits ("core grammar" in Chomsky, 1986) depend on the LSC.

Since this is an empirical question, Cyrino (1996) focused on a specific aspect of English and Portuguese, the subjects' L2 and L1 respectively, in which the core grammar and the periphery are different, although they involve the same syntactic

phenomenon, the so-called "null object". Below, I describe the preliminary results of that study.

## 2. CYRINO (1996)

Assuming Felix's theory about L2 acquisition, Cyrino (1996) intends to find out if learners have access to UG (that is, if they reset syntactic parameter values of core grammar), and if "cognitive learning" is necessary for periphery aspects. More specifically, the problem is to test the claims in Schachter (1988) about "lack of completeness" in L2 acquisition. My claim is that "lack of completeness" does not necessarily mean "lack of access to UG": you may have access to UG for core grammar, but not for the periphery.

Schachter (1988) makes two observations about that characteristic in the L2 speaker.

One of the observations Schachter (1988) makes is in relation to L2 intuition. She claims that several studies which test the learner's intuitions are misled, because as the L2 learners become proficient in global terms, they are progressively able to identify grammatical sentences as grammatical, but there is considerable less development in their ability to point ungrammatical sentences as ungrammatical. Thus, for Schachter, "lack of completeness" is characterized by lack of "native intuition".

However, my hypothesis is that the interlanguage is not "native L2" by definition (see Adjemian, 1976). Intuition for the interlanguage, as a natural language, exists. This intuition will yield judgements that will overlap with the grammaticality judgements of a native speaker.

This aspect is also related to the "core" vs. "periphery" distinction. The interlanguage core grammar should be similar to the L2 core grammar, but the periphery may not be necessarily similar, since it may involve pragmatic-semantic aspects that are not acquired through the LSC, that is, UG. The hypothesis is that the L2 speaker intuitions related to core grammar must exist and be similar to those of the native speaker. That would strongly point in favor of the accessibility to UG, since these intuitions reflect the set or reset values of the syntactic parameters. Intuitions about periphery, however, may not be similar to the native speakers' intuitions.

The other observation made by Schachter is that many speakers of English as a second language, who are highly proficient, operate very well with primitive versions of several English subsystems and, sometimes, without certain subsystems.

Here, Schachter refers to "subsystems" that take into account the semantic import of the utterance and not only the syntax of the language. Zobl (1989), however, shows that learners have access primarily to syntax, for the results in his study showed that properties of the input which are related to free focus assignment and admissibility of low referential NPs in subject position are not set until reasonably advanced levels. He points out that this discrepancy suggests that the linguistically specific module is not overcome by general problem-solving structures. Thus, it looks like UG, in terms of open parameters is, somehow, accessible for the adult.

Again, my hypothesis is that "lack of completeness" exists, but it does not mean lack of access to UG (that is, to the syntax of the language), but it means that there is some "difficulty" in the acquisition of those structures of the language which involve pragmatic-semantic aspects, that is, aspects of periphery.

The subjects of this study are students in Curso de Letras at UEL, students in the Curso de Especialização em Língua Inglesa at UEL, and English language professors in the Departmento de Letras Estrangeiras Modernas. The subjects were divided in 3 groups according to their level of proficiency: beginners, intermediate level, and advanced level. Besides that, there was a control group formed by native speakers, to verify the accuracy of the sentences in the test.

In order to answer these general questions, more specific questions are needed, that is, given an aspect of the L2 core grammar, the question is to find out whether this aspect is acquired. If this aspect of the L2 core grammar is different from the L1 core grammar, the study will be more interesting. If that aspect is acquired, we could say that, independently of L1, the learner seems to have access to UG, at least in what refers to central traits of L2.

Another general question involves aspects of the periphery of L2 and can be thus formulated: does the L2 speaker "acquire" or "learn"(using Krashen's terms) aspects of the periphery of L2? In other words, as for the aspects of periphery, is there access to UG, or do we have the interference of another cognitive system (Felix, 1987)?

In the same manner as we treated the first general question above, in order to deal specifically with the problem we have to focus on aspects of the periphery, the same syntactic phenomena, which show up differently in L1 and L2. Thus, we could observe whether the treatment that the learner/speaker gives to the aspects of the periphery of L2 is the same he/she gives to aspects of the core grammar of L2, for the existence of these phenomena in the periphery is not coincident in L1 and L2 either.

The "null object" is a direct object position that is not phonologically filled. Many studies have been done on the subject and, although there is not yet a satisfactory formulation for a parameter that would account for the variation among languages, it has been observed that it is part of the core grammar of some languages, as Chinese, Japanese, Korean, and Portuguese, and not others, as English, French, Spanish and Italian. Thus, a sentence like (3a) is perfectly grammatical in Portuguese, but not in English, as we may see in (3b):

(3)   a. João descascou a banana, e Maria comeu ___
       b. *John peeled the banana, and Mary ate ___

Several proposals have been made for an analysis of the empty category - for a complete review of the literature, as well as for a specific proposal, see Cyrino (1994). The interest in this study is the fact that the null object is part of the core grammar of Portuguese, but not of English. However, the null object is part of the periphery of English, as suggested by Haegeman (1987) and is also shown in Massam & Roberge (1989).

These studies show that the null object in English is restricted to very specific contexts, and, according to Haegeman, to the register/field of discourse. The author follows Quirk et al (1985:23) who define "discourse field" as the type of activity engaged in connected language. An English speaker, thus, has a repertoire of varieties according to the field and changes to the appropriate one, as the occasion requires. They even give, as an example, the omission of the direct object of a verb in instructional language in general.

Haegeman shows that, from the point of view of generative grammar, the fact that the object of a verb may be omitted in English in certain constructions would apparently violate one of the main principles of the core grammar of that language, namely, the theta-criteria. According to this principle, each argument (an NP with a thematic role) must have one and only one theta role, and each theta role should be assigned to one and only one argument (see Williams, 1981). For example, the verb <u>kill</u> is associated to two thematic roles, agent and patient, which have to be assigned to the arguments of this verb. That is why sentences as (4a) are ungrammatical in English:

(4)   a. *John killed.
      b. João matou ___

In Portuguese (4b), the sentence is possible, since this language allows the null object, an empty category that is assigned the patient theta role. Since English does not have such a category (in the same way as empty subjects are not allowed, cf. *Peter doesn't say so, but loves Mary), there is no way in which the theta role could be assigned in (4a).

Haegeman then proposes that the null object in English is a phenomenon of the periphery, linked to register. She points out that although strictly speaking null objects are ungrammatical in relation to the core grammar of English, the phenomena is subject to the periphery, which is no less systematic.

Massam & Roberge (1989) present several examples of this specific type of null object in English, and they call it "Recipe Context Null Object", because it may be easily found in recipes (example (2) in Massam & Roberge, 1989:135):

(5)   Take the cake mix, 1 cup of water, and 3 eggs. Mix ___ well and beat ___ for 5 minutes. Pour ___ into a well-greased cake pan and bake ___ for 20 minutes. Remove ___ from oven and cool ___

The authors also show how this type of null object is restricted: it may not occur with perception verbs, in certain predicate-argument structures, it always occurs with the imperative, among other restrictions.

Recall that the research hypothesis is that, assuming Felix's proposal, we could interpret this type of result: the LSC is in charge of central traits and the PSC is in charge of marked characteristics in the L2 acquisition/learning by an adult. We saw that, for Felix, after puberty the learner can rely on two different cognitive systems which deal with purely abstract information in order to learn/acquire a language (Felix,

1987:155): a) "the system of language-specific cognitive structures in which formal operations have been available for more than a decade"; b) "the system of the problem-solving cognitive structures in which formal operations have just started to emerge".

In this first study, two types of test were given to the subjects:

a)  a grammaticality judgement test, to test Schachter's first observation ('L2 learners can recognize grammatical sentences as such, but are not able to point out ungrammatical sentences as ungrammatical')

b)  a Portuguese to English translation test, to test Schachter's second observation ('learners operate with primitive versions of several English subsystems, but sometimes without certain subsystems'). Although Schachter does not point out the difference between core vs. periphery, we may suppose that this could be one distinction found in L2 learners: they acquire the core grammar, but have not learned certain subsystems or the periphery.

The sentences in the tests had the null object, which is possible in English mixed with the impossible one. The aim was to detect if the learner "intuitively" recognized the possibility of the occurrence of the null object in English, even if he/she had never been formally taught about that aspect of the language. There were also other types of sentences in the test, so that the subjects did not notice the grammatical point of the test.

The preliminary results are shown below in tables 1 to 6.

Table 1 shows the results for the judgement tests.

| PROFICIENCY LEVEL | "YES" | "NO" |
|---|---|---|
| *Beginner level* | 7.53/10 (75.3%) | 1.38/10 (13.8%) |
| *Intermediate level* | 7.58/10 (75.8%) | 1.5/10 (15%) |
| *Advanced level* | 7.18/10 (71,8%) | 2.18/10 (21.8%) |

Table 1. Percentage of correct answers of subjects in judgement test

There were 10 possible answers, and the number show the average of correct answers. The table shows that the subjects seem to accept the possible null object for the English, where it really is possible. However, we have to consider the fact that this could be a consequence of transfer of their Portuguese structure.

But when we consider the results for the "no" answers, we see that there is a small increase in the correct answers as their level of proficiency goes up, that is, the subjects seem to get the intuition that for some sentences in English the null object is impossible as they get more contact with English (although in Portuguese, the null object would be OK in the same structures).

When we look at table 2, with the results of the translation test, we see that there is an increase in the "filled object" column according to the level of proficiency of the subjects. That means that they filled the object position with a pronoun or NP, showing that they recognize that the null object is impossible in English in certain contexts, contrary to Portuguese. However, that increase is not accompanied by an increase in the recognition of the null object of English, the "RCNO".

| LEVEL | "RCNO" | FILLED OBJ. |
|---|---|---|
| *Beginner level* | 7.7/6 (77%) | 2.17/6 (21%) |
| *Intermediate level* | 3.33/6 (55.5%) | 1.83/6 (30.5%) |
| *Advanced level* | 2.72/6 (45.3%) | 3.81/6 (63.5%) |

Table 2. Percentage of correct answers of subjects in translation test

To get a clearer picture, I looked at the performance of the subjects by sentences. This could show me whether this behavior was due to a specific sentence being tested.

Table 3 shows the results of the judgement test, for the RCNO. If the subjects answered "yes", accepting a null object, it was correct. If they answered "no", it was a wrong answer.

| QUEST. | CORRECT ANSWERS | | | WRONG ANSWERS | | |
|---|---|---|---|---|---|---|
| | *Beg.* | *Inter.* | *Adv.* | *Beg.* | *Inter.* | *Adv.* |
| 1 | 92.3% | 100% | 90.9% | 0 | 0 | 9.1% |
| 2 | 84.6% | 83.3% | 81.8% | 15.4% | 8.3% | 9.1% |
| 6 | 92.3% | 75% | 81.8% | 7.7% | 25% | 18.2% |
| 13 | 84.6% | 83.3% | 45.5% | 7.7% | 0 | 36.4% |
| 16 | 84.6% | 83.3% | 54.5% | 15.4% | 8.3% | 18.2% |
| 17 | 76.9% | 58.3% | 81.8% | 0 | 25% | 0 |
| 19 | 61.5% | 66.7% | 54.5% | 30.8% | 25% | 9.1% |
| 26 | 84.6% | 66.7% | 81.8% | 15.4% | 8.3% | 9.1% |
| 28 | 7.7% | 66.7% | 81.8% | 76.9% | 25% | 0 |
| 30 | 100% | 83.3% | 63.3% | 0 | 0 | 18.2% |

Table 3. Percentage of subjects giving correct vs. wrong answers by question, in the RCNO context, judgement test

If we consider again only the percentage of correct answers, we could say that the subjects in general accept the null object in the RCNO, independent of level of proficiency. However, that, again, could be either the result of transfer or of acquisition/learning of the periphery grammar of English. Together with this result, we have the results of the wrong answers, that is, failing to accept the RCNO, which in general seem to confirm that subjects tend to accept the RCNO.

Before we go any further with the discussion, let us see the results for the impossible null object in English, in order to see whether transfer is the issue here.

Table 4 shows the results of the performance of the subjects, by question, for the impossible null object in English. Thus, the correct answer should be "NO", that is, the subjects should no accept a sentence with a null object.

| QUEST. | CORRECT ANSWERS | | | WRONG ANSWERS | | |
|---|---|---|---|---|---|---|
| | *Beg.* | *Inter.* | *Adv.* | *Beg.* | *Inter.* | *Adv.* |
| 4 | 46.1% | 50% | 45.4% | 38.5% | 41.7% | 36.4% |
| 9 | 7.7% | 0 | 9.1% | 84.6% | 91.7% | 72.7% |
| 10 | 7.7% | 8.3% | 27.3% | 69.2% | 66.7% | 72.7% |

| 14 | 7.7% | 8.3% | 9.1% | 84.6% | 91.7% | 72.7% |
| 18 | 30.8% | 16.7% | 9.1% | 61.5% | 75% | 81.8% |
| 20 | 0 | 0 | 0 | 100% | 100% | 100% |
| 21 | 0 | 0 | 18.2% | 84.6% | 100% | 72.7% |
| 23 | 7.7% | 25% | 27.3% | 69.2% | 66.7% | 72.7% |
| 24 | 7.7% | 16.7 | 36.4% | 76.9% | 75% | 54.5% |
| 27 | 30.8% | 25% | 45.4% | 38.5% | 66.7% | 36.4% |

Table 4. Percentage of subjects giving correct vs. wrong answers by question, for the impossible null object in English, judgement test

Again, we see that in general, the subjects seem to accept a null object in English, even in a context where it is impossible, but their performance seem to improve with level of proficiency, depending on the sentence. In order to clear up the results, and see whether the performance of the subjects was due to transfer, we may look at some sentences and their Portuguese counterpart, to see if "transfer" is at play here.

For example, sentence 6:

*Put cake into a well-greased pan and bake for 20 minutes.*

This is a possible sentence in English (RCNO), and also possible in Portuguese. The performance was good, as we may see in table 3. We could talk about transfer.

Another instance where we could see the possibility of transfer is sentence 4, impossible in English:

*Place meat in grill. Boil eggs while you roast.*

The sentence is high in the correct answers (as compared to the other sentences), that is, subjects seem not to accept it. When we look at the Portuguese version,

*Coloque a carne na grelha. Ferva os ovos enquanto você assa.*

we see that this sentence is awkward, due, perhaps, to reference problems. So, here we have a problem: the subjects may not have accepted it not because of its being impossible in English, but because of its awkwardness even in Portuguese. If this is true, in some sense we could be talking of transfer here.

The same situation may be the case of sentence 27, impossible in English, taken from Massam & Roberge (1989), which also has a high rate of correct answers compared to the other sentences. The subjects did not accept it:

*Take rice from oven. Give your guests immediately.*

The Portuguese version is possible, but the subjects would have to add the preposition "para" (to) which is not present in the English sentence. Maybe it would

be interesting to test another version: "Give to your guests immediately" to check whether the scores of correct answers would go down, if we are talking of transfer here.

The judgement tests seem to show that the subjects transfer their knowledge of L1 in L2 acquisition. However, let us look at the results of the translation test, by sentence.

| QUEST. | CORRECT ANSWERS | | | WRONG ANSWERS | | |
|---|---|---|---|---|---|---|
| | Beg. | Inter. | Adv. | Beg. | Inter. | Adv. |
| 3 | 84.6% | 41.7% | 18.2% | 15.4% | 58.3% | 81.8% |
| 4 | 69.2% | 83.3% | 54.5% | 30.8% | 16.7% | 45.5% |
| 9 | 46.2% | 25% | 63.6% | 53.8% | 75% | 36.4% |
| 12 | 61.5% | 83.3% | 36.4% | 38.5% | 16.7% | 63.6% |
| 14 | 53.8% | 41.7% | 36.4% | 46.2% | 58.3% | 63.6% |
| 17 | 38.5% | 66.7% | 63.6% | 61.5% | 33.3% | 36.4% |

Table 5. Percentage of subjects giving correct vs. wrong answers by question, translation test (RCNO)

The "correct answer" in this test would be when the subject used the RCNO of English. But, surprisingly, here we see a different result. As the level of proficiency goes up, the percentages of correct answers seem to go down. The interesting fact, however, is that the wrong answers go up, but "wrong" here means that the subject fills the object position, and that cannot be considered wrong in the sense that they produced an incorrect object position. Some subjects avoided some object constructions, and that was considered "wrong" too.

This means that the subjects do not accept a null object in English,  not even in a context where it is possible. This is a different result from the judgement tests. Here we can not be talking of transfer, because the sentences in Portuguese have a null object, but the subjects tend to fill it as their proficiency goes up. Perhaps, we could again say that the subjects somehow have not acquired/learned the periphery. But have they acquired the core grammar?

Let us look at Table 6, where we have the context where the null object is impossible in English. Here, the correct answer is when the subjects have filled the object position:

| QUEST. | CORRECT ANSWERS | | | WRONG ANSWERS | | |
|---|---|---|---|---|---|---|
| | Beg. | Inter. | Adv. | Beg. | Inter. | Adv. |
| 1 | 23.1% | 25% | 54.5% | 76.9% | 75% | 45.5% |
| 6 | 30.8% | 41.7% | 72.7% | 69.2% | 58.3% | 27.3% |
| 7 | 38.5% | 8.3% | 45.5% | 61.5% | 91.7% | 54.5% |
| 13 | 15.4% | 25% | 81.8% | 84.6% | 75% | 18.2% |
| 15 | 23.1% | 41.7% | 63.6% | 76.9% | 58.3% | 36.4% |
| 18 | 7.7% | 33.3% | 75% | 92.3% | 66.7% | 25% |

Table 6. Percentage of subjects giving correct vs. wrong answers by question, translation test (Impossible null object)

Here we may suggest that the subjects seem to acquire the core grammar: they fill the object position as they have more contact with English. And this is an important result. It shows definitely that transfer is not an issue here, since the sentences were all in Portuguese, with null objects all over, and yet subjects show a tendency to fill the object position as their level of proficiency is higher.

These preliminary results seem to confirm both Schachter's observations about "lack of completeness" in L2 acquisition.

We saw that the results in the judgement test were different from the results in the translation tests, tending to show that the learners did not do well when judging the grammaticality of a sentence in English. Too often they accepted null objects in English, independently of level. The "bad" results obtained in the judgement tests can be attributed to Schachter's first observation, namely, that as they become more proficient, L2 learners are progressively able to identify grammatical sentences as grammatical, but there is considerable less development in their ability to point ungrammatical sentences as ungrammatical.

Confirming her second observation, the most proficient subjects in this study seem to operate very well with the English core grammar (not accepting the ungrammatical null objects in English), but they still seem to not have certain subsystems, as the existence of the RCNO (periphery). These results were more clearly shown in the translation tests.

These preliminary results also seem to point in the direction of lack of completeness not necessarily meaning lack of access to UG. The same results that confirm the lack of completeness also show that the learners seem to have some access to UG when they do not accept the impossible null object in English in the translation test, if we are ready to assume the core vs. periphery distinction. The results suggest they have some acquisition of the core grammar, and that could only happen through the LSC, since the specific point is never explicitly taught in English classes, so we could not be talking of conscious learning here.

Nevertheless, the problem has to be further researched. The fact that the impossibility of a null object in English is never explicitly taught is an interesting point, if we want to apply here the acquisition/learning distinction as related to implicit/explicit knowledge (as Zobl does, see above). However, we have to be careful, because, as Ellis (1995:125) points out, "any theory of implicit learning of language must demonstrate (not simply assume) that learners lack conscious awareness of syntactic patterns during acquisition". In other words, not having been taught does not mean not having had consciously analyzed some syntactic structure, like the impossibility of null objects in English. However, showing that the learner has never consciously analyzed it is a difficult task.

Also other aspects of the problem of L2 acquisition should be investigated. If we use the same grammatical point, what happens when we change the type of subject for:

- someone who has as L1 Portuguese and as L2 English, but learned English when a child, by immersion

or

-       someone who has Portuguese as L1 and English as L2, but learned English when an adult, by immersion?

And still more interesting: what is the situation of the child acquiring English as L1? How is the RCNO acquired in English?


## CONCLUSION

The problem of L2 acquisition by adults is challenging. The Critical Period Hypothesis is attractive and seems to be confirmed in several studies of L1 acquisition (Pinker, 1994). However, as a speaker of English as a foreign language, I think it is possible to have intuitions about the grammaticality of constructions in that language, especially as for the occurrence of null objects. Somehow, in the process of language acquisition, there must be some access to UG, that is, there should be some access of the adult to the cognitive structures purely related to language - Felix's LSC. Thus, it is possible to understand that parameters may be set for the L2, even if the settings are different from the parameters of the L1. On the other hand, we cannot dismiss the influence of the biological side of acquisition, in which the age of acquisition may be crucial.

The research must go on in order to try to answer these questions, so that the problem of L2 acquisition by an adult may be better understood.

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