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## Cristianne Gonçalves de Sousa

## The "in" between languages: the cross-linguistic influence between second and third languages in written production.

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Orientadora: Profa. Silvia Becher

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To my parents who always believed in me and gave me all the support I needed to achieve all that I have achieved.

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#### Abstract

Some Brazilian parents seem to be concerned about their children having the opportunity to learn a third language apart from English. Among the implications of learning two second languages during the school years is that there might be more instances of cross-linguistic influence between those languages learned after the mother tongue (Angelis and Selinker, 2001). Cross-linguistic influences affect language learners due to the attempt to connect the new elements learned to whatever linguistic and other knowledge one may have and this may play an underlying role in the process of acquiring two or more second languages (Ringbom, 2001). "L2 transfer in L3 production is manifested especially clearly in lexis" (Ringbom, 2001, p.61). This paper aims to report the finding of a pilot study on the influence of German (L2) in English (L3) written productions, and vice versa, in a school setting. With this purpose, this paper examines compositions written by 22 subjects in both second languages. An interview was also carried in order to collect information about the students’ exposure to both second languages. The preliminary results of the research show that $55,4 \%$ of the subjects in this study do not produce any kind of lexical influence between German and English. The main conclusion to be drawn from this study is that students tend to borrow words that are morphologically similar to the target language. The results did not reveal more in-depth structural interference, although a broader study is necessary to attest to this.


## KEYWORDS

Cross-linguistic influence, second language acquisition, third language acquisition, interference.

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Figure 2: German task 32
I. Read the article above and write ( $T$ ) for True or ( $F$ ) for False. (2,0-0,4 each)

| 1. Paula lives in an extremely commercial area. | (F) |
| :--- | :--- |
| 2. The Walnut Street Theatre is a centenarian institution. | (F) |
| 3. Paula's parents love the city museum. | (T) |
| 4. Washington Square Park isn't a place for skateboarding. | (R) |
| 5. The city can be considered a historical and cultural place. | (R) |

II. Read the text again and answer the following questions. ( $2,0-0,5$ each $)$

1. What is Paula's opinion about the street where she lives on? Why?

2. Why does Paula love Joseph Fox?
B. lcouns is a loosstorl and
you can loos bocks and dryy marainins?
19/3/2012
"I know you can't consider this question but I changed with German, but please consider." IA

## 1. <br> Introduction

Learning a foreign language is an important asset in life in the globalized world of today and many families, in view of the future of their children, are concerned that they learn more than one. Cummins (2000, p.54) argues that "In many contexts in Europe and elsewhere, it is increasingly common for schools to promote knowledge of three (or more) languages." It is common, specifically in Brazil, that more economically favored social groups send their offsprings to bilingual schools, or quasi-bilingual institutions, so that their education is characterized by a multilingual and multicultural background that will, it is believed, enhance their career and job opportunities. Many of these youngsters are not born out of bilingual parents and, nevertheless, are exposed to at least two different foreign languages during their basic K-12 educational process. In fact, "In many parts of the world, bilingualism or multilingualism and innovative approaches to education that involve the use of two or more languages constitute the normal everyday experience." (TUCKER, 1999, p.1).

Despite the educational and career advantages that can be seen in such instructional settings, some educators and linguists have questioned the impacts of learning different languages simultaneously for educational success, while others advocate the benefits of using both native and learned languages as educational tools to develop cognitive skills, which include literacy development, mastery of content-material and academic abilities. Cummins (2005) observes that

> Although it is appropriate to maintain a separate space for each language, it is also important to teach for transfer across languages. In other words, it is useful to explore bilingual instructional strategies for teaching bilingual students rather than assuming that monolingual instructional strategies are inherently superior. (Abstract, p.2)

One issue that is commonly brought up in circumstances of bilingual instruction is the influence of the native language in the acquisition of nonnative language and vice-versa. More recently, studies on the interference of non-native languages on each other during the students’ learning phases have also started to develop. Specific structural and lexical characteristics may
imprint the other languages and can have an impact in the acquisition process or the level of proficiency attained in the foreign or native languages. Not many studies have investigated these issues and cross-linguistic influence is still a new area of research with a lot of potential for growth.

My own interest in the topic of bilingual education and, specifically, lexical transfer between two foreign languages, comes from my professional experience as an English teacher working for a German school in Brazil. Although the school is not characterized as bilingual, classes in German are more predominant in the school curriculum than those in English. Students start learning German earlier than they learn English and have a greater amount of German-speaking classes per week.

I have been teaching seven groups of high school students since 2009: four groups are 8th graders and three are 9th graders. Since then, I have been learning many of German words from my students’ English compositions and, consequently, a curiosity arose: How great is the interference of the German language when students write in English? How does the knowledge of German as L2 influence the lexical choices of students in the English as L3 writing process? Do the German teachers also find English words while correcting their pupil's compositions? Does the knowledge of English also influence the lexical choice in compositions written in German? Which interference is greater? German into English or English into German?

Through a brief literature review on the topic concerning second and third language acquisition and their mutual lexical interference, together with the collection of students' compositions in both languages, I hope to uncover preliminary answers to this question: How does knowledge of an L2 affect the lexical choice in L3 composition and vice versa?

## 2. <br> Theoretical Background

This chapter will present a general overview of the concepts of second language acquisition, third language acquisition, and interlanguage transfer, which are basic fundamentals for the analysis of the issue under study. The first section (2.1) presents the terminology related to first, second and third languages used in this study. The second section (2.2) gives special attention to some theories on second language acquisition. The third section (2.3) deals with third language acquisition and is grouped in two parts: the first one (2.3.1) covers issues which are common to both second and third language acquisition, and the second part (2.3.2) deals with specific issues in learning a third language. The fourth section (2.4) presents the concepts of interlanguage transfer. In the last section (2.5), I will draw conclusions interlinking what has been said in the previous sections. This theoretical background will assist me in understanding how additional languages learned interfere lexically with one another.

## 2.1 <br> Terminology

The notion of second language (L2) and third language (L3) is understood in this study in the sense these terms relate to the subjects' mother tongue, named L1. In contrast to Hammargerg's (2001, p.21) concept, which considers that "second may refer to any language that the learner has added after infancy", the terminology second and third language will be used here to relate to the order in which the languages started to be acquired by the subjects.

In the case of the school where this study was carried out, German was introduced to most of the subjects when they were around four years of age, and still had not learned any other foreign language besides their native language, Brazilian Portuguese, therefore it will be called L2. On the other hand, English will be called L3, due to the fact that the subjects started studying it, at this school, at the approximate age of 10 . Also, this research will not take into consideration any additional foreign languages the subjects
might have learned or are currently learning besides German and English, as a result of their family background for example. ${ }^{1}$

## 2.2 <br> Second language Acquisition

Despite the specific characteristics and complexity underlying third language acquisition (Cenoz, 2000, p. IX), it also shares certain features with second language acquisition. Some authors have described second language acquisition based on a monolingual perspective, and they have developed the following explanatory models: Krashen's monitor model (1982), Swain's (1985) pushed output hypothesis and Ellis' acquisition model (1984). I will briefly outline the main features of these different conceptualizations in an attempt to collect basic fundamental pillars that help explain second language acquisition and that will lay the grounds on which I can base myself to carry on with this study.

Krashen’s monitor model takes into account the "learner's internal mechanisms at work in second language acquisition, as well as those situational and affective factors influencing these mechanisms. According to Krashen:

The solution of our problems in language teaching lies not in expensive equipments, exotic methods, sophisticated linguistic analyses or new laboratories, but in full utilization of what we already have, speakers of the language using them [learner's internal mechanisms] for real communication. (1982, p.1)

Krashen's second language theory is based on the following hypotheses:

- Acquisition-learning hypothesis. Krashen distinguishes the process of acquisition from the process of learning in adult learners. For the author, acquisition occurs as a subconscious process and it leads to competence, which is a subconscious process too. On the other hand, learning is a conscious knowledge of the second language rules, i.e. the grammatical rules consciously memorized by the learner. Krashen's acquisition-learning hypothesis states that an adult undergoes both processes, the acquisition

[^0]process and the learning process, thus acquiring language in the same natural way children do.

- The natural order hypothesis. This principle states that "acquisition of grammatical structures proceeds in a predictable order" (Krashen: 1982, p.12) The author reports some research in which adults learning a second language tend to maintain a natural order, for example, for acquisition of morphemes, as shown in their production of the FL, not only in compositions, but also in samples of free speeches. Ellis (2004, p.64) also states that "there appear to be common developmental sequences of certain syntactic structures despite different learner L1 backgrounds, different exposures to language, and different teaching regimes."
- The monitor hypothesis: The monitor hypothesis states that acquisition and learning have very specific contexts. Acquisition is usually the process by which one is triggered to initiate utterances and lead to develop fluency, while learning has the monitoring - or editing - function which is used to arrange the produced utterance of the acquired system. The changes made by the monitor function can happen before or after (self-correction) the spoken or written language production. Therefore, acquisition plays a central role in developing language competence, while learning plays a more peripheral role.
- The input hypothesis. This hypothesis claims that a learner only moves from one stage to a certain level in language competence because he/she understood the meaning of the input received. That is, he/she focused on the meaning rather than on the form of the input. The learner is only able to grasp the meaning of linguistic forms because he/she uses context, knowledge of the world and extra-linguistic information together with linguistic competence in order to understand the new language item directed to him/her (Krashen, 1982). This hypothesis has "lead us to the idea that learners exposed to comprehensible input will acquire language in a natural way as language acquisition results from language comprehension, not production." (Jordà, 2005, p.16)
- The affective filter hypothesis. This principle illustrates the relationship between the affective variables - motivation, self confidence and anxiety and the processes of second language acquisition by positing that acquisition
varies with respect to the strength or level of their affective filter, which is built through the affective variables.

> Those whose attitudes are not optimal for second language acquisition will not only tend to seek less input, but they will also have a high or strong Affective Filter--even if they understand the message, the input will not reach the part of the brain responsible for language acquisition, or the language acquisition device. Those with attitudes more conducive to second language acquisition will not only seek and obtain more input, they will also have a lower or weaker filter. (Krashen, 1982, p.31)

Unlike Krashen's claim that comprehension plays the main role in language acquisition, Swain (2000), states that it is the other way round, "... it seems to me that the importance of output to learning could be that output pushes learners to process language more deeply - with more mental effort than does input" (Swain, 2000, p.99). Therefore, production is more important than comprehension in acquiring a second language. In her way of thinking, Swain claims that the output is fundamental to reach real competence in the second language, that is, the acquisition process improves when learners' own productions fail to meet their communicative goals and they are forced to revise their linguistic system. The author states that it is "the dialogue that constructs linguistic knowledge" (Swain, 2000, p. 99/102) and supports her theory by presenting three main functions. They are:

- noticing: Every time the learner fails in communicating, he/she becomes aware of his/her linguistic needs. This happens every time a message, oral or written, is not understood by the interlocutor. (Swain, 2000, p.99/100)
- Hypothesis testing: Once they notice the linguistic gap, learners use their existing language knowledge as an alternative way of conveying the message. That is, the learner tests different ways of communication until he/she reaches his/her goal. (Swain, 2000, p.100)
- Metalinguistic reflection: Learners may increase their reflection about the target language system while they try to solve the problems they face when communicating. (Swain, 2000, p.101)

A third second language theory is that of Ellis's variable competence model. Ellis (1985) proposes some hypotheses which attempt to provide a more comprehensive view of the second language acquisition phenomenon.

As opposed to Krashen and Swain's hypotheses, Ellis takes into consideration both the input received and the output produced, among other issues described below. Ellis’ hypotheses are divided according to five factors which are interrelated among themselves (Ellis, 1985, p.16): the situation in which learning takes place; the amount and quality of input the learner is exposed to, as well as the opportunities for linguistic output; learner processes and learner differences. They are briefly described below:

- Situational factors - The situational factor in which the learners are immersed influences both the kind of linguistic input and the strategies used by the learner. That is, if a Brazilian learner of English is trying to buy something, for example, in a store in England, the salesclerk will first approach him in the same way he/she would approach a British person, while the Brazilian learner might have to point out, paraphrase or mime in order to communicate. On the other hand, if the learner is in the classroom, the teacher will have to adapt his/her speech in order to pretend they are salesclerks, building an artificial atmosphere. If the classmates are roleplaying, most of time, all participants share the same first language, they use their interlanguage to communicate. These two environments where the learners can acquire a second language have been labeled by Ellis as the naturalistic SLA, that is, a situation where the learner is immerse in the target language community; and the classroom SLA, in which the target language is taught, and which is, most of the time, artificially adapted to reach a certain goal (Ellis, 1985, p.16/17).
- Linguistic Input - Ellis discusses the role of the Linguistic Input according to the interactionist view in which "language acquisition derives from the collaborative efforts of the learner and his interlocutors and involves a dynamic interplay between external and internal factors" (Ellis,1985, p.129) Therefore, the contribution of the native/non-native speaker (teacher or another L2 learner), which is named input, and the joint contribution of the L2 speaker (native or not) and learner, named interaction, are both taken into consideration.
- Learner differences - "Different learners in different situations learn a L2 in different ways" (Ellis, 1985, p.4). Features such age, aptitude and intelligence, motivation and needs, as well as personality and cognitive style may result in differences in the process through which the learners go when acquiring a second language. They may interfere not only in language fluency but also in the ultimate success of learning acquisition. Positive attitudes might, for example, lead learners to seek out and get more input or different kinds of input which may accelerate their language acquisition process. Although it is known that all the characteristics listed above can foster or slow down the language acquisition process, Ellis (1985, p.11) states that they are very difficult to be investigated due to the lack of testing instruments that can measure them in isolation.
- Learner processes: Learners must create interaction between the input received and their existing knowledge. "It [the learner’s language learning process] emphasizes the relationship between the input and internal processing in order to discover how each affects the other." (Ellis, 1985, p. $13 / 14$ ). Therefore, learners create strategies in order to interrelate input and their existing knowledge. The strategies used by learners are:
- "General cognitive strategies, which are part of their [students’] procedural knowledge and which are used in other forms of learning" (Ellis 1985, p.13). These cognitive strategies comprehend different learning strategies, such as memorization, repetition, inferencing; production strategies, such as rehearsal of what should be said, discourse planning among others; and communication strategies, i.e: strategies of use.
- "special linguistic faculty that enables them [students] to operate on the input data in order to discover the L2 rules in maximally efficient ways. This linguistic faculty is referred to as universal grammar ${ }^{22}$ (Ellis 1985, p.13).

[^1]- Linguistic output - This principle is used to rate how learners acquire the language through particular mistakes they produce. Ellis states that output is the main source of information about how a learner acquires a L2. When learners utter a particular mistake, either in written or spoken discourse, they actually provide clues of the "strategies they employ to handle the joint tasks of learning and using a L2" (Ellis, 1985:18). The process in which the errors are selected, identified, classified, explained and then evaluated is called by Corder (1974, apud Ellis 1985, p.53) Error Analysis.

Moreover, the concept of linguistic output in language learning is also related to the 'natural' order of acquisition: 'all learners pass along a more or less invariable (learning) route" (Ellis, 1985, p.17), that is, learners of a target language tend to acquire certain grammatical and lexical structures earlier, and others later.

The models above helped me to understand the factors which are fundamental to acquire a second language and I could also identify them while teaching. I could observe how they emerge during my English classes. I noticed, for example, that the students who take more advantage from an approach which involves both meaningful input and output are more likely to profit from the lessons than the ones who do not like producing, either spoken or written speech, in class.

After analyzing the three models above I decided to follow Ellis's in an attempt to understand the language acquisition process my students go through, once this model takes into consideration both the input received and the output produced by the learner. Therefore, I am going to take into account the exposure the students have both in and out of the school in order to try to understand what factors or causes trigger the code switching among their both second languages.

## 2.3 <br> Third language acquisition

In this section, specific features which explain third language acquisition will be discussed in order to help lay the grounds for contextualizing L3 and L2 relationships. The basic concepts discussed in this section are reviewed according to Cenoz's (2000) and Herdina \& Jessner’s (2000) findings.

### 2.3.1 <br> Second and third language acquisitions

This section will discuss features that are common in both second and third language acquisitions.

Hufeisen and Jessner (1998, 1999, apud Jordà 2005, p.18) claim that it is necessary to distinguish between the process of learning only one foreign language, therefore, one single process, from the one in which the learner is learning two or more second languages, that is, in which two or more processes are occurring simultaneously. Such a distinction will be influential in identifying what actually takes place during the acquisition of an additional foreign language. Cenoz (2000, p. 40-42) classifies the main differences between second and third language learning processes and subdivides three aspects as part of the contextual and linguistic factors influencing third language competence and performance. They are the order in which languages are learned, sociolinguistic factors and the psycholinguistic processes. I will briefly outline them below.

## A) The order in which languages are learned

There are very few possibilities of variation in terms of the order of second language learning, which are: either L2 is learned after L1, or the two languages are learned simultaneously, but one will be considered L1 due to situational features (which will not be discussed here as this is not the focus of this study). When adding other languages, possibilities for order variation increase, for example, the three languages can be learned at the same time, two languages can be learned first and latter a third one is added or even the acquisition of an L2, for example, could be interrupted by another language
acquisition (e.g. L3) during a long or short period of time due to external reasons, such as moving to a foreign country, or internal causes, such as lack of time, interest or motivation (Jordà 2005, p.19). This means that a learner can start learning English, for example, and then interrupts the acquisition process and receives input from another foreign language, like French for example. Therefore, the acquisition of English will be paused for a while and French will become more influent in cognitive terms. Nevertheless, Cenoz highlights that "When a third language is acquired, however, the chronological order in which the three languages have been learnt does not necessarily correspond to the frequency of use by or level of competence in the trilingual speaker." (2000, p. X)

The order in which additional languages, i.e. non-native languages, are learned may have an important impact on the proficiency obtained in the additional languages and in the learning process, per se, once the learner will have the metalinguistic awareness of two previous languages at the time the third language is learned. His/her language background is one of the factors that might interfere with the interactions that are possible among the languages being learned (see linguistic typology p.18).

## B) Sociolinguistic factors

Sociolinguistic factors, which focus on the group of speakers rather than on the individual, must also be taken into account in the discussion of simultaneous or sequential acquisition of additional (foreign) languages. The three most relevant sociolinguistic characteristics which might interfere in the rate of the competence and performance of the target language(s), as listed by Cenoz (2000, p.41) are: the context where the two foreign languages are learned and used; linguistic typology and the status of languages involved.

- Context: The context of language use implies that L1, L2 or L3 "may be used in either a natural context (being the community language), or an instructional setting (being used in class) or even in both contexts." (Jordà, 2005, p.19) This might affect the L3 acquisition process because it interferes in terms of the quality and the amount of L3 input available to the learner, as
well as in the opportunities for output. These factors will influence the development or his/her competence in the target language. The more exposure or opportunities for language usage - whether L1, L2 or L3 --, as recognized by most language learning pedagogies, the more opportunities learners will have to develop accuracy and fluency.
- Linguistic typology: The second sociolinguistic characteristic listed by Cenoz (2000, p.42) is linguistic typology, which refers to how similar or different languages are in terms of word roots, lexis, grammar structure, or, in summary, the language origin. In this sense, for instance, French and Portuguese are more similar than, say, German and Portuguese since the first two are derived from Latin, whereas, the latter are Anglo-saxon languages ${ }^{3}$.

Languages typologically closer to the target language may facilitate its acquisition or favor code-mixing procedures. In the latter case, learners may tend to borrow terms from those languages that are typologically closer to the target language. (Jordà,2005:19)

The proximity between the languages known by the learner might help in the comprehension of the new language being learned, however it can also conceal some points in other aspects. Actually, the proximity might help in the communication process, such as in the case of Portuguese and Spanish, since most of the Portuguese speakers can make themselves understood when trying to communicate in Spanish even when they have had just little exposure to the language. On the other hand, knowing a language is much more complex than only being understood, it implies, in most cases, mastering grammar rules, sentence patterns, phonetic system, and a wide range of lexis among other characteristics in all four of the language skills: speaking, writing, listening and reading. When taking these issues into account, the proximity between the languages might fossilize some important rules hampering the learner from mastering the language. Besides, there is

[^2]also the false-cognates issue, when the speaker uses a form which is similar in both languages but which embodies unmatched conceptual representation.

On the other hand, the typological distance between the languages may, in some cases, help in the language acquisition process. For instance, when the learner's L1 and L2 are typologically closer to each other, but typologically distant from the target language, L2 may favor the learning of the target language since it can work as a default supplier ${ }^{4}$. (Jordà 2005:19)

- Socio-cultural status of the languages involved: The socio-cultural context in which languages are learned and used is also an important factor affecting third language acquisition (Cenoz, 2000, p.42). "This context is most applicable in multilingual and bilingual societies, where languages have different privileges; that is, they are not used in the same way or for the same purposes." (Jordà, 2005, p.19) In formal education, as for example, in the school where this study takes place, German, L2, has a more important status than English, L3, considering among other reasons, the number of hours dedicated to the first in comparison to the number of hours dedicated to the second.

Languages that are socially more acceptable or have higher attributed status may motivate learning and/or may be provided with more situational contexts for usage. Thus, this sociocultural factor may make a difference in the results obtained in the acquisition of certain L2s or L3s.

## C) Psycholinguistic processes

The third category of factors influencing third language acquisition (Cenoz, 2000, p.42) is the psycholinguistic process involved in the acquisition of a third language. Psycholinguistic research focuses on the apprehension of knowledge of linguistic rules and patterns, in terms of the general cognitive processes, and the individual affective factors that interfere in the process -- as opposed to the sociolinguistic studies, which are geared to socially influenced features in language use or acquisition. Jordà (2005, p.21), however, points

[^3]out that further research still needs to be conducted in order to account for the differences between second and third language pyscholinguistic processing.

Several psycholinguistic features have been studied in L2 learning processes. Some of the factors that have shown to have influenced language pedagogy and competence are: sex, age, personality factors, aptitude, learning styles and strategies, and affect. Included in personality factors are such issues as self-esteem, inclination towards risk-taking, attitude in exposure to failure and anxiety. Among the affective factors that interfere in additional language learning, it is worth mentioning aspects such as motivation, ego-permeability, resilience and willingness to overcome barriers.

Krashen's affective filter hypothesis encompasses many of these factors and has greatly contributed to clarifying what influences output in language learning processes. The affective filter, as he defined, is a "mental block, caused by affective factors.... that prevents input from reaching the language acquisition device" (Krashen, 1985, p.100).

Yet, the impact of psychological factors and how they block or enhance language acquisition in different learners is not easy to measure.

It is obvious that a tired, unmotivated, uninterested EFL student will not learn as well. However the same principles would apply in other subjects as in L1 or L2. The underlying problem is that there is no way of knowing how the filter works or to what degree does it filters out. (McDougald, no date, p.7)

Learner differences, which are encompassed in psycholinguistic factors, are, in fact, extremely relevant aspects to be considered in the context of L2 and L3 acquisition and it is unfortunate that very few studies have to this day dwelled on such issues.

### 2.3.2 <br> Third Language acquisition

This section will focus on specific issues related to the acquisition of a third language which can bring light to the study in this monograph.

Jordà (2005, p.11) states that the concept of third language acquisition refers to those languages learned after a second language has been learnt. The concept may, then, imply either third, fourth or fifth language. However, it should be highlighted that this conceptualization involves a series of different

L2 backgrounds ${ }^{5}$ and learning situations that would point, not only to third language acquisition, but also to bilingualism, or even multilingual acquisition.

Multilingual acquisition is linked to multilingualism because to acquire a third or additional language is to acquire some type of multilingual competence and therefore some type of multilingualism. (Herdina and Jessner, 2000, p.86)

The concept of bilingualism is flooded with controversial views. According to Bloomfield (1933 apud Jordà, 2005, p.22), a bilingual individual is someone who: 'has native control of two languages'. Along this line of thought, Skutnabb-Kangas (1984, apud Jordà 2005: 24) defines as bilinguals those who 'use both languages at the same level as native speakers' or are 'immersed in the target language culture'. A somewhat distinct view is presented by Mackey (1970, p.555, apud Jordà , 2005, p. 23). In his view if you are able to make alternate use of two or more languages, you can be considered a bilingual individual. Another definition for bilingual/multilingual is proposed by Vaid (2002 apud Zimmer, Finger and Scherer, 2008:5). The author claims that a bilingual individual is someone who knows two languages, in the sense explained in the linguistic typology session of this study (2.3.1), i.e., mastering the four skills together with the language system as a whole. These languages are used, necessarily, neither in the same context nor in the same level of proficiency. Taking into consideration Vaid's definition of bilingualism, Zimmer, Finger and Scherer (2008, p.5) define bilingualism as the ability of using two languages, and multilingualism as the ability of using more than two languages. That is, bilingual and multilingual individuals are those who have different levels of proficiency in the languages they use, depending among others factors on the context and communicative goal of the speaker ${ }^{6}$ (Zimmer, Finger and Scherer, 2008, p5).

[^4]The above discussion on conceptualizing bilingualism seems important to contextualize L3 learning. In most environments, though definitely not all (as is not the case in this study), the acquisition of L3 occurs in situations where the individuals are mostly bilingual and are exposed to an additional language -other than the two already developed in family or institutional contexts.

Besides Cenoz's features of third language acquisition stated in section (2..3.1) Herdina and Jessner (2000, p.84-96), also present representative features of third language acquisition which may involve an important change in traditional language-learning paradigms and set the scene for a clearer understanding of issues involved in L3 development. These characteristics involve:

- non-linearity: According to the authors, one of the main characteristics of third language acquisition is namely that of non-linearity, mainly because non-linearity attempts to distinguish the third language acquisition process from that involved in acquiring only one second language. That is, second language learners reach a certain level of language skill in the target language after some training period and although this process may be fostered or slowed down by various internal and external factors, such as lack of interest, moving to another country where the target language is not used, or stopping studying in a certain international institution, it is still linear ${ }^{7}$. When there is a pause in the learning process of one of the second languages, this pause may lead to "language attrition" or decay, and, therefore, to non-linearity. "Learners might find it difficult to resort to their previously acquired knowledge after a certain period of time." When taking into account a third language, there is also a "competition among existing linguistic systems". (Jordà 2005, p.13)
- language maintenance: In order to avoid language decay, Herdina and Jessner (2000, p.90) claim that learners must make an effort to maintain their proficiency level in languages known to them. This effort to keep the level of

[^5]proficiency is named language maintenance. "The more languages known by an individual, the more effort is required for their maintenance." (Jordà 2005, p.13) Most third language learners are foreigners, that is, they are not immersed in a community where they can use their other two foreign languages' skills, daily, so not having the opportunity for real practice of the target language is one of the reasons for language attrition. The lack of use lack of input and possibilities of output - can cause fossilization of the language and consequently contribute to language attrition.

- individual variation: The authors connect the attrition phenomena to individual traits of the learner. "As complex human beings, learners might be influenced by a wide range of factors while learning a third language." (Jordà 2005, p.13). Herdina and Jessner state that both psychological and sociological factors influence the development of language acquisition; they claim that "psycohological factors are at least in part to be seen as dependent on sociological ones" (2000, p.88,89). The learner's internal factors, such as language acquisition process, perceived language competence (Herdina and Jessner, 2000, p.89) motivation, intelligence, age, aptitude and personality, among others (see learner's differences and processes in Ellis’ model described in section 2.2), must be analyzed according to their relation to each other and not individually. The analysis of these aspects in interaction is of a more complex nature, but even so it is considered to be quite relevant, since it may avoid misinterpretations of the learning process as explained by Jordá when she comments that 'However complex this may be, results focused on the relation among the internal factors might illustrate the development and progression of the linguistic system being learned’ (2005, p.13).


## - interdependence and quality change:

The interaction of specific features in third language acquisition can be explored by focusing on the existing relationships among those languages known by the learners. Third language learning leads us to consider learners' first, second and third languages as a whole linguistic system, which they command simultaneously" (...) An additional language affects the overall linguistic system of the learner, while creating new links and relationships. The whole system is restructured and new skills and learning techniques arise from learners' previous language-learning experience. (Jordà 2005, p.14)

That is, third language learners do not merely have a sum of three different language systems, as for example in the case of the present study, the Portuguese linguistic system, or subjects' mother tongue system, plus the German (L2) system, and the English (L3) system. They have a unique interdependent system in which the three language (or more) systems interact with each other to build its own complex language system. Herdina and Jessner claim that "The development of each individual language within one multilingual speaker largely depends on the behavior of previous and subsequent systems" (2000:92). Also, Jordà states that "third language acquisition involves widening the linguistic system of an individual both quantitatively and, above all, qualitatively" (2005, p.39). That is, besides adding another language (quantitatively), multilingual learners are considered to have developed some skills related to thinking about language, as stated by Bialystok (1988, 2001 apud Jordà 2005, p.41): "higher levels of bilingualism correlate with higher achievement in the ability of thinking about the language."

It is also worth observing that L3 learners have a larger linguistic repertoire from which they can derive their own deductions of linguistic processes and lexical items - their internal language corpora may be incremental in triggering language learning processes. Therefore, as observed by Kallenbach $(1996,1998)$ and Mibler $(1999$, apud Gibson et al, 2001 p. 138), "the main difference is that an adult L3 learner brings with her or him a wealth of knowledge and strategies that a learner of a first foreign language does not".

## 2.4 <br> Interlanguage Transfer

Interlanguage transfer is, according to De Angelis and Selinker (2001, p .43 ), the influence of a non-native language on another non-native language. De Angelis and Selinker (2001, p.44) argue that interlanguage transfer can only occur if there are a minimum of three linguistic systems. Thus, these linguistic systems allow us to picture the "simultaneous interaction, and the possible competition between more than two linguistic systems at a single point in time" (De Angelis and Selinker, 2001, p.44). The authors state that a multilingual learner can use words from all his/her second language systems, and is challenged with the task of keeping his/her first language apart in production. (De Angelis and Selinker 2001). Green (1986 apud De Angelis and Selinker 2001, p.45) argues that, although only one language is chosen to communicate, the other languages known (or that are being learned) can also be active or not during the processing for production of the language that is being activated. Words are collected aiming at communication in the target language, but they can eventually be collected from the other language system which is active, or even, from the dormant language.

Hammarberg (2001, p.22/23) proposes four factors which condition L2's influence on L3. They are:

- typological similarity, which is the most relevant influence of L2 on L3 if both languages are typologically close. Ringbon also agrees with Hammarberg when he claims that "languages perceived to be similar to the target language naturally provide many more reference points for the learner than to wholly unrelated languages (2001, p.65)."
- proficiency, which is related to competence and use in natural situations. For instance, the subject may borrow words or structures from the language he/she is most proficient in and use them in the language he/she is not as proficient. Williams and Hammarberg (1998, apud Rigbom 2001, p.62) state that we must take into consideration the level of activation of L2, and the stage of L3 learning. They have shown that the influence of L2 on the learning of a related L3 is strong at the beginning of learning, but it decreases as learning progresses.
- recency, "which means that the subject can activate more easily a language if he/she has used it recently" (Hammarberg, 2001, p.23) That is, the amount of L2 input received by the learner will directly affect the lexical interference.
- L2 status: which appears to be a general tendency to activate an earlier secondary language in L3 performance rather than L1, that is, the subject when in need or doubt about L3, refers to L2, and not to L1, because he/she indirectly recognizes that they are both distinct from L1.

The aspects discussed in this section, 2.4, are fundamental for a comprehensive picture of interlanguage influences in language learning processing and language proficiency development. Such concepts are, therefore, relevant to the analysis and broader understanding of the interlexical transfers present in the data.

## 2.5 <br> Final theoretical considerations

In this chapter studies on second and third language acquisitions and interlanguage transfer and the main concepts involved in understanding these linguistic processes have been discussed. Considering these studies, it is possible to conclude that third language acquisition and interlanguage transfer have many features in common with the process of acquiring only one second language. However, as has been noted in the discussion, third language acquisition is not only the sum or sequential accumulation of three different language systems.

As exposed in the section, the primary focus of research on crosslinguistic reference has been in the influence of the native language on the acquisition of a second or third foreign language. Yet, recent studies have shown interest in how previously learned non-native languages influence the acquisition of an additional language and have brought up the aspects that must be considered in analyzing such cases. These aspects will assist me in understanding my data more broadly.

## 3. <br> Method

The issue being investigated in this study is the scope of interference of L3, English, into L2, German, or vice-versa, in the case of young native Brazilian Portuguese speakers. As pointed out in the introduction of this monograph, questions such as how much interference of the German language is found when students write in English and whether the knowledge of English also influences the lexical choice in compositions written in German were at the core of my concerns.

In this section, I will describe the research methodology used in this study. This includes presenting the participants from whom the data analyzed in this study have been generated, the context in which the study took place and also the procedures adopted in this research. In addition, the criteria selected for grouping the instances of lexical interference found in the data, will be explained considering the second languages studied in the corpus, German and English.

## 3.1 <br> Participants

Participants of this study were 22 secondary school students who have Brazilian Portuguese as their first language, German as their second language and English as their third language. All the participants study in the same school: a semi-bilingual Portuguese-German school, where the regular school subjects (i.e. Math, Arts, Geography, Science and so on) are taught in Portuguese, the mother tongue of all the students, whilst during the language classes, German and English, the students are instructed in the language they are acquiring. Therefore, schooling is done in their mother tongue, whereas the foreign languages are present merely in their specific classroom sessions.

German is taught as a second language at school, and it is introduced in kindergarten. Students have 5 compulsory 45 -minute classes per week of the German language until the second year of high school, when the students are around 16 years old. German classes are optional during the third year due to
the rigorous preparation for the college entrance exams for which German is not required.

The learning process in the first few years is based on playful activities and the aim is to introduce the language by developing listening and speaking skills through enjoyable activities. When the students reach 1st grade (around 6 years old), they are introduced to the other two skills which are writing and reading. Thus, when they finish high school all the students are expected to master the four skills in German.

English is not taught until 5th grade (around 10 years old), when students start attending three 45 -minute classes per week of this new foreign language. The students are introduced to all four skills (reading, writing, listening and speaking) at, approximately, the same time in the first year of English learning. It is worth commenting that many of the students have already been introduced to English in extra-curricular language courses their parents enroll them in outside school hours. At the time the students start their English lessons, their German proficiency is elementary.

Although all the participants in this study attended the same school, they started learning English at different ages and, therefore, have different levels of proficiency. For instance, a student might have started learning English in a language institute before starting to learn it at school. Although the same process can be noticed in their German proficiency, all the students selected for this study started learning German in kindergarten; compositions produced by students who had started acquiring German later in life were disregarded.

The age factor is important to highlight, since there have been different standpoints on the question of whether age makes any difference in language transfer. Cenoz (2001, p.9) states that research on the relationship between age and cross-linguistic influence in third language acquisition still needs more attention. The author argues that:

In case of young learners, age is associated with cognitive and metalinguistic development, and older children have been reported to advance more quickly in the first stages of second language acquisition.(...) older children can have a more accurate perception of linguistic distance that could influence the source language they use when transferring terms from one of the languages they know (Cenoz, 2001:10).

In order to provide an educational setting which will allow for better language acquisition, both English and German classes have up to sixteen
students, allotted into the classes according to their language proficiency. The more proficient English students are set in a classroom called the Blue group, while the less proficient students are located in another called the Green group. The German department divides students by grouping them into the A class, which includes the most proficient students, and B class where the least proficient students study. The students’ level of proficiency in both German and English is tested using the parameters of the Common European Framework. They are all rated as A1 or A2 for English and A1 for German.

For the present purposes, I will define the subjects of this study according to Vaid's theory, which was presented in the theoretical background of this paper (section 2.3.2), because, according to my experience, the subjects in this study attained different levels of proficiency in each language and they might have difficulty in reaching advanced proficiency in any language learned after L1.

Table 1 lists the participants according to their language proficiency.

Table 1: Students' level of proficiency according to the school.

|  | German Level <br> according to the <br> school's <br> name <br> classification | English Level <br> according to the <br> school's <br> classification |
| :---: | :---: | :---: |
| BN | B | Blue |
| JPO | B | Green |
| MLG | B | Green |
| M F | B | Green |
| CL | B | Blue |
| LG | B | Blue |
| CL | B | Blue |
| LM | B | Green |
| JM | B | Blue |
| E N | B | Blue |
| BC | B | Green |
| PM | B | Blue |
| RM | B | Green |
| R B | B | Green |
| AL | B | Green |
| BQ | B | Blue |
| F | B | Green |
| JG | B | Blue |
| R | B | Blue |
| T T | B | Blue |
| A M | B | Blue |
| H P | B | Blue |

[^6]
## 3.2 <br> Instruments and procedures

In order to conduct the study and investigate possible answers to my research questions, all participants were asked to write two compositions ${ }^{9}$ as school tasks, one as part of their German class, which was assigned as homework. The other, in English, was assigned as class work. Since both tasks were part of the regular activities in their school curriculum, they focused on different topics, according to the lesson they were studying at the moment of the data collection. The English composition theme referred to the students' school, whilst the German composition was about their best friends. Figures 1 and 2 portray the specific instructions of each task.

## Figure one: ENGLISH TASK

The students first did a reading and comprehension activity about an Amish community in the USA. Then they had to write the following:

Read what Rebecca, an Amish student, says about her school. Then write a paragraph comparing it to your school. Write about:

- the age of students (from... to...)
- the number of students in a class
- the number of classrooms in your school
- the subjects you must study at school
- the length of your school day
"Amish children must start school when they are six years old and they finish at fourteen. We usually go to school from 9 a.m. to 3 p.m. There are nineteen children in my school and we all have lessons in one classroom. At school we must study math, English, German, geography, history and music." Rebecca

[^7]
## Figure two: GERMAN TASK ${ }^{10}$

Thema: Freundschaft

Dein Brieffreund Martin hat viele Freunde. In seinem letzten Brief hat er von seinen Freuden erzählt. Schreibe einen Brief an ihn und erzähle von deinen Freunden. Beantworte darin alle Fragn ausführlich.

Schreibe mindestens 80 Wörter.

- Hast du viele Freunde in der Schule? Was macht ihr zusammen in der Pause? Erzähle!
- Was machst du mit deinen Freunden am Wochenende?
- Wie feiern deine Freunde Geburtstag?
- $\quad$ Sind deine Eltern Freunde für dich? Erzähle!

The data collected derived from the students' compositions in both languages. Each composition was read and the instances of L2 interference were marked in the English language compositions and of L3 interference were marked in the German language compositions. Interference items were then grouped into categories which will be exposed in the next section.

The instances were then counted and analyzed in order to search for patterns and possible explanations, as suggested by Corder (1974 apud Ellis 1985, p.53) in the section 2.2. Ideally, these occurrences could help devise a teaching or learning strategy for future L2 or L3 language learning contexts.

Another very important source of data was the data informed in the questionnaires (see appendix, p. 42) which participants answered. This background questionnaire, which was answered in Portuguese so as to avoid misunderstandings, included questions on the subjects' knowledge and use of both English and German in their daily life. The questionnaire aimed to help

[^8]to classify students according to the amount of language input they are exposed to outside school and contextualize possible external or personal features that could have an impact on their foreign language acquisition.
4.

ANALYSIS
This section will outline the steps I took in analyzing the data. It also aims to point out the main foreign lexical interlanguage transfers found in the productions of the group in order to attempt to understand the extent to which these transfers take place.

As mentioned before, instances of lexical interference were highlighted and later on classified according to the following criteria:

- inadequate use of lexical items (that could be linked to the influence of the other foreign language); and
- use of lexical items or function words from the other foreign language in the writing samples (either the use of the full word or the effect of the spelling of a word).

Before looking into the data found in the assignments and analyzing the occurrences in terms of their features, it is worth looking at the characteristics of the subjects in this study, who are learning both L2 and L3 in an instructional setting, as shown through the answers to the questionnaire. Such background information will offer the context in which it will be possible to try to understand the extent to which these transfers take place. This information has been summarized in Table 2 below.

Table 2 below shows both the exposure students have outside the classroom and their level of proficiency, according to the school patterns, in English and German.

Table 2: Student's second languages exposure and production outside the classroom.

| $\sum_{\mathbb{Z}}^{\rightleftarrows}$ | German use outside school | German Level according to the school's classification ${ }^{11}$ | English course level | English use outside school | English Level according to the school's classification |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BN | no | B | Basic | site: Omigle and songs | Blue |
| JPO | no | B | Intermediate | vg | Green |
| MLG | no | B | Basic | films | Green |
| M F | no | B | He /she does not study outside school | English sites, song, video-game | Green |
| C L | private classes | B | Basic | no | Blue |
| L G | no | B | Basic | film, vg | Blue |
| C L | no | B | Red Ballon | trip, movies | Blue |
| L M | no | B | Intermediate | vg | Green |
| J M | German youtube videos | B | He /she does not study outside school | cousins in the usa, vg and songs | Blue |
| E N | chat with her/his mom | B | Basic | vg songs | Blue |
| BC | no | B | Basic | relatives in the usa | Green |
| PM | no | B | Intermediate | vg, read webpages | Blue |
| R M | no | B | Basic | vg, songs | Green |
| R B | chat with German cousins | B | Intermediate | vg, songs | Green |
| AL | no | B | Basic | songs, vg | Green |
| BQ | no | B | Intermediate | $\begin{aligned} & \text { his cousin, } \\ & \text { vg } \end{aligned}$ | Blue |
| F | no | B | Intermediate | vg, songs, films | Green |
| JG | no | B | Basic | films, online games | Blue |
| R | no | B | Intermediate | tourists, vg | Blue |
| T T | no | B | Intermediate | vg, music, movie | Blue |
| A M | no | B | Intermediate | internet, songs | Blue |
| H P | no | B | Intermediate | songs, vg | Blue |

[^9]In analyzing the data, one feature that stood out was the occurrence of a subtype of transfer called lexical interlanguage transfer (De Angelis \& Selinker 2001:43), which "refers to the use of an entire non-target word in the production of the target language". Ringbom (2001, p. 60) claims that "in no other area is the importance of similarities more in the foreground than in lexis". Instances of interference marked by lexical similarities were present in the data.

This analysis will follow Filatova's (2010, p.86) classification of lexical interference. She claims that lexical interference can be described as "nontarget units in the linguistic performance that occur because the needed words and constructions are being systematically borrowed from other languages native or foreign - known to the student" (Filatovia, 2010, p.86).

It is important to observe that L 1 transfer and some minor misspellings, that is, when only one letter in the word is mistaken or borrowed from another language, will not be taken into consideration in the analysis since the focus of this study is lexical interference between the additional languages. Also, in relation to misspellings, the word will be considered as "borrowed" from the other language known by the subject even if there is one misspelled letter. This is justified by the fact that the word will appear to be more similar to L2, since it keeps its morphology closer to the other second language than to the target language. For example: there is one occurrence of the word 'dutsch' which is the misspelling of the word deutsch (German). In this case, the omission of the vowel "e", still makes the word morphologically more similar to German and not to English.

In this study, as previously pointed out, the subjects initially receive more input in L2 German, once they are submitted to 45-minute classes 5 times a week. But, with time, a shift takes place and L3 input overtakes that of L2, due to the amount of English they are subjected to both in classroom contexts and in external contexts, i.e. trips to English speaking countries, exposure to songs and movies, experimenting with video-games and the prevalence of English in internet sites, besides the language institutions they may attend. It is worth mentioning that only one out of the 22 subjects of this study did not respond positively to the question of whether he used English outside the
classroom, while only four of them admit to the use German outside the school's classroom context.

According to table 4.2 below, based on the samples of writing pieces collected, we can observe that the writings of 12 out of 22 subjects did not present any kind of interference. There were neither German words in the English composition, nor English words in the German composition. That is, more than half of the subjects of this study did not show any instance of interference in their interlanguage in the written production of any of their second languages, that is, they were able to manage the use of one second language while keeping the other second language dormant.

It is surprising that the huge amount of English input and the dominant use of this language outside the institutional setting (watching movies, listening to songs, reading books, chatting with friends or relatives, playing online games or video games, or even travelling) by the majority of this 12student group, as well as the small German input or output (only one of them uses German outside school, to communicate to his German cousin) does not influence their interlanguage. Considering the data collected, it can be said that this result conflicts with Hammarberg's recency theory, which - as exposed in section 2.4 - states that a "subject can activate more easily a language if he/she has used it recently" (Hammarberg, 2001, p.23) In this case, it would be expected that subjects presented interferences from English which is the language they have mostly had contact with. Though this result seems surprising, it must be considered with caution, as the data for this study is derived from a limited sample and, therefore, no general conclusions can be drawn from the present study.

Table 3 below portrays the data from the students who did actually show interference between English and German. It is followed by the analysis of each of the cases.

Table 3: Student's lexical interference in both languages

| name | German lexical transfer | English lexical transfer |
| :---: | :---: | :---: |
| BN | Brasilien, englisch, deutsch | shopping (mall); fantastic |
| JPO | im | shopping |
| MLG | Englisch; portuguisisch; dutsch | best |
| M F | ist; beste | shopping |
| C L | Englisch | have, gym |
| L G | ---------- | Brazil; street |
| C L | ---------- | shopping (mall) |
| L M | Englisch | --------- |
| J M | am (at) $3 x$ | ---------- |
| EN | Englisch | ---------- |

Three subjects showed lexical influence only of German (L2) into English (L3). The lexical items were: Englisch and am - cases of morpholexical influence, whereby the German words or forms are used in English, probably due to the similarity of the forms in both languages. Two out of the three subjects who showed only German transfer use this language outside the classroom, $J M$ likes watching youtube videos in German while, EN usually chats to her mother, who is a German teacher, in German. This occurrence might be supported by Hammarberg's recency theory exposed in section 2.4.

Two subjects, $L G$ and $C L$, showed lexical influence only of English (L3) into German (L2). The lexical items used in writing a German text were 'Brazil’, 'street' and 'shopping', instead of using Brasilien, Stra $\beta$, ; and Einkaufszentrum respectively. None of these two subjects admit to using German outside the classroom, but they do state they use English to watch movies, play video games and communicate during trips. This might be explained by their higher fluency (see Table 2 with student's profile above) and recency in English (L3), as both are grouped in the English Blue group. When missing a word in German (L2), these two subjects seem to borrow lexical items from the language he/she was apparently more proficient in and used it to cover a gap in the production of the less proficient language. Such interference can also be explained by the frequency of the terms in their English spelling even in the students' native language - Portuguese, as well as by the much easier morphological and graphical (spelling) formally similar words in English. Some words which are
used in the Portuguese language are not necessarily employed with the original meaning, but with the same form. The more constant an item is in one's memory, the more it can become dominant over others that are less present.

Five subjects presented lexical interferences in both languages, they are BN, JPO, MLG, MF and CL. The occurrences in German were: Brasilien, englisch, deutsch, portuguisisch, ist and best; while the English occurrences were: shopping, fantastic, best, have gym, Brazil, street. The majority of the students who presented interference both from German into English and vice versa, uses English outside the classroom setting and does not use German; except for $C L$ who attends private German classes and does not mention any kind of English use outside the school. Considering these findings, a question that arises is why they still have German influence although they have greater exposure to English. An attempt to decipher this issue will be presented below.

Analyzing the use of German words in the English compositions (see table four), the occurrences were mostly occasions of a morphologically similar lexical item borrowed from the other language. There was also the addition of some morphemes at the end of the words. There are five occurrences of the misspellings of the noun/adjective by influence of the Germanic form as Englisch (English), two occurrences of the noun portuguisisch (Portuguese); one single occurrence of the noun Brasilien (Brazil), two of the noun deutsch/dutsch (Germany), three occurrences of the preposition am (at), one occurrence of the adjective beste (best), and one of the verb ist (is). This amounts to a total of 14 occurrences, among which only the noun deutsch is not similar to its English translation (German). This interference might have happened due to the similarities between German and English, which are languages typologically close (see section 2.4). This result must also be considered with caution due to the limited sample of this study.

Taking into consideration the influence of L3 English into German L2 (see Table 4) there is a total of ten lexical interferences. The English nouns found are shopping (instead of Einkaufszentru ) - the students mean shopping mall, although they didn't use the word mall (4 occurrences), Brazil (for Brasilien), street ( in place of Straße) and gym (to replace turnhalle), making a total of 8 occurrences. In addition to the nouns, there are three other
instances, one verb, have (haben), and two adjectives best (besten) and fantastic (fantastisch).

Table 4 shows the different lexical items which appeared in the samples collected.

Table 4: List of lexical items according to the language

| English lexical interlanguage <br> transfer in German compositions | German lexical interlanguage <br> transfer in English compositions |
| :---: | :---: |
| shopping, fantastic, best, have, gym, <br> Brazil, street | Brasilien, im, ist, best, am (at) |

The occurrence of the English words shopping, gym, Brazil and street in the German composition might be explained by the fact that these words are also used in the subject's L1 (Portuguese), as explained previously, to name brands or stores. In this case, the learner might unconsciously think that they can be used in other languages, once it is commonly seen in his/her L1.

For the words have, best and fantastic I could not draw any other conclusion beside the one that claims they are morphologically similar in both English and German which is, nevertheless, a very logical finding. Such a statement, to be reliable, could only be made in the presence of more conclusive data.

No comprehensive conclusion about the interference of L3 into L2 use can be driven based only on the data collected for this study, considering its limitation in terms of sampling. The restraining nature of the data, however, does give some indication of the kinds of processes involved in linguistic transference and, though the study was not very broad in nature, a few general processes were observed. This has been a pilot study so more data would be necessary in order to allow for more definite conclusions and any further statements on cross-linguistic influence in FL learners.

## 5. <br> Conclusion

Surprisingly, the lexical transfer between English (L3) and German (L2) and viceversa was not as frequent as I expected at the beginning of this pilot study. It seemed much greater when I was correcting the seven classes’ compositions all at once - the impression that actually motivated me to conduct this study. When examining closely the 25 -student group, the incidence is, in fact, infrequent. Nevertheless, according to what can be observed from the analysis, it seems clear that the lexical transfer between L2 and L3 does not turn out to be a major issue in the communicative goal of any of the subjects in this study, since at the end of the task all students met the goal of the activity. Also, the recency factor (as commented in section 2.4) did not reveal itself to be a determining factor in all cases, because although most of the students use English outside the school, German also played a role in their lexical interference process.

I began this study aiming to draw reflections which could enlighten the understanding of the following questions in terms of cross-linguistic interference of students learning German as L2 and English as L3:

- How great is the interference of the German language when students write in English?
- How does the knowledge of German as L2 influence the lexical choices of students in the English as L3 writing process?
- Do the German teachers also find English words while correcting their pupil's compositions?
- Does the knowledge of English also influence the lexical choice in compositions written in German?
- Which interference is greater? German into English or English into German?

These questions can be comprised into two main enquiries: How great is the interference between two additional languages? And, how does the knowledge of two additional languages influence the lexical choices in the target language writing production of this specific group of students? Although interference in both languages was found, it is not possible to draw definite conclusions neither about which lexical
influence is bigger nor under which circumstances interference happens, since the data is insufficient to. lead to more comprehensive conclusions.

This study points to the need for further investigation to determine the role of transfer among two additional languages. At present, it can only be tentatively suggested that the two second language systems mentioned in this pilot study interact in some way during the learning process, to the extent that interference occurs in both directions - from L2 to L3 and from L3 to L2, influenced by the amount of exposure to each of the languages and by the recency of the linguistic features learned.

It is important to mention that this study requires continuity. Further research should include the investigation of an increased number of samples in different age groups, or phases of the additional language learning processes. Studies which also compile both written and oral cross-linguistic interference among the same group of students for a longer period of time would be relevant in order to investigate whether the influence of L3 in L2, or vice-versa, is stronger in oral production than in written production.

It is also important to highlight another issue faced when developing this research, which was the limited access I had to relevant literature. This was due to two main reasons: the theme has not been highly explored yet, as stated by Jordà (2005:1) "The scarcity of multilingualism studies contrasts with the abundant existing research in the field of second language acquisition", and the fact that the PUC-Rio university library did not have any book on the topic of third language acquisition, nor some of the books of relevant authors such as Williams and Hammargerg, 1998; Hufeisen and Jessner 1998,1999; Green, 1986 and Bialystok, 1988, 2001.

I hope this research will be helpful, not only for me and my own understanding of the particular dynamics of the students of the school I work for, but also to other teachers whose students bring the knowledge of one foreign language into another. I truly agree with Blayle's (2001) statement "although we call ourselves English as Second Language teachers, the reality is that for many of our students, we are English as a Third, Fourth, Fifth, or Sixth language teachers." since it is important to take into account that multilingualism has become a world phenomenon (Chlopek, 2007:17).

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## 7. <br> Appendix

### 7.1 Oral Questionnaire:

The following questions comprised the questionnaire orally answered by the participants of this study.

1. When did you start studying at this school?
2. Do you study German outside the school? Where? What is your level?
3. Do you use German in your free time activities? For example, reading books, listening to music, chatting, websites...
4. Do you have a German pen-pal?
5. Do you study English outside the school? Where? What is your level?
6. Do you use English in your free time activities?
7. Do you have an English pen-pal?

### 7.2 Students' excerpts

## BN

- Am wochenende wir gehen zum partys, shopping... (...) Bruna ist so freundlich, schön und fantastic, sie ist meine besten freundin.

JPO

- Barra shopping und wir sehen viele sache laufen in der shopping.
- There are many children im my school...


## MLG

- I study Englisch, Maths, Geography, portuguisisch, Deutsch and scientist.

MF

- Am wochenende ihr gehen zum shopping.
- My name is $X$ and my school ist $X(\ldots)$ the beste in the Rio de Janeiro.

CL

- In der shule ich have viele freunde und...


## LG

- Meine bester feuide ist $X$, er ist 13 jahre alt, es wohnt in Brazil und (...) nicht gern wann street mit ich und...

CL

- Am wochenende wor gehen zu shopping, ins kino (...) suzammen ode rim gym.
- at school I study math, Englisch, Germany, Portuguese, Cience...


## LM

- At school we must study math, Englisch, German, German, geography. history...

JM

- We must study German language, Math, english, portuguiese, Cience, Geography...

EN

- There are thisty-two children in my class and we all have Gramm, Englisch, Art, Math and others subjects.


[^0]:    ${ }^{1}$ This restriction is attributed to the fact that this is a pilot research project and several constraints were imposed on the study.

[^1]:    ${ }^{2}$ The author refers to the concept of Universal Grammar proposed by Chomsky.

[^2]:    ${ }^{3}$ However, it is crucial to bear in mind that despite the seemingly obvious proximity between English and German, the matter is complicated at the lexical level due to extensive lexical borrowing. Evidence of this fact can be found in the English lexical system, which had many Latin words borrowed during the Norman Conquest beginning in 1066 (Godinho, 2001). Because of the heavy borrowing found in the English lexicon, one can hypothesize that English also consists of Latin-originated vocabulary to a certain extent.

[^3]:    ${ }^{4}$ Default supplier is the "language that eventually becomes the source where non-target interfering lexical units originate. This language,(...) is activated either consciously or nonconsciously whenever a speaker needs lexical compensation" (Filatova, K., 2010).

[^4]:    ${ }^{5}$ The different backgrounds consider that L2 may refer to either second or foreign language.
    ${ }^{6}$ My own translation of: "entender bilinguismo como a habilidade de usar duas línguas, e o multilinguismo como a habilidade de usar mais do que duas linguas. (...) Assim os bilíngues e multilíngues podem ter mais ou menos fluência numa língua do que em outra; podem ter desempenhos diferentes nas línguas em função do contexto de uso e do propósito comunicativo, entre outros motivos." (Zimmer, Finger and Scherer, 2008:5).

[^5]:    ${ }^{7}$ The linear process described by Nunan is not the same as the complex nonlinear system described by Larsen-Freeman. I assume that this is a general conception because the author does not specify whether language learning is taking place in a classroom setting or not.

[^6]:    ${ }^{8}$ See section 3.1

[^7]:    ${ }^{9}$ Due to the different school curriculum and to the school constraints for each language, it was not possible to collect compositions with the same theme in both languages, nor assign tasks under the same conditions. The tasks requested were produced under different conditions, in one language as homework and in the other as class work. Such divergences may, certainly, have given biased results. Nevertheless, as a pilot experience the results are useful for discussion.

[^8]:    ${ }^{10}$ Theme: Friendship. Your pen pal Martin has many friends. In his last letter he talks about what his likes. Write a letter to him and talk about your friends. Answer to all questions in detail. Write at least 80 words. Do you have many friends at school? What do you do together during the break? What do you do with your friend on the weekend? How do you celebrate your friend's birthday? Are your parents your friends?

[^9]:    ${ }^{11}$ See section 3.1

