

The Interlanguage in Learners of English as a Foreign Language: An Error Analysis Approach¹

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Abstract

In order to investigate the internal factors present in the interlanguage of learners of English as a foreign language, a qualitative research study was implemented to analyze the written productions of college students. The main objective of this case study was to identify the type of errors the students made and suggest the cognitive reasons that might have influenced them. The data were collected from a content exam applied to fourteen fourth-year students, and the syntactic errors were analyzed following the Error Analysis Approach. To classify errors is a complex task since the number of variables that influence the written production is considerable, and many times there is not a single cause of errors. However, the learners' errors do reflect the different learning strategies they apply, and it is possible to give an approximate description of this process, as it is shown in the results obtained in this study.

Resumen

Con el fin de investigar los factores internos que influyen en el interlenguaje de los aprendices de inglés como lengua extranjera, se implementó una investigación cualitativa para analizar las producciones escritas realizadas en inglés por estudiantes universitarios. El objetivo principal fue identificar el tipo de errores que los estudiantes produjeron y proponer las razones cognitivas que pudieron provocarlos. Para esto, se efectuó un estudio de caso por medio de una revisión sistemática de los datos obtenidos de la aplicación de un examen de contenido a catorce estudiantes de séptimo semestre. Los datos fueron recolectados y analizados según el enfoque de análisis de los errores. Este tipo de análisis es muy complejo debido a que el número de variables que influyen en la producción escrita es muy variado y, en ocasiones, se puede identificar más de una causa del error. Sin embargo, los errores de los aprendices reflejan las diferentes estrategias de aprendizaje que los aprendices inconscientemente aplican y, a través del análisis de los errores, es posible dar una descripción aproximada de este proceso como se demuestra a través de los resultados obtenidos en este estudio.

Introduction

Many different types of research have been carried out in order to try to explain the second language learning process. One of the reasons for this interest has been to study how the internal as well as the external factors facilitate or interfere with the learners' goal to communicate effectively. This work is focused on the identification of some of the internal factors that influence the interlanguage, which is a unique linguistic system developed by a foreign or second language learner (Ellis, 2015). The main aim is to identify the causes of the syntactic errors that occur in the written production in English of a group of college students. If the causes of these problems are known, English as a Foreign Language (EFL) or second language (ESL) teachers may devise more effective methods to eradicate those errors.

This article consists of three sections: a) a review of some research done in relation to the interlanguage system and some of the causes of the errors made by second language (L2) learners; b) a description of the theories of interlanguage, Contrastive Analysis (CA), Error Analysis (EA), and the types of errors and their classification; and c) the presentation of the results of an analysis of the errors produced by a group of college students.

This qualitative investigation describes a case study of a sample of fourteen students who were studying to be English-Spanish translators. These students were in their fourth year of their undergraduate studies. EA was used to analyze the data, classify the syntactic errors, and identify the causes of the syntactic errors found in their written productions. Through this analysis, it was possible to give a systematic approximation to the different causes of the syntactic errors produced by the EFL learners under consideration.

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Literature Review

Throughout the years, the interest in the interlanguage theory has continued, and different research been done in order to try to describe the system.

A study made by Khansir (2012) reviewed CA and EA, which were the first approaches that studied the interlanguage. He made a comparison of the advantages and disadvantages of CA and EA, and he emphasized the importance of considering interlanguage theory in order to explain L2 acquisition. He affirmed that, despite the disadvantages of these approaches, they could provide insights about how interlanguage system functions. He proposed that the insights obtained through these approaches could be taken into account to create better teaching methodologies and techniques in English as an L2 classrooms. In the present research, EA was applied to study the errors made by college students.

On the other hand, there are studies that were focused on using for L2 errors as a source to explain the mental processes followed by the learners when performing different L2 activities.

Cáceres Donaire (2013) made an investigation whose general objective was to discover the factors that intervene in the first language (L1) transference existing in the L2 written productions of students from a college in Honduras. In his investigation, he examined the differences between the languages involved; Spanish, which was the learners' L1, and English, which was the target language. He also considered the students' perceptions of their difficulties learning English as due to the differences between the languages. As a result of the analysis, he found that many of the students' errors were due to negative L1 transference (or interference), and he proposed using his results to create strategies for teachers to use in order to solve them. In his work, he did not discuss other possible factors for students' errors.

Marin Serrano (2013) made an analysis of 200 written texts in order to identify the errors made by future EFL English teachers in the second and third year of their studies. His goal was to improve the learning-teaching process given in the Universidad Pontificia in Salamanca, Spain. He made an extensive analysis of different types of errors at different levels: lexical-grammatical, text, and discourse. He used examples obtained from his corpora to classify them. He described different reasons for the learners' production of errors, among which he considered simplification, generalization, omission, and L1 interference. He affirmed that through these errors it is possible to determine the learners' level of L2 development and to make a teaching adjustments considering each learner's stage.

Díaz Sánchez and Álvarez Pérez (2013) from Universidad de la Sabana, Puerto Rico, compiled different neurobiological studies in which they described the effects that the students' mother tongue had on learning an L2. Through the results obtained, they concluded that the learners' pre-established schemes would inevitably influence L2 learning because there were neurobiological elements present in certain mechanisms that might induce interference, and they posited that this would be more probable when the native language and the target language were similar.

The previous researches are similar to the present study in that the participants were young adults and they were studying EFL and for English for academic purposes. In addition, they all considered interference as one of the main reasons for L2 learners' errors.

Theoretical Framework

Different theories have contributed to explain the internal factors that influence language learning among them: CA, EA, interlanguage, errors, language transfer, and language interference. Those are described in the next sections.

Contrastive Analysis as a Precursor of Error Analysis

The interest in identifying the reasons that influence L2 acquisition started in the 1950s. Some of the most important contributors to this study were Lado, Fries, and Weinreich (as cited in Richards, 2014). These authors applied the CA approach because they believed that the main strategy used by adults when learning a L2 or foreign language (FL) was *native language interference*. This type of interference results from the contrast of the speaker's mother tongue system and the L2 system that is being taught (Richards, 2014). Accordingly, many errors in the L2 production were due to the differences between the two languages. Lado

and Fries (as cited in Selinker, 2013) affirmed that through CA, the identification of those differences was possible in order to predict and avoid those errors.

The conclusions of CA about language grammar were based on the behavioristic theory that proposed that learning occurred through the formation of habits; Lado (as cited in Selinker, 2013) used the term *habit* in many of his conclusions to refer to the students' productions, which resulted later in the rejection of his theory. The reason of this rejection was that behaviorism could not explain the fact that learners apply their own rules for expressing ideas as Chomsky (as cited in Ellis, 2015) affirmed in the 1960's in his mentalist theory. Selinker (2013) considered that, thanks to CA, EA emerged, and it created the basis for an interlanguage theory.

EA is an approach that emerged in the 1960s when linguists recognized that learning a language implies more than the knowledge of grammar. Errors were considered by Strevens (as cited in Richards, 2014) as part of the learners' strategies in the process of learning a language. Therefore, this process would be better understood by identifying the students' errors and the possible factor(s) behind them through the use of an EA approach. EA identifies, analyzes, and classifies errors in order to find out the system functioning in the learners (Brown, 2014).

Interlanguage and Language Transfer

The theory of interlanguage arose between the 1960s and 1970s as a result of the interest of the behaviorist and mentalist theories to understand how L2 learners process linguistic data in order to learn a new language. However, most of the insights on which the interlanguage is based were obtained, as in EA, from the mentalist theory proposed by Chomsky in the 1960's (as cited in Ellis, 2015). One of Chomsky's main theories is the existence of a language acquisition device (LAD), an innate mechanism to learn a language. This device contains innate linguistic properties that allow children to create an infinite number of utterances resulting in the construction of an internal system of language (Brown, 2014).

The concept of interlanguage was introduced by Selinker in 1972 (as cited in Ellis, 2015). This concept refers to a separate linguistic system created by an adult learner different from the L1 and the L2, but related to them. Ellis (2015) states that the concept of *interlanguage* involves different premises:

1. It contains its *own system of rules* that is created by the L2 learners.
2. It can be influenced by external and internal factors because it is *permeable*.
3. It is *transitional* since learners periodically restructure the system by the addition and deletion of rules.
4. It is developed through the learners' use of different learning strategies reflected by the errors they made.
5. It can fossilize. Generally, the development of the learners' mental grammar stops before reaching an L2 complete system.

One controversy that has prevailed for many years in L2 and interlanguage theory is the role of native language transfer/interference. One of the main opponents to the influence of language transfer on L2 learning is Corder (1982). Based on the mentalist conception, this author affirmed that, as in L1 acquisition, a L2 learner uses innate abilities to internalize the input received. Therefore, he concluded that L2 learners will apply similar strategies, but that does not mean that they will learn the target language in the same way they learn the L1. In addition, this author says that the differences between the first and the second language do not affect the process of acquisition since LAD remains in adults in a latent form (Corder, 1982).

On the other hand, Selinker (2013) states that when adults lose LAD, they apply other strategies, including *language transfer*, to acquire the new language. Language transfer is understood as the positive or negative influence of the native language on the L2 learning. Contrastive analysts affirm that when language transfer causes an error it is called *language interference* (Ellis, 2015). Even though language transfer is not the only process used, it still has an important role in forming the learners' interlanguage system. Selinker (2013) explains that learners identify the same meaning for different linguistic units across the three systems that he proposes: the native language, the interlanguage, and the target language. Therefore, they would use the native language unit in the other systems when speaking in the foreign language.

In the area of psycholinguistics and neurolinguistics based on the theory of interference, different studies of the behavior of the brain were made in order to explore the neuro-biological substrates present in the different aspects of bilinguals' language. Díaz Sánchez and Álvarez Pérez (2013) quote about 10 studies,

some of which focused on lexical patterns (e.g., Elston-Güttler & Williams, 2008; Ivanova & Acosta, 2007), phonetics (e.g., Díaz et al., 2008; Iverson et al., 2009), and grammar (e.g., Sabourin & Stowe, 2008; Tokowicz & MacWhinney, 2005) that demonstrate through the analysis of the behavior of the brain that there is an L1 transference to L2 performance. This process is more noticeable when the languages are similar; this facilitates L2 learning and interferes when they are different because different areas of the brain are involved. Moreover, Díaz Sánchez and Álvarez Pérez (2013) conclude that the factors that may influence L2 learning depend on the learners' age of acquisition, their linguistic experience, their individual abilities, and their level of linguistic achievement, among others. In conclusion, language transfer operates selectively and in conjunction with other factors which will be explained in the next sections.

Interlanguage and Error Production

During the process of learning a language, *errors* are unconsciously made. Corder (1982) affirms that they reflect the learners' systematic attempt to deal with the data of the new language and the strategies the learners use according to the hypotheses they made. In contrast, Richards (2014) says that the learner uses a specific linguistic system in every part of the process of his interlanguage. Corder (1982) also distinguishes the notion of mistake from that of error. A *mistake* is a performance error that speakers can intentionally correct since they are result of particular circumstances of the learner, while *errors* are result of the lack of knowledge of a linguistic element. Unless a longitudinal study is carried out, it is often not possible to distinguish a mistake from an error in a single study. Therefore, in the analysis of this study, the term *error* is used in any speaker's production that is not following the L2 features, unless it is possible to identify the structure as a mistake.

According to Richards (2014), errors can be classified into two types: linguistic and psycholinguistic. The *linguistic type* classifies the error as a deviation in a particular linguistic subsystem, while the *psycholinguistic type* brings four clues about the kinds of processes or strategies learners use when they are speaking or writing in the target language related to this type of errors: overgeneralization, ignorance of rule restrictions, incomplete application of rules, and false concepts hypothesized. Richards (2014) classifies the psycholinguistic errors into two groups: developmental or interference errors, which are:

1. Overgeneralization: Application of an incorrect structure in contexts where the learner does not distinguish the linguistic difference and a different structure is used.
2. Ignorance of rule restrictions: A subtype of overgeneralization in which rules are extended to contexts where they do not apply.
3. Incomplete application of rules: A rule is partially applied unconsciously by the learner who expects that the idea is communicated effectively. This error represents the degree of the learners' development of the rules.
4. False concepts hypothesized: Incomplete or incorrect understanding of target language distinctions.

The last type of psycholinguistic error considered by Richards (2014) is the interference or interlingual errors. The *interference errors* occur due to the differences between the mother tongue and the target language.

For this study, a new psycholinguistic type of error called *concept comprehension issue* was added. The reason of this addition was that one of the causes of the errors presented in the data analyzed was due to the lack of comprehension of the concept that was explained since the learners' data were collected from a content exam and the students were focused on explaining concepts, not on the English expression itself.

As it was explained previously, EA has been used since the 1960s to study the language learners' errors not only to provide a linguistic classification, but also to identify the processes and strategies the learners unconsciously applied (Ellis, 2015).

Corder (as cited in Ellis, 2015) describes the procedure EA follows:

1. A corpus of language is selected. The analyst needs to determine the learners' age, background, and stage of development among other factors.
2. The errors in the corpus are identified. The analyst must have in mind the normal form in the target language in the phonological, morphological, syntactic, and other language levels. In this work, the emphasis is placed on the syntactic level. One difficulty of identifying the learners' errors is that the analyst cannot infer what the speaker meant to say and he cannot reconstruct the sentence.
3. The errors are classified. The analyst provides the grammatical description of the errors found.

4. The errors are explained. The analyst identifies the psycholinguistic causes of the errors. In this work, the classification used by Richards (2014) described above was used.
5. The errors are evaluated. This step is mainly given for pedagogical reasons. Considering the types of errors found, L2 teachers can identify procedures that may improve the learner's way of learning.

Ellis (2015) state three main reasons to perform EA: a) it identifies the possible reasons of the learners' errors; b) it helps teachers identify which learners' errors are more frequent; and c) it may help learners to learn the target language when they are able to self-correct the errors they make. This study is made for psycholinguistic reasons; its main purpose is to identify the reasons of the learners' errors applying the Corder's proposal of EA (as cited in Ellis, 2015). The results may help English teachers create a teaching methodology that can be appropriate for their students' specific necessities.

Research Objectives

In the college program where this study was applied, different types of L2 errors were identified to be produced by some of the students when writing in English. As the result of a spontaneous observation, it was believed that one of the main reasons for these errors was the influence of their knowledge of Spanish. However, other factors were also detected to be present in different degrees, and the following question arose: What factors influence the foreign language learning process followed by college students?

In order to attempt to answer this question, the following general objective for this study was established: Analyze the different types of syntactic errors produced by a group of fourteen college students in order to identify the most frequent factors that influence their FL learning process in their written productions in English. Besides, some specific objectives were established:

1. Classify the syntactic errors in the students' written production in English.
2. Identify the possible cognitive reasons of the students' L2 errors in syntax.
3. Determine the average of frequency of the different factors that influence the foreign language learners' system.

The concept of interlanguage is part of the mentalist theory, which is interested in identifying the internal mechanisms that occur in the foreign or L2 learning process. These mechanisms can be reflected through the analysis of the kinds of errors learners produce since errors provide an evidence for the strategies they apply to learn a language. Therefore, EA can offer a general explanation of how Foreign/L2 acquisition occurs (Ellis, 2015). Steinberg and Sciarini (2006) state that foreign language (FL) learners have fewer opportunities to practice the target language since they are not learning it in contexts where it is spoken; therefore, they are not exposed to natural situations outside the classroom, as it happens with L2 learners. This may influence the learners' learning process, the errors they make, and their duration.

In addition, according to Richards (2014), EA is accepted by many linguists as an approach that facilitates the identification of L2 learners' processes when acquiring a language. Besides, EA can provide tools for teachers to create a methodology to help learners correct those errors. Here, the main reason for using EA, as proposed by Ellis (2015), is to identify the psycholinguistic causes of errors produced by FL learners, which is related to the type of learners' strategies present in interlanguage.

Methodology

The purpose of this case study was to identify the types of errors that EFL college students made when answering a content exam. The main objective of the study was to discover the types of errors they made, the most frequent causes of their errors, and the role of language transfer in their production.

First, a group of fourteen students was selected. The participants of the study were fourth year undergraduates who were taking a content class as part of their training as English-Spanish translators during their college studies. They had an intermediate level of English learned in public schools, and the researcher was the students' professor.

Then, the data were collected from a written content exam in which the students were notified that their answers would be used for this research. They were required to sign a written consent form; if they accepted it, their data would be used. They were required to explain some concepts related to Discourse Analysis, which is a subject they take during their studies. In order to register their use of English in their explanation of the required concepts, the answer of one question was analyzed.

Finally, the obtained data was analyzed with the application of EA (Creswell & Creswell, 2018). The answers to the exams were analyzed considering the fact that the original text was in English and that they were required to explain theoretical concepts so, their main focus was not on the language expression but on communicating the idea. The main purpose of this procedure was to analyze the written production of English in a spontaneous context.

The steps in the data analysis were as followed:

1. Only one of each student’s answers was transcribed.
2. EA was applied according to Corder (1982). This consisted of
 - a. error identification. The identification of the errors was given on the syntactic level.
 - b. error classification. The type of syntactic error was determined.
 - c. error explanation. The possible psycholinguistic cause was established according to the classification proposed by Richards (2014).

Results

The results of the data analysis are described in this section. In order to show the procedure of the analysis, some examples of the errors produced by the students are presented in the table below.

In the first column, some of the sentences where the errors were identified are listed. In the second column, the different types of errors are classified and, in the third column, the approximate psycholinguistic error is given for each type of linguistic error. In this analysis, the term *cause* is used instead of psycholinguistic error as proposed by Richards (2014) in order to make a more direct reference to the strategy the learner followed when producing a particular error.

The main purpose of this study is to present in the results of the last column, as listed in Table 1, the type of psycholinguistic causes which are identified as follows: overgeneralization, ignorance of rule restriction, incomplete application of rule, false concept hypothesized, interference, mistake and, concept comprehension issue. This concept was added due to the particular characteristics of the students’ errors of this study as explained formerly. The order of appearance depends on the sequence of errors identified in each sentence.

Sentence	Linguistic error	Cause
(1) Conversational implicature (2) has to be with the way that (3) speaker is doing (4) or intonation (5) his/her message .	<ol style="list-style-type: none"> 1. Lack of indefinite article 2. Double subject 3. Lack of indefinite article 4. Wrong choice of words 5. Lack of parallelism 	<ol style="list-style-type: none"> 1. Overgeneralization 2. False concept hypothesized 3. Overgeneralization 4. Concept comprehension issue 5. Ignorance of rule restriction
The (1) conversational implicature refers to the meaning that is imply (2) in what we say and not exactly in the real meaning of the words.	<ol style="list-style-type: none"> 1. Wrong article 2. Wrong verb inflection: passive form (is implied) 	<ol style="list-style-type: none"> 1. Interference 2. Incomplete application of rule
That is why the existence of the misunderstanding . (1)	<ol style="list-style-type: none"> 1. Wrong choice of words 	<ol style="list-style-type: none"> 1. Interference
The (1) conversational implicature is a form that speaker use (2) in a conversation to avoid to say (3) something but that some time (4) is (5) understandable (6) because (7) the way that he/she say (8) it or because the intonation and other factor (9) that use (10) to say something without saying it.	<ol style="list-style-type: none"> 1. Wrong use of definite article 2. Wrong subject-verb inflection (speakers use) 3. Wrong verb inflection (saying) 4. Wrong lexical form 5. Lack of subject 6. Wrong verb inflection: passive form (is understood) 7. Incomplete conjunction (because of) 8. Lack of -s 3rd person 9. Lack of use of plural form 10. Lack of passive form (are used) 	<ol style="list-style-type: none"> 1. Interference 2. Mistake / overgeneralization 3. Ignorance of rule restriction 4. Interference 5. interference 6. False concept hypothesized 7. False concept hypothesized 8. Overgeneralization 9. Mistake 10. Interference
In the (1) conversation (2) implicature the meaning is on (3) the context, also the conversation implicature is (4) how the conversation develop (5), I mean the cooperative principle and in this there are the transactions which consist in (6) a common immediate aim, a mutually depend (7) contribution and conversation ending agreement.	<ol style="list-style-type: none"> 1. Wrong use of article 2. Wrong use of adjectival form (conversational) 3. Wrong preposition (in) 4. Wrong lexical form 5. Wrong subject-verb inflection (the conversation develops) 6. Wrong use of preposition (of) 7. Use of adjective form 	<ol style="list-style-type: none"> 1. Interference 2. False concept hypothesized 3. False concept hypothesized 4. False concept hypothesized 5. Overgeneralization 6. False concept hypothesized 7. Overgeneralization

Table 1: Examples of Students’ Errors

A variety of linguistic errors occurred in students' written productions, and the causes of these errors were related to the use of English structure and meaning; Richards (2014) calls them intralingual errors, and interference errors. The results of the complete sample used in this study are shown in Table 2.

Type of error	Cause	Total 76
Intralingual errors 59%	False concept hypothesized	17
	Ignorance of rule restriction	6
	Overgeneralization	13
	Incomplete application of rule	9
Interlingual errors 34%	Interference	26
Other errors 7%	Mistake	3
	Concept comprehension issue	2

Table 2: General Results

As it is shown in Table 2, the more frequent types of errors in this study were the intralingual errors, while the interlingual errors appear as the most frequent single cause of students' errors. As Richards (2014) affirmed, there are different psycholinguistic causes of errors: overgeneralization, ignorance of rule restrictions, incomplete application of rules, and false concepts hypothesized. Interference is another cause, whose importance in the learners' interlanguage development cannot be denied.

Conclusions

As it was discussed in this article, the interlanguage is a system that contains rules that change according to the learners' knowledge of the new language. During this process, the L2 learners apply strategies that may be incorrect, and this produces errors in their performance of the target language.

The production of errors is part of the natural process of language development in the interlanguage system of these learners, and the types of errors they make depends on their situational background. In this research, the speakers were young adults who are more susceptible to language interference, since they have learned English as a FL and they were producing English in a content class as part of an exam. Their main concern was to explain the concepts required; because of that, they did not realize they produced incorrect sentences; moreover, their knowledge of English was not totally developed since they only were at an intermediate level.

In conclusion, despite the possible weaknesses of EA, through the systematic analysis performed in this research, it can be said that there is evidence of how a language is learned and the possible strategies the learners are employing during this process. This is based on the affirmation of Richards (2014) and Ellis (2015), that the interlanguage system is developed through the learners' use of different learning strategies reflected by the errors they made.

Finally, it is expected that, with the teachers' use of EA, the learning stage of the students can be evaluated and that they adjust their teaching strategies to help learners correct those errors.

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