A Comparative Taxonomy of Errors Made by Iranian Undergraduate Learners of English

COMPARAISON DES ERREURS DE TAXOMONIE, COMMISESS PAR LES APPRENANTS IRANIENS DU PREMIER CYCLE DE L’ANGLAIS

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Abstract
This study tried to identify and investigate errors made by Persian learners of English according to comparative taxonomy which categorizes errors based on the source of errors such as interlingual, developmental, ambiguous and other errors. To conduct this study, 40 Persian learners of English were selected according to their Grade Point Average from Shiraz Azad University. Elicitation test was used for data collection. Writings of the students were analyzed and the errors were extracted and categorized based on comparative taxonomy. The results showed that the majority of the errors can be attributed to developmental, other, ambiguous and interlingual errors respectively. It proved that majority of errors were those which are common among native speakers of English and foreign leaners of English. Interlingual errors constitute the lowest number of errors. This finding rejected positive transfer from Persian learner’s mother tongue, Farsi.

Key words: Language learning; Writing; Contrastive analysis; Error analysis; EFL; ESL

INTRODUCTION
Nowadays, errors made by learners in the process of language learning are not considered as a negative aspect of language learning but a natural step in development of language skills. Dulay, Burt and Krashen (1982) believe that analysis of errors made by language learners can help understand the process of language learning deeply; moreover, it will help teachers and curriculum designers to decide on teaching materials which best fit learning needs of language learners. From that time, errors received much attention from researchers who tried to analyze different errors made by language learners. Consequently, many different analysis procedures have been introduced which analyze errors from a specific point of view. Many error taxonomies have been based on the linguistic item which is affected by an error. These linguistic taxonomies classify errors according to the language component and/
or the particular linguistic constituent the error affects. Many researchers use the linguistic taxonomy as a reporting tool which organizes the errors they have collected. Politzer and Ramirez (1973) studied 120 Mexican-American children learning English in the United States, taping their narrative of a short, silent animated cartoon. Errors were extracted for analysis from this body of natural speech. Burt and Kiparsky (1972) developed another linguistic taxonomy into which they classified several thousand English errors made by students learning English in foreign environment. Errors can be classified based on different taxonomies. Surface Strategy Taxonomy and Comparative taxonomy are two major linguistic taxonomies for classifying errors. The current study analyzes errors according to comparative taxonomy.

To find the source of errors made by L2 learners, taxonomy of a different nature i.e Comparative Taxonomy is needed. The classification of errors in a comparative taxonomy is based on comparisons between the structure of L2 errors and certain other types of construction. This taxonomy includes 4 error categories: developmental, interlingual, ambiguous and other errors.

*Developmental errors* are similar to those made by children learning the target language as their first language. For example, *dog eat it* made by a Spanish child learning English. *Interlingual errors* are similar in structure to a semantically equivalent phrase or sentence in the learners’ native language as *the man skinny* produced by a Spanish speaker. *Ambiguous errors* are those that could be classified equally well as developmental or interlingual as *I no have a car*. Other errors are those which do not belong to any of previous categories. For example: *She do hungary.*

In the first empirical study undertaken in which the grammatical errors made by children were actually counted and classified, less than 5% were found to reflect the children’s first language (Dulay and Burt, 1974). Moreover, Venable (1974) lists a few possible Greek- and French-influenced errors. Another study (Gonzalez and Elijah, 1979) investigated errors in reading. They studied the developmental reading behavior of 75 second to ninth grade Hispanic bilingual students to determine the kind of language difficulties the children encountered when learning to read English. Children were tested with a cloze procedure (Mcleod, 1970) and their errors were categorized into 4 types: illogical, logical, interference, and other. The students that state actual proportions (white,1977; and LoCoco, 1975) report an 8-23% incidence of interlingual errors. In addition, LoCoco (1976) and Bertkau (1974) noted that only a few individuals were responsible for most of the interlingual errors in their data.

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**OBJECTIVE OF THE STUDY**

This study is going to investigate and classify errors made by Persian learners of English according to comparative taxonomy proposed by Dulay, Burt and Krashen (1982). This study pays attention to the following questions:

1) What types of errors made by Persian learners of English?
2) Is positive transfer source of errors made by Persian-learners of English?

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**REVIEW OF THE RELATED LITERATURE**

Errors are the flawed side of learner’s speech or writing. They are those parts of conversation or composition that deviate from some selected norms of mature language performance. Teachers and mothers who have waged long and patient battles against their students’ or children’s language errors have come to realize that making errors is an inevitable part of learning. People cannot learn language without first systematically committing errors (Dulay, Burt and Krashen, 1982).

According to Bartholomae (1984) students do make errors in their writing. Some errors seem to the teacher to be the natural accompaniment of learning a new skill or the inevitable slips of the pen. Others seem intractable, persistent, and resistant to instruction like an insect that has developed resistance to insecticide. Given the prestige society attaches to correctness in writing, teachers often feel duty-bound to note, mark, and correct every error in a student’s paper then follow the papers with skills drills. This tremendous amount of time and effort is motivated by a healthy desire to “nip errors in the bud.” Yet a wealth of research not only suggests that this approach to dealing with language error is ineffective, but also argues it may have a negative impact on writing ability generally because it destroys fluency.

As an integral part of contrastive analysis, error analysis was used predominantly to help language teachers predict what problems a language learner would have due to the linguistic differences between the learner’s native language and the target language. Errors that could not be attributed to language interference were virtually ignored and those most frequently focused upon, such as the omission of articles before unique nouns or phonological errors, were so well known that many teachers found the work of the researchers redundant. Thus, in the beginning, error analysis consisted of little more than impressionistic collections of ‘common’ errors and their linguistic classification (Ellis, 1985).

In summary, errors are the result of social, psychological and linguistic interactions that challenge researchers to establish a solid linguistic research paradigm capable of the descriptive or explanatory powers necessary for error analysis. Despite its weaknesses as a tool of research, it still provides hints at
the possible connections between the classroom and the psycholinguistic questions of first and second language acquisition. It also demonstrates the importance of further research and the training of teachers who are capable of treating errors in language form as well as errors of communication and function. It must be remembered, however, that errors are only a way of describing a language learner’s performance and should not be allowed to eclipse the successes of the language learner.

**Error Taxonomies**

Dulay, Burt and Krashen (1989) limit their discussion to the descriptive aspects of error taxonomies on the assumption that the accurate description of errors is a separate activity from the task of inferring the sources of those errors. They have focused on error taxonomies that classify errors according to some observable surface feature of the error itself, without reference to its underlying cause or source. They have called these descriptive taxonomies. Error analysis, from this perspective, is an analytical tool, as are the specification of transitional constructions, the computation of acquisition orders, and the delineation of special utterance types. They have reviewed the literature in order to present the most useful and commonly used bases for the descriptive classification of errors. They are (1) linguistic category; (2) surface strategy; (3) comparative analysis; and (4) communicative effect. Discussion of these descriptive classifications is guided by two major purposes: to present error categories which rely solely on observable (rather than inferred) characteristics for their definition; and to report the findings of research conducted to date with respect to error types observed. Such findings may assist teachers in their instructional efforts and theoreticians in their formulation of L2 theory.

Furthermore, many error taxonomies have been based on the linguistic item which is affected by an error. These linguistic taxonomies classify errors according to the language component and/or the particular linguistic constituent the error affects (Dulay, Burt and Krashen, 1989). Errors can be classified based on different taxonomies:

- **Surface strategy taxonomy** and Comparative taxonomy are two major linguistic taxonomies for classifying errors.
  
  *Surface strategy taxonomy* highlights the ways surface structures are altered. Analyzing errors from a surface strategy perspective makes us aware that learners’ errors are based on some logic. They are not the result of laziness or sloppy thinking but of the learners’ use of interim principles to produce a new language (Dulay, Burt and Krashen, 1982). This taxonomy classifies errors as: Omission, Addition, Misformation and Misordering.

  According to Dulay, Burt and Krashen (1989), the classification of errors in a comparative taxonomy is based on comparisons between the structure of L2 errors and certain other types of constructions. For example, if one were to use a comparative taxonomy to classify the errors of a Korean student learning English, one might compare the structure of the student’s errors to that of errors reported for children acquiring English as a first language.

  In the research literature, L2 errors have most frequently been compared to errors made by children learning the target language as their first language and to equivalent phrases or sentences in the learner’s mother tongue. These comparisons have yielded the two major error categories in this taxonomy: developmental errors and interlingual errors. Two other categories that have been used in comparative analysis taxonomies are derived from the first two: ambiguous errors, which are classifiable as either developmental or interlingual; and, of course, the grab bag category, other, which are neither.

### Developmental Errors

“Developmental errors are errors similar to those made by children learning the target language as their first language” (Dulay, Burt and Krashen, 1982, p.165). For example, the following utterance made by a Spanish child learning English:

```plaintext
Dog eat it. The omission of the article and the past tense marker may be classified as developmental because these are also found in the speech of children learning English as their first language.
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Two considerations underlie the interest in comparing L2 and L1 acquisition errors. The first has to do with facilitating L2 theoretical development. As Dulay, Burt and Krashen (1989) mentioned, if the characteristics common to both L1 and L2 acquisition could be identified, theoretical inferences that have been drawn from the large pool of L1 research data may be applicable to L2 acquisition theory as well.

The second consideration has to do with the role of the first language when learning a second. Since children acquiring a first language have not experienced learning a previous language, the errors they make cannot possibly be due to any interference from another language. When such errors are made by second language learners, it would be reasonable to hypothesize that mental mechanisms underlying general language development come into play, not the rules and structures of the learner’s native language (Dulay, Burt and Krashen, 1982).

### Interlingual Errors

According to Dulay, Burt and Krashen (1982), Interlingual errors are similar in structure to a semantically equivalent phrase or sentence in the learner’s native language. For example, The man skinny produced by a Spanish speaker reflects the word order of Spanish adjectival phrases (e.g. *el hombre flaco*).

To identify an interlingual error, researchers usually translate the grammatical form of the learner’s phrase or sentence into the learner’s first language to see if...
similarities exist. For example, if the learner produced
Dog eat it.
The researcher would translate the grammatical form
The dog ate it.
into Spanish
El perro lo comió.
Then compare both sentences to see if the learner’s L1 structure is discernible in the L2 sentence. In this case it is not.

Interlingual errors as defined by Dulay, Burt and Krashen (1989), simply refer to L2 errors that reflect native language structure, regardless of the internal processes or external conditions that spawed them.

Ambiguous Errors
“Ambiguous errors are those that could be classified equally well as developmental or interlingual.”(Dulay, Burt and Krashen, 1982, p.172). That is because these errors reflect the learner's native language structure, and at the same time, they are of the type found in the speech of children acquiring a first language. For example, in the utterance
I no have a car
The negative construction reflects the learner’s native Spanish and is also characteristic of the speech of children learning English as their first language.
The ambiguous category is particularly important in a comparative taxonomy. Assigning such errors to a separate category ensures the clarity of the findings resulting from a comparative error analysis and enables researchers to draw clear theoretical inferences from the rest of the data (Dulay, Burt and Krashen,1982).

Other Errors
Dulay, Burt and Krashen(1982) believe that few taxonomies are complete without a grab bag for items that don’t fit into any other category. For example, in the utterance
She do hungry
The speaker used neither her native Spanish structure (the use of have for is as in she have hungry), nor an L2 developmental form such as She hungry where the auxiliary is omitted altogether. Such an error would go into the Other category.

Related Studies
Studies conducted on the speech and writing of adults learning second languages have also found that the majority of non-phonological errors adult learners make do not reflect their mother tongues. The proportion of interlingual errors that have been observed, however, is larger than that observed for children. The studies that state actual proportions (White, 1977; and LoCoco, 1975) report an 8-23% incidence of interlingual errors in various samples. LoCoco (1976) and Bertkau (1974) noted that only a few individuals were responsible for most of the interlingual errors in their data. This observation indicates that characteristics unique to certain individuals may be closely related to the incidence of interlingual errors.
The two available quasi-proportion studies (one on oral production and the other on comprehension) report that virtually no interlingual errors were observed. One of them carried out by Hanania and Gradman (1977) concluded, “There was no evidence of marked first language interference in the learner’s English sentence constructions”(p.88). The other one done by d’Anglejan and Tucker (1975) states,
Contrary to expectation, the second language learners... even those in the beginning group, appeared not to process the target sentences by relating them to similar structures in their native language... they do not attempt to apply language specific rules appropriate to their mother tongue to the interpretation of sentence in the target language (p.293).

In another study conducted by White (1977), twelve Spanish-speaking adults from Venezuela who were studying intensive English at Concordia University in Montreal were selected. The students had been exposed to eight months of study in Canada at the time the experiment was undertaken and fell into the intermediate and advanced levels of proficiency. Oral production data were elicited using the Bilingual Syntax Measure. Following the Dulay and Burt (1974) method, White classified and tallied Developmental, Interlingual and Other errors, excluding Ambiguous errors from the developmental and interlingual counts. A total of 541 errors were classified and grouped into 12 grammatical categories. Based on the results, 60.3% of the errors were classified as Developmental; 20.6% were classified as Interlingual; and 19% were classified as Other errors.

LoCoco made two investigations of adult second language acquisition in a foreign language environment. In her 1975 study, she examined the errors of native English-speaking students enrolled in Spanish and German classes at a university in Northern California. The language data was collected by asking the students to write a composition on a topic of their choice. Four written samples were obtained in this manner for the two groups of students (one studying German, the other Spanish) at different points during the quarter of language instruction they were receiving. Between 28 and 48 students were included for each language at each sampling. The first sample was taken three weeks after the beginning of the quarter, the last at the end of the quarter. LoCoco used error categories which were essentially subcategories of those used by the other proportion studies (e.g. White, 1977; Dulay and Burt, 1974). Based on the results, interlingual errors comprised, on the average, only 15.4% of the total errors, whereas developmental errors comprised 68.7%. LoCoco also noted that only 25% of the German subjects contributed to the higher level obtained for interlingual errors. Similarly, Bertkau (1974) reports that only 3 of his 15 Japanese-speaking students were responsible for nearly all of the
interlingual errors he observed.

In her second study, LoCoco (1976) again examined the errors of adults learning a second language in a foreign language environment. Her subjects were 28 English-speaking students taking an elementary Spanish course in a California university. The purpose of this study was to compare the effects on errors of three tasks used to elicit speech in the written mode: translation, picture description and composition. Again, in over a hundred errors classified, the incidence of interlingual errors was low, even lower than in the first study across all three tasks: 13.2% for translation, 13.0% for composition, and 8.3% for picture description.

**METHOD**

**Participants**

Approximately 40 Persian undergraduate university students, both male and female, majoring in English Translator Training and Teaching English participated in this study. All participants were the students of last year. The subjects were chosen according to their English language performance. That is, the students were chosen according to their Grade Point Average. The Persian-speaking students were selected from Shiraz Azad University.

**Instrument**

The instrument used in this study was an Elicitation Test. The subjects were exposed to some pictures and asked to write a composition of their own choice based on what they perceived from the pictures. The pictures were related to U.S. war against Iraq and Iranian traditional holidays called “Nouruz”. Pictures about the war were selected because the topic implied by the pictures was one of the most important issues of the day at the time of administering the test. The participants had naturally received a good amount of information on the topic by the media. So they had a sufficient amount of knowledge regarding the topic. The participants were also expected to have sufficient knowledge on the topic covered by the second set of pictures since Nourouz is the most important national holiday in Iran.

**Procedure**

The administration of the elicitation test took place in the Spring semester 2010. Data collection was done in a 2-hour session and the participants were asked to perform on the elicitation test. The students’ linguistic errors extracted from the composition the students wrote on the pictures were calculated. Errors extracted from the compositions were linguistic errors including morphological, syntactic and semantic ones. The errors categorized and analyzed according to the error analysis model presented by DULAY, Burt and Krashen (1982). This model categorizes and analyzes errors according to two error taxonomies i.e. surface strategy taxonomy and comparative taxonomy. However, only comparative taxonomy was considered for the current study according to the objectives of the study. Finally, the average frequency of errors for Persian-speaking EFL university students was calculated according to descriptive statistics.

In addition, the majority of the participants were so inspired by the pictures that they wrote more than one page about the topics. This indicates that the pictures had face-validity. Moreover, the pictures were presented to the students, and after 10 days the same pictures were presented to them again. The results of two tests showed a high correlation. It proved that the pictures were reliable.

**RESULTS**

Data collected from Persian learners of English were analyzed and all errors extracted from their writing. Then, the errors categorized according to comparative taxonomy which categorized errors as interlingual, developmental, ambiguous and other errors. The following Table provided detailed information about ambiguous errors.

### Table 1

<table>
<thead>
<tr>
<th>Comparative Taxonomies</th>
<th>Interlingual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kind of error</td>
<td>Omission of proposition</td>
</tr>
<tr>
<td>Number</td>
<td>1</td>
</tr>
<tr>
<td>Total number</td>
<td>17</td>
</tr>
<tr>
<td>Percent</td>
<td>16.19</td>
</tr>
</tbody>
</table>

As Table 1 shows, seven different types of errors were found in data which can be categorized under interlingual errors. Referring to the frequency, they consist of 17 out of 105 overall errors found in the writing of the learners. Thus, 16.19% of the overall errors can be referred to as interlingual errors. The following Table provides detailed information about ambiguous errors.
As depicted in Table 2, five different errors were found as ambiguous errors made by the learners which constitute 21 out of overall 105 errors made by Persian learners of English. According to the data, 20% of overall errors made by learners can be referred to as ambiguous errors. The third type of errors in comparative taxonomy is developmental. The relevant information was provided in Table 3.

Table 2

<table>
<thead>
<tr>
<th>Comparative Taxonomies</th>
<th>Ambiguous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kind of error</td>
<td>Omission of definite article</td>
</tr>
<tr>
<td>Number</td>
<td>13</td>
</tr>
<tr>
<td>Total number</td>
<td>21</td>
</tr>
<tr>
<td>Percent</td>
<td>20</td>
</tr>
</tbody>
</table>

As Table 2 revealed, developmental errors constitute the majority of errors made by Persian learners. Eight different types of errors could be categorized under developmental errors. These types of errors consist of 42 out of overall 105 errors. Therefore, 40% of the errors made by learners belong to developmental errors. All other errors found in the data could not be fitted to previous categories. Thus, they are categorized as Other errors (Table 4).

Table 3

<table>
<thead>
<tr>
<th>Comparative Taxonomies</th>
<th>Developmental</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kind of error</td>
<td>Omission of copula</td>
</tr>
<tr>
<td>Number</td>
<td>1</td>
</tr>
<tr>
<td>Total number</td>
<td>42</td>
</tr>
<tr>
<td>Percent</td>
<td>40</td>
</tr>
</tbody>
</table>

As Table 3 revealed, developmental errors constitute the majority of errors made by Persian learners. Eight different types of errors could be categorized under developmental errors. These types of errors consist of 42 out of overall 105 errors. Therefore, 40% of the errors made by learners belong to developmental errors. All other errors found in the data could not be fitted to previous categories. Thus, they are categorized as Other errors (Table 4).

Table 4

<table>
<thead>
<tr>
<th>Comparative taxonomies</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kind of error</td>
<td>Omission of preposition</td>
</tr>
<tr>
<td>Number</td>
<td>1</td>
</tr>
<tr>
<td>Total number</td>
<td>25</td>
</tr>
<tr>
<td>Percent</td>
<td>23.80</td>
</tr>
</tbody>
</table>

As Table 4 shows, 9 different types of errors could not fit under interlingual, developmental or ambiguous errors. These errors were categorized under other errors. Other errors include 25 out of 105 overall errors which is equal to 25% of the overall errors made by learners.

DISCUSSION

Table 1 showed that only 16.19% of the errors made by Persian learners of English are interlingual that is they may be originated from the native language of the learners. That is, the differences between Farsi and English can be the source of errors made by the learners. It is similar to the results of studies done by other researchers. Dulay, Burt and Krashen (1982) say that the research on speech and writing of adult learners who learn English as L2 had the same result which was seen in the research done on children learning English as L1. They believe that 8 to 23 percent of the errors can be categorized as interlingual errors. Therefore, the majority of grammatical errors are not under the influence of learners’ first language, Farsi.
Analysis of Persian sentences confirmed the point that learners of English made errors even where the structure of their first language (Farsi) and second language (English) were the same. It confirmed that unlike the belief of contrastive analysis proponents, positive transfer is not responsible for such errors. If it were responsible, such errors would not have occurred.

This investigation came to the conclusion that Farsi as the native language of the students of English in the current study was not a major obstacle in learning English. While contrastive analysis refers to the mother tongue as the only source of errors made by EFL-learners, error analysis also pays attention to a category of errors which is not a reflection of the mother tongue, i.e. developmental errors. In the current study, in comparison with other types of errors the majority of the errors were categorized under developmental errors (40%). Developmental errors are those types of errors which are common among native speakers of English and foreign learners of English. This finding also confirms that most of the errors made by learners were not under the influence of their native language, Farsi and cannot be assigned to positive transfer.

However, this study supports this idea that errors are not confined to the above-mentioned categories. Some errors referred to as ambiguous errors which can equally be listed under the two categories, and some others referred to as other errors which is the grab bag of all errors indicate that our knowledge about the source of errors is still far from clear and comprehensive.

REFERENCES