Research Paper

Investigating error analysis in interlinguistic English language teaching and the consequences of contradictory analysis on teaching quality

Reza Amini, Javad Bayesteh*

Department of Foreign Language, Islamic Azad University Khorasgan Branch, Iran

Abstract

Students learning a foreign language meet with many kinds of learning problems dealing with its sound system, vocabulary, structure, etc. Linguists try to find out the causes of the problems to be applied in language teaching, to minimize the problems. They propose contrastive analysis, error analysis, and interlanguage theory. Contrastive analysis is the systematic study of a pair of languages with a view to identifying their structural differences and similarities between the first language and the target language based on the assumptions that: the similarities facilitate learning while differences cause problems. A counter-theory to contrastive analysis is error analysis. A key finding of error analysis is that many learner errors are produced by learners making faulty inferences about the rules of the new language. These errors can be divided into three subcategories: overgeneralization, incomplete rule application, and the hypothesizing of false concepts. In the mid-1970s, Corder and others moved on to a more wide-ranging approach to learner language, known as interlanguage. The scholars reject the view of learner language as merely an imperfect version of the target language. Interlanguage is continuum between the first language and the target language. Interlanguage is dynamic (constantly adapting to new information) and influenced by the learners.

Keywords: Contrastive Analysis; Error Analysis; Interlanguage; Learning Problem

1. Introduction

If someone wants to learn a foreign language, he will obviously meet with many kinds of learning problems dealing with its sound system, vocabulary, structure, etc. This is understandable since the student learning the foreign language has spoken his own native language, which has been deeply implanted in him as part of his habit. Very often, he transfers his habit into the target language he learns, which perhaps will cause errors. Contrastive analysis theory pioneered by Fries assumed that these errors are caused by the different elements between the native language and the target language [1] . Thus, contrastive analysis followers suggest that teachers do contrastive analysis between the native language and the target language so as to predict the learning problems that will be faced by the students. However, not all problems predicted by contrastive analysis always appear to be difficult for the students. On the other hand, many errors that do turn up are not predicted by contrastive analysis. This shortcoming has inspired the appearance of error analysis which was pioneered by Corder in the 1960s. The key finding of error analysis is that many learner errors are produced by the learners making faulty inferences about the rules of the target language [2] .

---

* Corresponding Author Email: Bayesteh.r1980@yahoo.com

To overcome the shortcoming of contrastive analysis, it is suggested that teachers accompany contrastive analysis with error analysis. It is carried out by identifying the errors actually made by the students in the classroom.

Selinker (1992) states that errors are indispensable to learners since the making of errors can be regarded as 'a device the learner uses in order to learn.' [1] .

Thus, error is a proof that the student is learning. In this paper, the writer will focus on the discussion of what is contrastive analysis, error analysis, interlanguage; and what's the implication to the language teaching. Thus, the problems in this paper can be stated as follows:

1. What is contrastive analysis?
2. What is error analysis?
3. What is interlanguage?
4. What is the implication to the language teaching?

2. Review of Literature

To many students and to the public in general, an error is something they have done wrong. However, in science, the word "error" means the "uncertainty" which accompanies every measurement. No measurement of any sort is complete without a consideration of this inherent error. We cannot avoid the "uncertainties" by being very careful. So how do we deal with the measurement errors? All we can do is to try to ensure they are as small as possible and to have a reliable estimate of how large they are. An important component of a science student's education is to learn how to handle and interpret experimental data and results. This includes the development of methodologies needed to estimate the errors inherent in various types of measurements, and techniques for testing data to find out if these error estimates are valid, and the understanding of the way errors propagate through calculations made using experimental data. Learning how to handle experimental errors will be very useful also in other Sciences and Engineering. This document is a brief introduction to errors and how you approach them in the laboratory. Please read the entire document, but do not get desperate or disappointed if you do not understand all the details. Different experiments deal with different aspect of errors. Mastering error analysis requires extensive practice and will not happen overnight. Consider this document as a resource on how to handle the particular errors you face in your lab work [3] .

Contrastive analysis is the systematic study of a pair of languages with a view to identifying their structural differences and similarities. Contrastive Analysis was extensively used in the 1960s and early 1970s as a method of explaining why some features of a Target Language were more difficult to acquire than others. According to the behaviourist theories, language learning was a question of habit formation, and this could be reinforced by existing habits. Therefore, the difficulty in mastering certain structures in a second language depended on the difference between the learners' mother language and the language they were trying to learn. The theoretical foundations for what became known as the Contrastive Analysis Hypothesis were formulated in Lado's Linguistics across Cultures (1957). In this book, Lado claimed that "those elements which are similar to the learner's native language will be simple for him, and those elements that are different will be difficult". While this was not a novel suggestion, Lado was the first to provide a comprehensive theoretical treatment and to suggest a systematic set of technical procedures for the contrastive study of languages [4] . The goals of Contrastive Analysis can be stated as follows: to make foreign language teaching more effective, to find out the differences between the first language and the target language based on the assumptions that:

1) foreign language learning is based on the mother tongue,
2) similarities facilitate learning (positive transfer),
3) differences cause problems (negative transfer/Interference),
4) via contrastive analysis, problems can be predicted and considered in the curriculum.

However, not all problems predicted by contrastive analysis always appear to be difficult for the students. On the other hand, many errors that do turn up are not predicted by contrastive analysis. This prediction failure leads to the criticism to the Contrastive Analysis hypothesis.

The criticism is that Contrastive Analysis hypothesis could not be sustained by empirical evidence. It was soon pointed out that many errors predicted by Contrastive Analysis were inexplicably not observed in learners' language. Fisiak claims that Contrastive Analysis needs to be carried out in spite of some shortcoming because not all Contrastive Analysis hypotheses are wrong. To overcome the shortcoming of contrastive analysis, it is suggested that teachers accompany contrastive analysis with error analysis. It is carried out by identifying the errors actually made by the students in the classroom [1] . Schackne states "research shows that contrastive analysis may be most predictive at the level of phonology and least predictive at the syntactic level." Critics of contrastive analysis argue that since LI interference is only one of the sources of error, the predictions of errors is not worth the time spent on it due to the fact that on the one hand, many of the difficulties predicted by contrastive analysis do not appear in

the actual learner performance at all and many errors that occur are not predicted by contrastive analysis, on the other hand [2] .

3. Error Analysis

Error analysis was established in the 1960s by Stephen Pit Corder and colleagues. Error analysis was an alternative to contrastive analysis. Error analysis showed that contrastive analysis was unable to predict a great majority of errors, although it is more valuable aspects have been incorporated into the study of language transfer. A key finding of error analysis has been that many learner errors are produced by learners making faulty inferences about the rules of the new language. Although error analysis is still used to investigate specific questions in SLA, the quest for an overarching theory of learner errors has largely been abandoned. Contrastive analysis emphasized the study of phonology and morphology. It did not address communicative contexts, i.e. contrasting socio pragmatic conditions that influence linguistic production. Brown differentiates between mistakes and errors. A mistake refers to a performance error that is either a random guess or slip in that it is a failure to utilize a known system correctly. All people make mistakes, in both native and second language situations. Native speakers are normally capable of recognizing and correcting such mistakes, which are not the result of a deficiency in competence but the result of some sort of breakdown in the process of production [5] .

Error analysis developed as a branch of applied linguistics and as an alternative to contrastive analysis. It may be carried out in order to identify strategies learners use in language learning, recognize the causes of learner errors and obtain information on common difficulties in language learning as an aid to teaching and/or in the preparation of teaching materials. Despite the fact that it had its heyday in the 1960s, nowadays it can be illuminating for pedagogy due to its high practicality. Experience reveals that intermediate and even advanced foreign language learners have recourse to their mother tongue resources whenever they are in shortage of L2 patterns and vocabulary. The methodology of error analysis (traditional error analysis) can be said to have followed the steps below:

1. Collection of data
2. Identification of errors (labeling with varying degree of precision depending on the linguistic sophistication brought to bear upon the task, with respect to the exact nature of the deviation.
3. Classification into error types
4. Statement of relative frequency of error types
5. Identification of the areas of difficulty in the target language;
6. Therapy (remedial drills, lessons, etc.).

While the above methodology is roughly representative of the majority of error analyses in the traditional framework, the more sophisticated investigations went further, to include one or both of the following:
1. Analysis of the source of the errors (e.g. mother tongue interference, overgeneralization, inconsistencies in the spelling system of the target language, etc.);
2. Determination of the degree of disturbance caused by the error (or the seriousness of the error in terms of communication, norm, etc.).

Most researchers agree that contrastive analysis and error analysis alone can't predict or account for the myriad errors encountered in learning English [2-4, 6].

3.1. Concept of Error

Various definitions of error have been presented by expert. Basically, those definitions contain the same meaning while the difference lies only on the ways they formulate them. That is way the writer only puts forward two definitions of error in this research. These two definitions are adequate to reveal the errors showing up in the written texts. The two definitions are:

1) error is a systematic deviation, when a learner has not learnt something and consistently gets it wrong' (Norrish, 1987:7)
2) errors are systematic deviations from the norms of the language being learned.

It seems that the phrase 'systematic deviation' in these definitions is a keyword which can be interpreted as the deviation which happens repeatedly.

Further, it is necessary to differentiate between error and mistake. A mistake is also a deviation of the norms of the language but is not systematic. It means that the use of the norms of the language in sentences is sometimes true and sometimes wrong. Norrish says that a mistake is an inconsistent deviation that is sometimes the learner 'gets it right' but sometimes wrong. Richards et.al state that mistake is made by a learner when writing or speaking which lacks of attention, fatigue, carelessness, or other aspects of performance. From these two definitions, it can be concluded that a mistake is made by a learner because he does not apply the rule (s) that he actually knows, in other words, a mistake is a non-systematic deviation from the norms of the language [7, 8] .

3.2. Sources of Errors

Brown classifies sources of error into four categories [9, 10] :

1) interlingual transfer, that is the negative influence of the mother tongue of learner,

2) intralingual transfer, that is the negative transfer of items within the target language. In order words, the incorrect generalization of rules within the target language;

3) context of learning, which overlaps both types of transfer, for example, the classroom with its teacher and its materials in the case of school learning or the social situation in the case of untutored second language learning. In a classroom context the teacher or the textbook can lead the learner to make wrong generalization about the language;

4) communication strategies. It is obvious that communication strategy is the conscious employment of verbal mechanisms for communicating an idea when linguistic forms are not available to the learner for some reasons. There are five main communication strategies, namely:

3.2.1. Avoidance

Avoidance can be broken down into several subcategories, and thus distinguished from other types of strategies.

The most common type of avoidance strategy is 'syntactic or lexical avoidance' within a semantic category. When a learner, for example, cannot say "I lost my way" he might avoid the use of way' and says "I lost my road" instead. "Phonological avoidance' is also common, as in the case of a learner of English who finds initial /I/ difficult to pronounce and wants to say "he is a liar" may choose to say" He does not speak the truth". A more direct type of avoidance is "topic avoidance", in which a whole topic of conversation is entirely avoided. To avoid the topic, a learner may change the subject, pretend not to understand, or simply not respond at all.

3.2.2. Prefabricated patterns

Another common communication strategy is to memorize certain stock phrases or sentences without understanding the components of the phrases or sentences. "Tourist survival" language is full of prefabricated patterns, most of which can be found in pocket bilingual "phrase" books which list hundreds of stock sentences for various occasions. The examples of these prefabricated patterns are "How much does it cost?", "Where is the toilet?". "I don't speak English" and "I don't understand you".

3.2.3. Cognitive and personality style

One's own personality style or style of thinking can be a source of error, highlighting the idiosyncratic nature of many learner errors. A reflective and conservative style might result in very careful but hesitant production of speech with perhaps fewer errors but errors indicative of the conscious application of rules. Such a person might also commit errors of over formality. A person with high self-esteem may be willing to risk more errors, in the interest of communication, because he does not feel as threatened by committing errors with a person with low self-esteem. In answer to "How did you get here?" a person might be heard to say, "I drove my bicycle" while another might say, "I pedaled my bicycle" in an attempt to be precise. Language errors can thus conceivably be traced to sources in certain personal or cognitive idiosyncrasies.

3.2.4. Appeal to authority

Another common strategy of communication is a direct appeal authority. The learner may directly ask a native speaker (the authority) if he gets stuck by saying, for example, "How do you say?" Or he might guess and then ask for verification from the native speaker of the correctness of the attempt. He might also choose to look a word or structure up in a bilingual dictionary.

3.2.5. Language Switch

Finally, when all other strategies fail to produce a meaningful utterance, a learner may switch to the so-called language switch. That is, he may simply use his native language whether the hearer knows that native language or not. Usually, just a word or two are slipped in, in the hope that learner will get the gist of what is being communicated.

4. Interlanguage Study

In the mid-1970s, Corder and others moved on to a more wide-ranging approach to learner language, known as interlanguage. It is a term coined by Selinker. Interlanguage scholars reject the view of learner language as merely an imperfect version of the target language. Interlanguage is a continuum between the first language and the target language along which all learners traverse. The term 'interlanguage' was firstly used by John Reinecke in 1935. He always used 'interlanguage' to refer to a non-standard variety of a first or second language, used as a means of intergroup communication [8] . Ellis mentions the characteristics of learners' talk as follows: interlanguage is dynamic (constantly adapting to new information) and influenced by the learners [11, 12] . Ellis quoted Selinker's idea about the characteristics of interlanguage as follows:

1) Language transfer (some, but certainly not all, items, rules, and subsystems of a learner's interlanguage may be transferred from the first language)

2) Transfer of training (some interlanguage elements may derive from the way in which the learners were taught)

3) Strategies of second language learning

4) Strategies of second language communication (an identifiable approach by the learner to

communication with native speakers of the target language)

An interlanguage is developed by a learner of a second language who has not become fully proficient yet but is approximating the target language: preserving some features of their first language, or overgeneralizing target language rules in speaking or writing the target language and creating innovations. The interlanguage rules are shaped by: L1 transfer, transfer of training, strategies of L2 learning (e.g. simplification), strategies of L2 communication (or communication strategies like circumlocution), and overgeneralization of the target language patterns. Interlanguage fossilization is a stage during second language acquisition. It refers to a permanent cessation of progress toward the TL. This linguistic phenomenon, IL fossilization, can occur despite all reasonable attempts at learning. The research result indicated that there were strong similarities in the developmental route followed by L2 learners. The errors made by the learners are routes that that must be passed. An error is a proof of hypothesis testing [13] .

The hypothesis testing is not only done by foreign language learners but also by children learning their mother tongue. The child builds up his knowledge of his mother tongue by means of hypothesis testing. The child's task is connecting his innate knowledge to the language he is learning. Thus, both L1 and L2 learners make errors in order to test out certain hypotheses about the nature of the language they are learning. Ellis mentions a list of characteristics of good learners as the following:
1) Be able to respond to the group dynamics of the learning situation so as not to develop negative anxiety and inhabitations
2) Seek out all opportunities to use the target language
3) Make maximum use of the opportunities afforded to practice listening to and responding to speech to meaning rather than to form
4) Supplement the learning that derives from direct contact with speakers of the L2 with learning derived from the use of study technique (such as making vocabulary lists)- this is likely to involve attention to form.

5.   The Implication to Teaching English

Teachers of languages are aware of the same errors appearing so regularly. Errors are indispensable to learners since the making of errors can be regarded as 'a device the learner uses in order to learn' (Ho, 2003). Language learners cannot correct their errors until they have sufficient knowledge. These errors occur in the course of the learner's study because they haven't acquired enough knowledge. Once they acquire additional knowledge, they will be able to correct their errors and the more errors the learners correct the more conscious of language they will become. The teachers need to ask to themselves how to help learners to correct their errors:
(a) at what level of error does the teacher correct?
(b) what methodology should be used to correct?
It is not easy to find a systematic method that helps learners. There is a danger in too much attention to learners' errors. Too much attention on the learners' errors may cause the correct utterances in the second language go unnoticed.

Prodromou (1995) in put forward method of correction as follows: (a) Putting responsibility for error correction primarily on the student. This balanced approach offers the learner the chance to participate in the process of bringing performance closer to standard production, while giving room for the teacher to exercise the responsibility of guiding, informing and explaining. The student's discovery of patterns of error would be more effective. (b) Post lesson feedback. Correcting every single error is avoided by giving the feedback to both written and spoken production after the event. There is absolutely no point in correcting one student in front of the rest of the class – this is demotivating and inefficient.

6.   Conclusion

From the discussion, some conclusions can be drawn as follows: contrastive analysis is the systematic study of a pair of languages with a view to identifying their differences and similarities with the assumption the different elements between the native and the target language will cause learning problems, while similar elements will not cause any problems. Contrastive analysis hypothesis is criticized for not all problems predicted by contrastive analysis always appear to be difficult for the students. On the other hand, many errors that do turn up are not predicted by contrastive analysis.

Error analysis was an alternative to contrastive analysis. Error analysis was criticized for misdiagnosing student learning problems due to their "avoidance" of certain difficult L2 elements.

Interlanguage is a continuum between the first language and the target language along which all learners traverse. It is dynamic (constantly adapting to new information) and influenced by the learners. Some methods for error correction are: putting responsibility for error correction primarily on the student, post-lesson feedback.

References

1. Bitchener J, Knoch U. 2009. The Contribution of Written Corrective Feedback to Language Development: A Ten Month Investigation. *Applied Linguistics* 31(2): 193-214.

2. Ellis R, Sheen Y, Murakami M, Takashima H. 2008. The effects of focused and unfocused written corrective feedback in an English as a foreign language context. *System* 36(3): 353-371.

3. Evans NW, Hartshorn KJ, McCollum RM, Wolfersberger M. 2010. Contextualizing corrective feedback in second language writing pedagogy. *Language Teaching Research* 14(4): 445-463.

4. Ferris DR. 2010. SECOND LANGUAGE WRITING RESEARCH AND WRITTEN CORRECTIVE FEEDBACK IN SLA: Intersections and Practical Applications. *Studies in Second Language Acquisition* 32(2): 181-201. Epub 2010/04/23.

5. Sheen Y. 2007. The Effect of Focused Written Corrective Feedback and Language Aptitude on ESL Learners' Acquisition of Articles. *TESOL Quarterly* 41(2): 255-283.

6. Rubenstein-Montano B, Liebowitz J, Buchwalter J, McCaw D, Newman B, Rebeck K. 2001. A systems thinking framework for knowledge management. *Decision Support Systems* 31(1): 5-16.

7. Economy D, Martin J, Kennedy MS, editors. Factors influencing participants' selection of individual REU sites. 2013 IEEE Frontiers in Education Conference (FIE); 2013: IEEE.

8. Egan D, Marshall S. 2007. Educational leadership and school renewal in Wales. *Australian journal of education* 51(3): 286-298.

9. Mamaril N, Usher E, Economy D, Kennedy MS, editors. An examination of students' motivation in engineering service courses. 2013 IEEE Frontiers in Education Conference (FIE); 2013: IEEE.

10. Marshall S. 2007. Educational leadership and school renewal in Wales David Egan. *Australian Journal of Education* 51(3): 286-298.

11. Education NA, Program P, on the Diagnosis TEP, of Asthma M. Section 3, Component 2: Education for a Partnership in Asthma Care. Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma: National Heart, Lung, and Blood Institute (US); 2007.

12. Education NA, Program P, on the Diagnosis TEP, of Asthma M. Section 3, Component 1: Measures of Asthma Assessment and Monitoring. Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma: National Heart, Lung, and Blood Institute (US); 2007.

13. Economy DR, Sharp JL, Martin JP, Kennedy MS. 2014. Factors associated with student decision-making for participation in the Research Experiences for Undergraduates program. *International Journal of Engineering Education* 30(6): 1395-1404.