



A Study and Analysis of Error Analysis on Literature Review

PRITI PRIYA

Research Scholar,
Department of English
Meerut College, Meerut, UP

DR. SUMAN CHAUHAN

Research Supervisor,
Department of English
Meerut College, Meerut, UP

Abstract:

This chapter reviews literature on Error Analysis (EA) in the context of second language learning and teaching. It highlights the theoretical background of second language acquisition (SLA), the origin of error analysis, and its comparison with contrastive analysis. Various second language learning theories are discussed with a focus on their ability to explain learner errors, particularly in written tasks. Special attention is given to the Behaviorist perspective, which views language learning as a process of imitation, reinforcement, and habit formation, emphasizing stimulus-response mechanisms. The review also draws upon insights from scholars such as Rod Ellis, Schachter, and Larsen-Freeman, examining the significance of error analysis in understanding how English Second Language (ESL) learners acquire and use language. Furthermore, studies across Europe, Asia, and India are considered, providing a broad view of error analysis research and its implications for language pedagogy.

1. Introduction

This chapter presents the relevant review of literature of Error Analysis. The study focuses on the second language learning and teaching in relation with second language theories. In addition, it also deals with the origin of error analysis, and how it is compared with contrastive analysis as well. The chapter also presents an overview of published research in Europe, Asia and India as well.

2. Second Language Learning Theories

In the following sections, different theories of Second Language Learning are examined. The review focused on the points whether the theories can account for the errors made in writing. As already stated, the students in this work are all English Second Language (ESL) learners. In this way ESL learning has become more significant feature of this work.

According to Rod Ellis (1994), in second language, the term 'second' is generally used to refer to any language other than the first language (P. 11). Moreover, Schachter (1993) states that Second Language Acquisition "is thought of as a discipline devoted to discovering and characterizing how it is that a human being is able to learn a second language: what pre- knowledge does he or she bring to task, what set of learning procedures does he or she use, what strategies are appropriate for certain phenomena and not others, etc." (P. 8).

It is understood that, in countries like India, English is considered as Second Language and it is a medium of instruction in most of the schools and colleges. Children learn English as second language in their institutions, schools and colleges. But in countries such as England and France, majority of the children are familiar with more than one or two languages. It is evident from the theories of 'world languages' that major parts of the world's population seem to be bilingual or multi-lingual. Therefore, it is difficult to differentiate that which language is L1 and which one is L2.

3. Behaviorism

The behaviorist theory believes that "infants learn oral language from other human role models through a process involving imitation, rewards, and practice. Human role models in an infant's environment provide the stimuli and rewards" (Cooter & Reutzel, 2004). When a child attempts to use oral language or imitates the sounds or speech patterns, they are usually encouraged by giving affection for their efforts.

Behaviorist theory, which is basically a psychological theory in its essence, founded by J.B. Watson, is actually a theory of native language learning, advanced in part as a reaction to traditional grammar. Behaviorism was advanced in America as a new approach to psychology in the early decades of the 20th century by making a particular emphasis on the importance of verbal behavior, and received considerable trust from the educational world of the 1950s.

Behaviorism provided birth to the stimulus-response (SR) concept which realizes language as a fixed of arrangements and accomplishment as a fact of usual development. Overlooking any interior tool, it proceeds into an account of the linguistic ambiance and it generates the motivations. The process of learning is a noticeable component which is mechanically assimilated by the way of stimulus response (SR) in the form of mechanical recurrence. Thus, to obtain a language is to attain automatic linguistic customs. As per the observation of Johnson (2004, P. 18) behaviorism weakens the role of thought procedures and also, he states that learning has the capability to discover forms of rule-governed conduct from the patterns delivered to the student by his/her atmosphere. Larsen-Freeman and Long (1991, P. 266) argue that SR prototypes offer minute assurances as descriptions of SLA, possibly, pronunciation and the rote-memorization of procedures. This kind of aspect of language learning has given chance to pursue the research on contrastive analysis, particularly error analysis as the main attention on the interference of first language on the target language. It also has given the chance to inter-language studies.

4. Acculturation Theory

Schuman (1978, P. 34) has projected another type of environmental-oriented theory. He has exercised questionnaires, observed spontaneous conversation during ten months in his well-known investigation of some syntactic aspects with six learners (2 children, 2 adolescents, 2 adults) and applied a quantitative usage to the data. He has found out the reason that a person who is socially and mentally distant from the TL group has accomplished the least amount of English. He adds that SLA is the result of acculturation which he defines as “the social and psychological integration of the learner with the target language (TL) group” (p. 29). The acculturation model argues that learners will be successful in SLA if there are fewer social and psychological distances between the speakers of the second language.

5. Universal Grammar Hypothesis

As a counterpoint to the environmental perspective, Chomsky’s followers try to understand SLA in the light of his universal grammar (UG) theory, a human innate endowment. Chomsky (1976) is interested in the nature of language, and sees language as a mirror of the mind. Although he is not concerned with SLA, his work has been influencing studies in this area. According to his theory, every human being is biologically endowed with a language faculty, the language acquisition device, which is responsible for the initial state of language development. The UG theory considers that the input from the environment is insufficient to account for language acquisition. In the same perspective, White (2003, P. 22) says that “if it turns out that the L2 learner acquires abstract properties that could not have been induced from the input, this is strongly indicative that principles of UG constrain inter-language grammars, parallel to the situation of L1 acquisition”. The research supported by UG theory works mainly with experiments in the form of grammaticality and acceptability judgments.

6. Stephen Krashen’s Model of SLA

According to Krashen (1981:1), adults usually improve language proficiency in two separate ways i.e., a) language acquisition and b) language learning. Language learning and language acquisition is varying in several respects. Krashen (1981, P. 2) defines language acquisition is an unintentional process as a child learns his/her mother tongue. It is very important that the language learners may deliberately not be conscious about the grammatical guidelines of the language but he/she is slightly progress for exactness.

As per the understanding of above information, the learner obtains language usually by involvement. In this case, the SLA procedures vary in the process of first language acquisition in many aspects. Richards & Schmidt (2002, P. 184) state that a child is usually grown in two different languages’ environment on everyday basis. In many countries, two languages are used very commonly but L2 is not learned from infancy. L2 is usually learned at school or even later. Though the learners become fluent in L1 at home,

they begin learning English (L2) at school level. For that reason, error analysis is necessary to be carried out to discover the learning strategies that learners use L2 in order to identify the problems they experience. Hakuta (198, P. 1) categorically addresses that the research of language acquisition is defined as the search for a suitable level of explanation of the learner's structure of rules. The learner will have an impact on the process of L2 learning, as he/she has already acquired language (L1) and it also seems that language acquisition and L2 Learning are different aspects. As per the understanding of Krashen (1981, P. 2) language learning is the sensible process because it demands the learner to know the rules and also capable to talk about them. Similarly, Brown (2002, P. 278) points out that the language learning is a sensible method in which learners are generally conscious of their own method to figure out rules. According to Krashen's (1994, P. 53) theory of language learning generally contains of five main hypotheses i.e., 1) the acquisition-learning hypothesis 2) the natural order hypothesis 3) the monitor hypothesis 4) the affective filter hypothesis and 5) the input hypothesis.

7. The Acquisition-Learning Hypothesis

As per the understanding of Ellis (1986, P. 390-417), Krashen's (1981) theory is the important module. He (1994:53) recognizes two autonomous methods of L2 performance i.e., 1) the acquired system 2) the learned system. For this hypothesis, the term 'learning' communicates precisely to language and mentions to the techniques in which children improve first language competence. As per the observation of Richard-Amato (1996, P. 42), the acquisition feature of this hypothesis is unintentional, while the learning part is a sensible exertion by the learner. In this case, language acquisition happens subconsciously Krashen (1994, P. 58) while joining in normal conversations or communications where the emphasis is on the meaning. Richard- Amato (1996, P. 42) additionally explains that the learning of a language happens distinctly. where grammar, vocabulary and other rules about the target language are clearly taught. The emphasis in the feature of learning is not on the content or meaning of the conversation but somewhat on the structure having a tendency to be acquired early language.

8. The Natural Order Hypothesis

Krashen & Terrell (1983, P. 28) state that the basic idea of this hypothesis is that the procurement of grammatical structures continues in an anticipated order. Some of the grammatical structures have a tendency to be acquired early in the language but others may be late irrespective of the first language of a learner. It doesn't mean that grammar has to be taught in this natural order of acquisition. Krashen (1994, P. 53) points out that as there is a lot of difference between second language acquisition and first language acquisition, the usual outlines of second language acquisition do not keep an eye on those of the first language acquisition outlines. But the L2 acquisition outlines of a child are very parallel to the L2 learning adult.

9. The Monitor Hypothesis

The basic idea of this hypothesis is 'monitor'. It means that this kind of functioning will help a learner to filter his/her language. This kind of monitoring system assists to apply rules to the already learned knowledge i.e., what verb tense to use or what form of speech to use. Krashen (as cited in Lightbown and Spada, 1995, P. 27) clarifies that in order to use a monitor well, three factors have to be met.

1. Time: The learner should have enough time to think about and use sensible rules effectively. Generally, if a learner takes time to think about the rules, the communication will be disturbed.
2. Focus on the form: The learner has to emphasize on the forms and the exactness of the forms.
3. Knowledge of the rules: The learner has to recognize all the rules.

As per the observation of above information, the learners need time to use the monitor hypothesis to understand the assignment. Moreover, they have to identify the time of the event to decide the correct tense, kind of vocabulary, particular register to use in order to respond appropriately to the given tasks. The knowledge of the rules is demonstrated through this method.

Krashen (cited in Lightbown and Spada, 1995, P. 27) also emphasizes that the usage of the 'monitor' differs among people. The learners, who practice it every time, are categorized as 'over-users'. On the contrary, the learners, who either do not learn how to use the 'monitor' or select how to not use it, are

acknowledged as ‘under-users’. There is another group between these two groups i.e., the ‘optimal users’. This group uses the ‘monitor’ when it is proper. If it is an ordinary conversation, the optimal user is not extremely anxious but sensible on rules to perform. In writing or in planned speech, the learners make any correction so that it develops the accuracy of their output.

10. Affective Filter Hypothesis

Affective filter hypothesis emphasizes that the feelings, motivations and attitudes of the learner are very important in order to achieve the successful L2 acquisition. It denotes that if the learner is not in tense, angry, anxious or boring situation, it will be easier to the learner to acquire a language. Affective filter hypothesis defines regarding the degree of a person, who acquires in an official or an unofficial situation. The main intention of this hypothesis is to develop vision upon second language learning. All the SLA theories have emphasized regarding the tendency of making the errors of language learners; and also they explained that it happens because of complete ignorance of it. As per the opinion of Nunan (2001, P. 87-92), it is necessary that every student has to understand about committing errors while learning a language as a common phenomenon in the language learning process irrespective of their age, gender or intelligence. Hence, if this kind of encouragement is given to the learners, it will be helpful in order to improve the confidence to carry on their language learning.

Krashen (1981, P. 6-7) points out that the language learners have to focus on communication but not on form or structures. He also comments that errors which are made by adult second language learners are somewhat as same as the errors made by children while they are learning English as a second language. Makoni, Eun-pyo, and Kasanga are the popular scholars in this area. They approve the happening of errors in the course of language learning.

11. The Input Hypothesis

The input hypothesis has three important parts. The first important part says that the language has to be acquired but not learned. If a learner comprehends a message that has structures, it is just a minute of gaining his/her present level of acquired competence. The second important part is that conversation should be permitted to occur on its own. Krashen, (1994, P. 55) points out that generally there is a silent period and speech will come when the speaker feels ready. The willingness state comes at different times for different people. The language must not be taught directly and over a period of time, grammatically inappropriate speech is distinctive. At the time of silent period, the learners construct competence in order to speak, as they have had active listening input. Krashen (1994) proclaims that this kind of awareness helps to minimize the feeling of uneasiness among the learners. When the learners are asked to speak in the target language in a correct away, they will acquire enough competence through intelligible input. If the learners are forced to talk a bit early, they may have a tendency to fall back on their first language. It seems that the second language learners require a silent period to adopt the input properly.

The Socio-Cultural Theory (SCT) is based on Vygotskian ideas and thoughts, which claim that language learning is a socially mediated process. Mediation is a fundamental principle and language is a cultural artefact that mediates social and psychological activities. As emphasized by Mitchell and Myles (2004, P. 9) the socio-cultural perception also plays a major role in children’s early language learning because it develops the nature of meaning-making in collective activity with other members of same culture.

Thorne and Lantolf (2006) argue that the principles of the SCT can also apply to SLA. They also explain that SCT is higher perception and it does not separate an individual from the society and also explains that an individual develops with social interaction as he/she has been a social being (p. 217-18). It is in the social world that the language learners observe others using language and imitate them. It is also with the collaboration of other social actors that learners move from one stage to another.

12. Connectionism

Connectionism tries to explain Second Language Acquisition in terms of mental representations and information processing while rejecting the innate endowment hypothesis. Elman et al. (1996) agree that there are universal behaviors, but that does not mean that they are directly contained in our genes. Any

learning is understood as a matter of neural networks. The networks learn in a Parallel Distributed Processing where connections are strengthened or weakened. Language learning is understood as the processing of experience and the repetition of experiences causing the strengthening of the connections. Ellis (2007) explains that “our neural apparatus is highly plastic in its initial state” (p. 82), but “the initial state of SLA is no longer a plastic system; it is one that is already tuned and committed to the L1” (p. 83). He adds that “in the L2 situation, forms of low salience may be blocked by prior L1 experience, and all the extra input in the world may not result in advancement” (p. 84).

In contrast with the linearity of behaviorism, connectionism presupposes that some mental processes can occur in a parallel or simultaneous way and that knowledge is distributed among the various interconnections. Thus, learning does not occur in sequential stages, but rather in parallel, i.e., in different parts of the brain simultaneously. Connectionism can be situated in the philosophical and scientific tradition known as emergentism. Ellis (1988) refers “emergentism as language representations which emerge from interactions at all levels from brain to society”. He adds that “simple learning mechanisms, operating in and across the human systems for perception, motor-action and cognition as they are exposed to language data as part of a social environment, suffice to drive the emergence of complex language representations” (p. 631).

To sum up, research available on SLA seems to fail to conclude how languages are learned. It is difficult to reject any of the aforementioned theories as all of them seem reasonable, but they also seem incomplete, as they do not describe the whole SLA phenomenon, but just parts of it.

Like any other kind of learning, second language learning is not a completely right method and therefore it cannot be considered as probable as some of these models of acquisition.

13. Contrastive Analysis Hypothesis (CAH)

The role of L1 is considered very significant in SLA, as it is assumed that the nature of L1 affects the acquisition of the second language. In second language acquisition, where structures of L1 and L2 are same, the positive transfer occurs and L1 facilitates learning of the L2 and therefore L1 helps learners in learning L2. About the significance of this positive transfer, Krashen and Terrell (1983) states: One obvious advantage is that the use of L1 rule allows performers to “outperform their competence”, to meet a practical need in communication in the target language (L2) before they have acquired the relevant $i+1$ rule (where i is current level of competence and $i+1$ is the level of competence immediately following the i). When the L1 rule used is identical to a rule in the L2 (positive transfer), performers seem to have gotten for free. (Krashen and Terrell, 1983, P. 42).

L1 does not only facilitate, but in some cases, L1 functions as impediments. When features of L1 and L2 are dissimilar, the negative transfer occurs and L1 hinders the learning of L2, i.e., L1 causes interference in learning L2. Sridhar, (1981, P. 210) recollects the idea of Weinreich, who has categorically defined regarding the phenomenon of ‘interference’. The occurrences of differences from the rules of one language to other language happen in the conversation among bilinguals as a product of their understanding with more than one language.

14. Defining Contrastive Analysis

Contrastive analysis (CA) is the description of a native language (NL) and a Target Language, and a comparison of the explanations that shows in the different statements about the similarities and the dissimilarities of the two languages (Fries, 1945) Lado, 1957). It is well-known that, although the influence of the first language in learning a second language was discovered by such linguists as Henry Sweet, Harold Palmer and Otto Jespersen, C. C. Fries and his colleague and collaborator, Robert Lado, were considered pioneers in this field. Fries, in his book Teaching and Learning English as a Foreign Language (1945), emphasize the importance of CA.

It was during 1950s and 1960s that contrastive analysis became a practical approach through the method of comparison of L1 with L2. As a basic concept it provides similarities and dissimilarities of two

languages. The major influence of this theory is established from the theories of behaviorism and structuralism (Saville-Troike, 2006, P. 34).

Robert Lado's *Linguistics Across Cultures* written in 1957 is considered to be the real beginning of contrastive analysis of language. Fires (1945) focused on the pedagogical application of contrastive analysis. He stated that the effective materials are made based upon the scientific description of the language. It is learned very carefully comparing with similar explanation of the learner of a native language.

It was generally considered that the problem in L2 acquisition is in contrast between mother tongue and second language. According to Lado, the teaching material of second language must be the outcome of contrastive analysis. According to Lado's book *Linguistics Across Cultures*, teachers can understand the problems of students when comparing native language with target language; then they can provide suggestion for better Learning.

Contrastive analysis, when L1 and L2 structures are identical with each other, target language will be easier; but when L1 and L2 structures are different, it may be the difficult thing in learning process of target language. Hence in teaching of language, contrastive analysis has become important component of second language teaching.

Whenever an individual attempts to learn a new language, his natural tendency is, consciously or unconsciously, to compare and assimilate the new language to the one he already knows. Obviously, languages differ but common elements do exist between them. That is why the learner's reflexion of transferring elements from his own language is sometimes met with success. Such transfer is considered to be positive. When the transferred elements do not have their counterparts in the other language, the transfer is labelled negative since it causes the learner to commit errors in performance.

Lado (1957, P. 59) claims that: The structures that are similar will be transferred and may function satisfactorily in the foreign language. But those structures that are different will be difficult because, when transferred, they will not function satisfactorily in the foreign language and will therefore have to be changed.

This means that similar elements in both the native and target languages are not problematic and those that are alien are difficult to learn. Therefore, the learner's difficulties are due to structural interference from the mother tongue, i.e., the learner's knowledge of his own language affects the learning of the TL. This is what is referred to as the 'interference phenomenon'. Christophersen (1973), states that the TL can influence the NL as well. What he means is that it is equally true that there is influence; the other way round, i.e., there will be interference in the sense of mutual influence between the two languages. Wilkins (1972) says that learning a second/foreign language is essentially learning to overcome the difficulties which the learner encounters. He adds that when the structures of the two languages are identical, teaching becomes unnecessary, and mere exposure to the TL will be sufficient. Teaching, therefore, should be directed at the points which are structurally different.

CA, therefore, is a very important factor for the improvement and development of second/foreign language learning and teaching, since it helps to discover points of correspondence and discrepancy between the native and the learner of the TL. Wilkins (1972) argues that if CA is carried out properly, it will certainly determine what the learners have to learn and what the teacher has to teach. With regard to this point, Nickel (1971, P. 15) states: Both teacher and author require knowledge of contrastive analysis in order to be able to predict, explain, correct, and eliminate errors due to interference between source and target language.

The optimism which was generated about the possibilities of CA led to an over application among its proponents who were not hesitant to make some excessive claims, one of which is stated by Lee (1968, P. 186) as follows:

1. The main cause of error making is interference from the native language of a learner in the process of foreign language learning.

2. The problems are mainly because of the differences between the two languages.
3. These differences present serious learning problems.
4. The result of the comparison between the two languages is required to foretell the problems and errors which usually occur.

These potential sources of errors, therefore, must be given special consideration in language instruction. One possibility for obviating such interference is the systematic analysis and classification of errors. This can be of considerable utility in predicting errors due to interference. A detailed CA of the source and target languages will be of great benefit since the results of the analysis can be directly used in language instruction.

15. Conclusion

The review of literature establishes that Error Analysis plays a crucial role in identifying and understanding the grammatical and structural difficulties faced by ESL learners. Second Language Learning theories, particularly behaviourism, shed light on how language acquisition is shaped by imitation, reinforcement, and the learning environment. While behaviourism explains certain aspects of habit formation in language learning, its limitations in addressing the cognitive and rule-governed aspects of SLA necessitated the development of error analysis and interlanguage studies. The insights gained from the reviewed literature emphasize that errors are not merely negative deviations but important indicators of the learning process. They provide valuable evidence for teachers and researchers to refine instructional strategies and strengthen second language teaching. Thus, the study of error analysis contributes significantly to both theoretical understanding and practical applications in ESL learning.

References

1. Allwright, R. (1975). Problems in the Study of the Language Teacher's Treatment of Learner Error. In On TESOL '75: New Directions in Language Learning, Teaching, and Bilingual Education, edited by M. Burt and H. Dulay, 96–109. Washington, DC: TESOL.
2. Baker, C. (1996). Foundations of Bilingual Education and Bilingualism, (2nd Ed.).
3. Bristol, Pennsylvania: Multilingual Matters.
4. Bhakshi, R.N. (1978). A Linguistic Analysis of Errors in the Verbal group in English Made by Punjabi-Speaking Students. Unpublished M. Litt Dissertation, Hyderabad: CIEFL.
5. Bhela, B. (1999). Native Language Interference in Learning a Second Language: Exploratory Case Studies of Native Language Interference with Target Language Usage. International Education Journal, 1(1), pp 22-23
6. Block, D. (2003). The Social Turn in Second Language Acquisition. Edinburg: Edinburg University Press.
7. Burt, M., & Kiparsky, C. (1972). The Gooficon: A Repair Manual for English. Rowley: New Bury House.
8. Brice, C. (1995). ESL Writers' Reactions to Teacher Commentary: A Case Study. ERIC Document Reproduction Service No. ED 394 312. Accessed on: 2008/04/12. Retrieved from: <http://www.eric.ed.gov/PDFS/ED394312.pdf>.
9. Brown, H.D. (1980). The Optimal Distance Model of Second Language Acquisition.
10. TESOL. Quarterly 14: 157-64.
11. Brown, H. D. (1994). Principles of Language Learning and Teaching (3rd Ed.).
12. Eaglewood Cliffs, NJ: Prentice Hall.
13. Brown, H. D. (2002). Principles of Language Learning and Teaching. (4th Ed.).
14. Addison Wesley Longman, Inc, A Pearson Education Company, White Plains, NY 10606.
15. Brooks, N. (1964). Language and Language Learning. New York: Harcourt, Brace and World, Inc.
16. Caicedo, M. C. M. (2009). Native Language Interference in Learning English as a Foreign Language: An Analysis of Written Material Produced by Spanish Speaking Students in Senior High School Classes, pp 1-123.
17. Candling, R. B. (2001). Vocabulary and Language Teaching. New York: Longman Inc.99.

18. Carson, J. (2001). Second Language Writing and Second Language Acquisition. In Silva, T., & Matsuda P. (Eds.), *On Second Language Writing*, pp 191-200. Mahwah, NJ: Lawrence Erlbaum Associates.
19. Celaya, M. L., &Torras, M. R. (2001). L1 Influence and EFL Vocabulary: Do Children Rely More on L1 than Adult Learners? *Actasdel XXV Congreso AEDEAN*. December 13-15, University of Granada, pp 1-14.
20. Chen, H.C. (2000). Error Analysis of Some Features of English Article Usage. *Journal of Wu-Feng Applied Linguistics*, 8, pp 282-296.
21. Chomsky, N. (1959). Review of Skinner, *Verbal Behaviour*. *Language*, No. 35, PP. 26-58.
22. Chomsky, N. A. (1976). *Reflections on Language*, Pantheon, New York.
23. Christopherson, P. (1973). *Second Language Learning: Myth and Reality*. Penguins, Harmondsworth: England.
24. Cooter, R. B. and Reutzel, D.R. (2004). *Teaching Children to Read: Putting the Pieces Together*. Upper Saddle River, NJ: Pearson Education, Inc.2004.
25. Corder, S. P. (1967). The Significance of Learners' Errors. Cited in Richards, J.C. (ed.) 1984 *Error Analysis: Perspectives on Second Language Acquisition*, pp 19 –
26. London: Longman, (Originally in *International Review of Applied Linguistics*, 5 (4)).
27. Corder, S. P. (1973). *Introducing Applied Linguistics*. Hammonds Worth: Penguin.