

A Bird's Eye On CA And EA: Application

Mohamed S. Salem (DR)
Faculty of Arts/Al-Fateh University

نظرة حول التحليل المقارن وتحليل الأخطاء: التطبيق والمنهجية

ملخص

بالرغم من النقد الذي وجه لنظرية التحليل المقارن خلال العقود الماضية ، وبروز نظرية تحليل الأخطاء كبديل لها ، إلا أن الأولى أسترجت مكانتها في الوسط الأكاديمي بعدد الجامعات الأوروبية والعربية والاسيوية . إن طالب الدراسات العليا في ليبيا كغيره في الوطن العربي يواجه بعض المصاعب المتعلقة بالكيفية الصحيحة لاستخدام إحدى هاتين النظريتين أو كليهما معا في البحث اللغوي. هذه الورقة البحثية تفسر العلاقة بين النظريتين ، وتقدم عرضاً بالخطوات الرئيسة التي ينبغي على الباحث اللغوي اتباعها عند تبني نظرية التحليل المقارن أو نظرية تحليل الأخطاء في دراسته العليا.

Abstract

Postgraduate students, facing the need of writing dissertations in partial fulfilment for their degrees, usually seek out their mentors with plaintive pleas for guidance, "What can I write about? ...How can I conduct a Contrastive Analysis, for example, between the Arabic and English languages?... How can I investigate the errors committed by Libyan learners of English?"

When Second Language Acquisition (SLA) started to appear as a genuine tributary of linguistics, attempts to explain the process of second language learning were enunciated by Robert Lado (1957), hence the birth of the Contrastive Analysis (CA) hypothesis.

While the CA has been largely discounted in North America, at least in its strong form with its predictive bent, it still survives as a tool of research in Europe, South East Asia and the Arab world.

My purpose in this article is neither to investigate the controversy that surrounds contrastive studies nor to raise the strong / weak version argument or to understate the error / mistake dichotomy in the explanation of the learner's errors. The goal is to provide the postgraduate student with some useful guidelines on the steps that should be followed while undertaking a research study using the Contrastive Analysis or Error Analysis Approach.

Introduction

Methodology is a term that refers basically to the methods incorporated in answering a research question or testing a hypothesis. The aim and kind of a language research, be it descriptive or predictive, govern the method to be applied and the model to be chosen whether it is a pragmatic, generative or classic model.

The comparison of human languages is not a new field. In the past, the original theoretical objective of the comparison of grammars was to construct a universal grammar valid for all or most human languages. In the 19th century, comparative studies were undertaken by the Europeans, pioneered by German grammarians and philologists like F. Bopp (*Conjugation System*), A. Schleicher (*Theory and Family Tree Theory*) and J. B. de Courtenay (*Theory of the Humanization of Phonology*). Later, linguists of the Prague School stressed that comparative studies should allow for the possibility of establishing typologies of linguistic codes that are not genetically related, i.e., not to have as their sole objective genealogical considerations of the languages compared.

Indeed, the comparison of languages in the form of applied and synchronic studies began to gain popularity only around World War II, following the publication of C. C. Fries' *Teaching and*

Learning of English as a Foreign Language (1945), and R. Lado's *Linguistics Across Cultures* (1957). These two volumes paved the way for the evolution of Contrastive Analysis both as an approach and method.

Typology of Contrastive Analysis

Pietri (1984), a French lecturer at the University of Paris III, has spoken of three types of Contrastive Analysis. These are (1) CA that makes use of the pedagogical data to construct a theory, (2) CA that is intended especially for language teaching, (3) and CA that uses teaching as a pretext for its theoretical work.

Contrastive Analysis can be undertaken at different strata of linguistic study. Of major significance are "contrastive syntax, contrastive lexicon, contrastive semantics and contrastive pragmatics, the latter including text studies and some aspects of sociolinguistic and psycholinguistic perspective," (Jaszczolt, 1995:1).

Contrastive Analysis is situated at the applied stratum when it is devoted solely to provide data for preparing instructional materials in FL teaching. It is however situated at the theoretical stratum if the primary objective is the comparison of the linguistic systems or subsystems of two or more languages.

Whether applied or theoretical, we believe that all types of contrastive studies (CS) are helpful in the explanation of the learner's errors in the TL. Krzeszowski (1989: 69-70) asserts that the distinction between pure CS and pedagogically oriented CS is irrelevant: directional or adirectional contrastive study, adding that if carried out properly, it should yield results relevant to the teaching of foreign/second language. Scholars like Pietri (1984: 579) sees contrastive analysis as "crossroads" of disciplines in the sense that it supplies descriptive data on the one hand and it incorporates various sciences in its approach on the other.

In applied CA, three main fields of knowledge converge namely: pedagogy, linguistics and psychology. In pedagogy, the linguistic elements already acquired are compared with those to be acquired in order to determine the learning problems. In linguistics, we compare languages to find out the differences and similarities,

and in psychology, both monolinguals and bilinguals are compared to discover the conflicts inherent in SL and TL acquisition.

Recent criticisms from psychologists and language teachers on the CA's linguistic task nearly relegated the approach to a thing of the past in the 1970s. Nevertheless, a marked revival of the CA came about in the 1980s, not only in its application aspect but also in its heuristic role in general linguistics. According to Jaszczolt (1995: 2) contrastive Analysis "came back to the fore of methodological studies...thanks to Chomsky's (1981) theory of Universal Grammar". To our judgement, theoretical CA is still a useful apparatus in linguistics because it can be used to validate new theories.

Steps of Research in Contrastive Analysis

In the Friesian or classic approach, two main stages of research are followed. The initial step involves the description of the two languages in question, that is, the source language and the target language. At this stage, the only problem that may arise is to decide which language variety to use, the standard or the dialectal variety? Although most contrastive studies are based on the standard variety (SV), one must bear in mind that the learners themselves may be using the dialectal form, but one of the many dialects that may be existing in the country. The other important thing to remember is that the same descriptive model has to be applied for both systems. The choice of a model of analysis is thoroughly the analyst's business as he may have his own methodological and theoretical preferences.

The second stage is "juxtaposition" of the two systems or subsystems. It should be noted however that the linguistic component discovered at a certain level in SL might not have equivalence in TL. This is why Halliday (1965) suggested an extra step to the Friesian procedure due to the impossibility of comparing two languages in entirety. Halliday points out that since "languages are systems of systems" according to the Saussurean formula, there is logically a restriction over the possibility of juxtaposing whole systems that are structurally different. Therefore, the linguistic researcher must make sure the syntactic structures of the two languages are comparable.

Although the Friesian approach is still widely practised, the scope of research seems to be generally limited. Research students should not be put off by the notion of comparability as a restriction set forth by M.A.K.Halliday(1965). They should rather be guided by the fact that the primary aim of contrasting languages is to look for differences that may pose learning difficulties, be they syntactic, phonological or semantico-pragmatic difficulties.

After juxtaposition, we come to the ultimate stage, which is "pedagogical predictions". From the analysis output, the researcher should be able to construct a hierarchy of predicted learning problems, starting with the most difficult descending to the least problematic. These are features of the FL that are likely to be sources of errors because of interference from L1. The construction of such hierarchy is based mainly on the assumption that there are problems that are easier to overcome and there are problems that are relatively harder to deal with. The predictions would enable the manual writer and similarly the language tutor to describe the TL in a way that would anticipate some of the learner's deviations. And this is the preventative application of Contrastive Analysis.

Contrastive Analysis And Error Analysis

As a result of the failure of the CA approach to explain all the learner's errors, the EA approach was put forward as an alternative or a supplement to CA. The attacks on CA were in fact a defence of EA (Pietri: 1984). A team of contrastivists view the two procedures as supplementary and according to them, the ideal approach is that which combines the two possibilities. **CA a posteriori**, that is, the weak version is none other than EA (Schumann and Stenson:1975; Gaston Canu: 1984; E. Pietri: 1984). **CA a priori**, that is, the strong version (Wardhaugh: 1972) enables us to anticipate the kind and number of difficulties the learners are likely to encounter. It is in fact a preventive measure.

Error Analysis enables researchers to initially classify and then explain learner's errors and to suggest necessary steps to correct them. Once an error has been identified, it is easier to prevent its recurrence. In other words, should the language teacher be able to know the cause(s) of the learning problem(s), he would certainly be able to take the appropriate classroom techniques and

remedial steps to cure them, and better still to 'prevent' them from happening.

Steps of Research in Error Analysis

P. Strevens (1978) speaks of two major objectives for the EA approach, namely: (i) EA as a technique of applied linguistics intended primarily for the improvement of teaching materials and language research, and (ii) as a medium of theoretical linguistics to be regarded as a crucial information source on foreign/second language learning.

On comparative grounds, the CA can only predict a range of possible deviations and expect learners to commit some of the predicted errors, but not all of them. With the application of EA, an evidence of the learners' production (performance) can be obtained. The errors observed can then be taxonomized and illustrated, after which remedial drills and exercises would be designed to eliminate, or at best alleviate, the occurrence of such errors.

Classification of Errors

The errors obtained have to be classified before they can be analysed. This is normally done with the help of what is technically termed "error classification grid". Within the error grid, both classified errors and unclassified errors are included. Nevertheless, two subcategories of learners' errors violate classification. These are: (i) utterances that are semantically unacceptable but grammatically correct. (ii) utterances that are both semantically and grammatically incorrect.

In Error Analysis, we are studying, in fact, an amalgamation or mixture of the learner's performance and pedagogical problems that arise. Indeed, we are testing the individual learner as well as the tutor himself. The teaching context (situation) would help us pinpoint the source of error. (cf. P. Corder: 1967,1973; Norrish: 1983; J.C.Richards: (ed.)1974).

In Error Analysis, we are concerned exclusively with the linguistic deviations (errors) that can be classified. Many of these errors can be arranged and classified based on a CA between the

first language (L1) and the second language (L2) with the exception of those caused by non-linguistic factors such as socio-cultural problems and psychological states like frustration, tongue slips, laziness ...etc. Linguistic analysts stress that only errors that are not ambiguous should be classified, and that the principles to be adhered to in the evaluation are: (i) ambiguous errors need not be studied, (ii) classifiable errors may be divided into two subcategories, namely: (a) relative errors, and (b) absolute errors.

Relative errors are linguistic forms that exist in the language, but not in the language setting in question. This type of error is either oral or written. Absolute errors are 'barbarisms', i.e., forms that do not exist in language. They are deviations in vocabulary, syntax or speech. Below is an illustration of an error classification grid that accounts for errors committed at different linguistic components.

Grid of Error Classification

The following grid is a modified version of the general error classification grid proposed by C.K.Yok (1996) and published in (*JBM*).

0.0	Unclassifiable errors
1.1	Lexical (absolute)+(written)
1.2	Lexical (absolute)+(oral)
1.3	Lexical (relative)+(semantics)
1.4	Lexical (relative)+(form)
2.1	Syntactic (morphology)+(relative)+(oral)
2.2	Syntactic (morphology)+(absolute)+(oral)
2.3	Syntactic (morphology)+(relative)+(written)
2.4	Syntactic (morphology)+(absolute)+(written)
2.5	Syntactic (structure)+(agreement)
2.6	Syntactic (structure)+(coordination)

2.7 Syntactic (structure)+(subordination)

3.0 Stylistic (registers)

Having arranged and classified the errors committed by learners, there comes the stage of analysis. Here, the various sources of deviations must be taken into consideration. Selinker (1974) has given prominence to five categories of errors: (1) learning strategies of the learner, (2) over-generalization, (3) influence of the procedures, (4) negative transfer of the MT, and (5) the learner's need to communicate in the target language that is beyond his competence.

After the analysis has been completed, the researcher can then evaluate the results obtained. This procedure will enable him to build what is called "a hierarchy of difficulties", based on both the nature and frequency of error committed. The more frequent the error, the more difficult it will be for the learner to overcome.

Ultimately, a comparison of the two types of hierarchies can be conducted, one from the EA results and the other from the CA results. If the same types of errors appear in the two sets of hierarchies, that is, if they tally, it can be said that the CA hypothesis based upon the predictions drawn earlier has proven to be correct. Nonetheless, whether the findings of the EA/CA analyses are similar or different, they should be elaborated on.

Success Analysis

In Europe and since 1986, there has been a new development in Contrastive Analysis. A new method and theory labeled Success Analysis (Analyse de Succes) has been introduced to the world by the French theoretician Etienne Pietri. Success Analysis (SA), a champion of universal grammar, sees Contrastive Analysis as a major tool of research that should concentrate on the similarities rather than on the differences between languages. In other words, future SA would be closer to research in universals among languages, getting nearer to linguistic realities instead of falling into the trap of transposing the fundamentals of one particular language onto another.

Pietri maintains that "commutation", the base of research behind Success Analysis, is aimed at discovering universals (or:

positive materials) among language systems. The procedure is to contrast formal items like morphological markers, lexical items and syntactic paradigms in the source language with contextually equivalent paradigms in the target language. The ultimate objective of such contrast is to tell the formal correspondences between the two systems and to record the multiple communication results of variations. The primary aim of SA seems to be purely linguistic in the sense that it satisfies the applied goals of Contrastive Analysis through providing universals that facilitate second language learning.

Steps of Research in Success Analysis

The first and most important step in Success Analysis is to specify the 'subject of research', which may be selected from any level of analysis. The subject in turn determines the nature of analysis to be undertaken, which is the next step. The linguistic methods available can be made use of although this entails a metalanguage problem. Analysis techniques are applied conjointly to the two languages under study. The analysis output is validated before it can be applied to pedagogy.

Conclusion

Despite the shift in the last thirty years from the description of syntactic structures to the study of language as a medium of communication, there is still a lot of vacancy to fill in micro-linguistics. In monolingual countries like Libya where foreign language learning is becoming a necessity of this millennium, post-graduate research on foreign languages should be encouraged further.

The unceasing development in the models of analysis has posed a great problem to research students. Most of them face difficulties in understanding the fundamentals of these models, let alone apply them in their theses or dissertations. Research students must bear in mind that there is a difference between a pedagogical description and a linguistic description. Consequently, they must not lose sight of the pedagogical objective of Contrastive Analysis, which is foreign language teaching.

A linguistic study, using CA or EA, has to be as "exhaustive" as possible and "systematic". The convention of scientific research should be adhered to and must not be infringed. A CA supplemented by EA will offer a wide scope for language specialists, opens up unseen horizons for language learners, and enriches the discipline with fresh findings.

References

- Corder, S.P.** 1967. The Significance of Learners' Errors, in IRAL, Vol.5.161-169.
- _____ 1973. Introducing Applied Linguistics. Harmondsworth: Penguin Books.
- Canu, G.** 1979. Critique des Modeles d'Application. Publication du Conseil Scientifique de la Sorbonne Nouvelle, Paris III.
- Chomsky, N.**1981. Lectures on Government and Binding. Dordrecht: Foris.
- Fries, C.C.** 1945. Teaching and Learning English as a Foreign Language. Ann Arbor, Michigan: The University of Michigan Press.
- Halliday, M.A. K., et al.** 1965. The Linguistic Sciences and Language Teaching. London: Longman's Linguistic Library.
- Jaszczolt, K.**1995. Typology of Contrastive Studies: Specialization, Progress and Application. *Language Teaching*, Vol. 28, No.1: 1-45.
- Krzyszowski, T. P.**1989. Towards a Typology of Contrastive Studies, in Oleksy, W. (ed). *Contrastive Pragmatics*. Amsterdam: John Benjamine: 55-72.
- Lado, R.** 1957. Linguistics Across Cultures. Ann Arbor: The University of Michigan Press.
- Pietri, E.** 1984. Methodologiques de l'Analyse Contrastive. Th'ese d'etat, University de Paris III.
- Richards, J.C.** 1974. Error Analysis: Perspectives in Second Language Acquisition. London: Longman.
- Selinker, L.** 1974. Interlanguage, in Shumann, J.H. & Stenson, N.(eds.). *New Frontiers In Second Language Learning*. Mass: Newbury House: 31-54.
- Shumann, J.H. & Stenson, N.** (eds.) 1975. New Frontiers In Second language Learning. Massachusetts: Newbury House.
- Stevens, P.** 1978. The Nature of Language Teaching, in Richards, J.C. (ed.) *Understanding Second and Foreign Language Learning*. Mass: Newbury House: 179-203.
- Wardhaugh, R.** 1972. The Contrastive Analysis Hypothesis, in *TESOL Quarterly*, Vol. 4: 123-130.
- Yok, C.K.** 1996. Some Guidelines for CA and EA, in *JBM*, Vol.10. 76-84.

