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Error Gravity and Learning Cues: A Study of the Intermediate Learners' English in Odisha

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Abstract

Error Gravity (Hereafter EG) is the study of errors which tries to compare the seriousness of errors in terms of their frequency or their percentage of occurrence. In other words, it shows the fact that errors are not to be considered/ treated equally. Rather there seems to be an order in which some errors are considered as more grave than others, thus, they will come first and others will follow in a sequential order. The present paper intends to discuss about three major points:

1. Investigating different types of semantic errors produced by Odia students while writing in English.
2. Enquiring into the frequency of the above types of errors.
3. Finding out which type of semantic error is more serious than the other by employing a statistical method on the basis of their frequency.

The paper begins with a brief introduction to the concept of "Error Gravity" followed by a pertinent review of literature related to EG. The paper also presents a neat statistical analysis of different types of semantic errors committed by the Intermediate Odia students which leads to determine the gravity of each error types. Finally the paper throws light on the hierarchy of these semantic errors.

Key Words: Error Gravity, Semantic Errors, Error Hierarchy

Introduction

To err is human, to err while learning a language is even more human. Philosophical underpinnings apart, it goes by fact that errors exhibit

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startling facts about the way a new language is acquired and the multifaceted ways in which the previously known languages affect the learning of the new language. In case of Second Language Learning it is inevitable for the learners to commit errors. The errors produced by the L2 learners merit committed understanding and analysis. As it has various implications for acquisition and learning process, a number of scholars have emphasized on L2 errors. They all perceive L2 errors as a dynamic issue within (applied) linguistics. The perspectives on errors and frontiers of research on errors have come a long way since the time error formed part of research in applied linguistics. Error Analysis (EA) began and acquired wide popularity among researchers during the decade of 1960s. It was followed by a phase of drawing terminological distinctions. Errors and mistakes were interpreted differently. It is worth mentioning that the perspectives on errors along with its implications in teaching learning experience have been undergoing significant changes. No wonder, the body of research has also kept growing in terms of quality as well quantity. However, now-a-days, the popularity of EA among the Second Language Acquisition (SLA) scholars is declining.

The reason behind such quasi-banishment of Error Analysis is not that the L2 learners have suddenly stopped producing deviant forms. Rather, the focus of researchers has shifted to determine the gravity of L2 learners' errors. To put it in simple words, the focus has been shifted to the factors that should be taken into account so that error analysts may consider when a deviant form can be labelled more or less serious. Thus, the field of Error gravity came into existence. Error Gravity (Hereafter EG) is the study of errors which tries to compare the seriousness of errors in terms of their frequency or their percentage of occurrence. In other words, it shows the fact that errors are not to be considered/ treated equally. Rather there seems to be an order in which some errors are considered as graver than others, thus, they will come first and others will follow in a sequential order.

Review of Literature

The field of Error Gravity is now being impregnated with plenty of works done in different languages and by variegated researchers. Works that have been done on error gravity exhibit some differences among them regarding

the factor that which criteria should be taken into account while conducting EG studies. The views of different researchers regarding this criterion are not unanimous. As mentioned earlier, while *intelligibility*, *acceptability* and *irritation* are being chosen as criteria by some researchers, others have selected *comprehensibility*, *acceptability* and/or *irritation.* Researchers like Johansson (1973) chose *comprehensibility* and *conformity* as the criteria. Apart from the above mentioned criteria, *error frequency* has also been selected by a number of researchers like Palmer (1980) ,Lennon (1991), Davies (1983), Johansson (1973) and James (1977). Gyanan (1985) employed *comprehensibility* and *irritation* as criteria .But the concept of *irritation* used in his work needs more elucidation. For him NS response to IL is not merely the result of irritation but also of evaluation. To the above mentioned criteria Khalil (1985) has added *inteligibility*. Khalil is of the view that when an utterance is not intelligible, communication is hampered. Besides these, the judges' or NS's tolerance is another criterion used by some EG analysts (James: 1977, Hughes & Lasacaratou: 1982, Davies: 1983, Sheorey:1986 and McCretton & Rider :1993).

This variability leads to contradiction rather than understanding between the EG analysts. Studies like: Johansson (1973), Olsson (1973), Palmer (1980). Lennon (1991) employed "*error frequency*" as a criterion for expressing EG. Johansson's approach is infused with the idea that though comprehensibility and irritation are considered as factors while evaluating learners' errors, still they are subsidiary criteria. According to Johansson learners' errors should be "evaluated according to the frequency of the word or constructions (high or low) and according to the degree of generality (high or low) of the construction used; if the degree of frequency/generality is high, the error is considered to be more serious" (Johansson op.cit:106-107). According to Palmer (1980), "Seriousness of an error is related to frequency and not to notions of communicative difficulty or globality." This was also claimed by Burt and Kiparsky (1975). This approach is grounded on the statistical computation of frequency of occurrence of an error which will make the students encounter with their communication problem and the teachers with their

work. The most recent work on EG based on the error frequency criteria was done by Shormani (2010). His work discusses about the syntactic and semantic error gravities based on university learners' English of Arab world. He has taken 102 Arab speaking learners of English who have been admitted in the first year of English Language Department. The subjects were asked to answer a set of questionnaire. The most important aspect of his study is, he tries to exhibit whether syntactic categories are more serious than semantic categories or vice-versa through calculating EG with statistical computation. It has been found that the subjects of his study had committed a total number of 19,494 syntactic errors and 20,021 semantic errors. The EG calculated for syntactic errors was 1382.46 and for semantic errors it was 1401.02. Thus, according to his observation, semantic errors are more serious than syntactic errors.

Another unsettled matter in the context of EG is the decision regarding which category of errors is more serious than other. While EG analysts like (James 1977, Hughes & Lasacaratou 1982, Olsson 1972, Khalil 1985) have detected semantic errors as more serious than other categories, at the same time analysts like (Sheorey 1986, McCretton & Rider 1993, Torre 1996) found that according to NN teachers, lexical errors are least serious errors. In Hughes & Lascaratou's study (1982) NSs marked semantic errors as more serious than other types. But in McCretton & Rider's study NS teachers marked semantic errors as least serious in comparison to other categories. Khalil (1985) was of the view that semantically aberrant sentences were judged as less intelligible and hence, more serious than the syntactic ones. These errors are characterised by less accuracy which is not in case of syntactic deviant utterances. Thus, according to Khalil, semantic errors are more serious, graver and irritating (see Shormani 2010).

Current Study

The current study aims at:

4. Investigating different types of semantic errors produced by Odia students while writing in English.
5. Enquiring into the frequency of the above types of errors.

6. Finding out which type of semantic error is more serious than the other by employing a statistical method on the basis of their frequency.

Methodology

Participants: The present study includes 100 Odia speakers learning English as students of the Intermediate course (+2). These students have been selected from two different colleges: Paradeep College, Paradeep, Odisha and Sri Sri Jagannath Mahavidyalaya, Erasama, Odisha.

Questionnaires:

In order to collect data for the study at hand, a students' questionnaire has been prepared. This questionnaire begins with an Informants' Consent Form which provides an introduction to the researcher, the supervisor, the study at hand and how the questionnaire is prepared. The questionnaire consists of 3 parts:

- **Students' overall conversance with English Questionnaire:** In order to know the acquaintance of the subjects with English, a questionnaire has been prepared. This questionnaire also includes 8 other questions, the answer to each of which requires each subject to choose one of the four alternatives: *always (A), sometimes (S), rarely (R), never* (N). These questions are related to the students' familiarity with English apart from the classroom.
- **Translation:** The subjects were asked to translate a passage from their mother tongue to English, viz. Odia to English for the purpose of detecting their semantic errors.
- **Free Composition Test:** In this test, subjects were asked to write on one of the following topics in not more than 150 words:

    1. Your plans for future

    2. My weekend

    3. A Memorable event in your life

    4. Your first day at college

Methods of Analysis

The criterion employed in the present study is error frequency i.e. the number of times an error or group of errors repeatedly occurs in one's language use, be it written or spoken. The study at hand adopts a statistical method proposed by Palmer (1980), which has been used in Shormani (2010) in order to judge the seriousness of an error or group of errors. The EG model proposed by Palmer can be formulated statistically by drawing statistical tables showing error type, number of errors, mean, number of students committing errors, percentage and distribution of an error.

The table below represents how the seriousness of any error category can be statistically computed:

Statistical categories	**Error Categories**			
TNS				
N				
$\sum$				
$\bar{x}$				
P				
EG				

Table: 01 EG Calculation model

- TNS = Total Numbers of subjects involved.
- N = Number of students who committed errors.
- $\sum$ = The sum of committed errors
- $\bar{x}$ = The mean
- P = The percentage of students committing the errors
- EG = Error gravity calculated

Thus, EG of an error or group of errors can be computed statistically by "taking the product of percentage of students making the error (p) and the

square-root of the mean number of errors made by those students *(¯x), ¯x = ∑/N"* and thus, statistically, the seriousness of an error can be obtained by the formula: EG = p x √ ¯*x* . The seriousness of a category or sub category will be expressed in terms of a 3-point scale: more serious, serious and less serious.

Results and Findings

In order to find out the gravity of different types of semantic errors and to establish a hierarchy of those types, the semantic errors found in the subjects' written paper, have been broadly divided into 3 types which are further divided into sub-types under each type.

1. **Lexical Choice** : *Assumed Synonymy, Homophony*
2. **Distortions due to Spelling** : *Misordering, Omission*
3. **Collocation Errors** : *Wrong Form, Collocate Choice*

Lets' discuss the gravity of these types of errors one by one in detail.

EG in Lexical Choice: Analysis and Interpretation

Statistical Category	**Error Category**	
	Assumed Synonymy	**Homophony**
TNS	100	100
N	97	70
∑	650	410
¯***x***	6.70	5.85
P	97%	70%
EG	251.07	169.30

Table: 02 EG of Lexical Choice Errors

Errors found in this category in our corpus have been classified into two categories: *assumed synonymy* and *homophony*. *Assumed synonymy* errors

are those errors where two or more words are assumed to be synonymous where one of them is correct to use, e.g***. get*** and ***receive*** as in * I **received** first class in 10^{th} standard, where ***get*** is the correct verb to be used. This sub-type includes 650 frequent errors and has been committed by 97% of the total subjects involved. Thus, the average as per individual learner is 6.70 and finally the EG calculated for this category is 251.07. *Homophony* can simply refer to the phenomenon where two or more words having the same pronunciation but different spellings and meanings. Homophony includes a list of frequently confused words, e.g. ***buy*** ↔ ***by, sell*** ↔ ***cell, fare*** ↔***fair*** etc, among others. The total number of errors included in this category is 410 and are committed by 70% of the total subjects involved in the study. The average is 5.85 as per individual learner. Accordingly, the EG calculated for this category is 169.30. It has been found that errors committed in *assumed synonymy* are *more serious* and the *homophony* errors are *less serious*.

EG in Distortions due to Spelling: Analysis and Interpretations

Statistical Category	**Error Category**	
	Misordering	**Omission**
TNS	100	100
N	99	95
$\sum$	765	649
$\bar{x}$	7.72	6.83
P	99%	95%
EG	275.07	248.27

Table: 03 EG of Distortions due to Spelling

Errors in this category have been classified into two categories: *misordering* and *omission*. *Misordering* category includes total number of 765 frequent errors. Such errors have been committed by 99% of the total

subjects involved in the study, which is quite significant, with a mean of 7.72 as per individual learner. Accordingly the EG calculated for such category of errors is 275.07. *Omission* category includes 649 frequent errors. These errors have been committed by 95% of the total subjects involved in the study; hence, the mean is 6.83 per individual learner. Accordingly, the EG calculated for this category is 248.27. Thus, it has been found that *more serious* errors are those committed in *misordering* category. On the other hand errors in *omission* category are considered as *serious*.

EG in the use of Collocation: Analysis and Interpretation

Statistical Category	**Error Category**	
	Wrong forms	**Collocate choice**
TNS	100	100
N	77	63
∑	495	427
$\bar{x}$	6.42	6.77
P	77%	63%
EG	195.10	163.92

Table: 03 EG of Collocation Errors

Errors in collocation have been classified into two categories: *wrong forms* and *collocate choice*. *Wrong Form* category includes 495 frequent collocation errors. These errors have been committed by 77 subjects, i.e. 77% of the total subjects involved. The mean of these errors is 6.42 as per individual learner. Accordingly, the gravity calculated for such errors is 195.10. *Collocate Choice* includes 427 frequent errors. These errors are committed by 63 subjects, i.e. 63% of the total subjects involved in the study. The mean is 6.77 as per individual learner. Accordingly, the EG calculated for this category is 163.92. Errors those are included in *wrong*

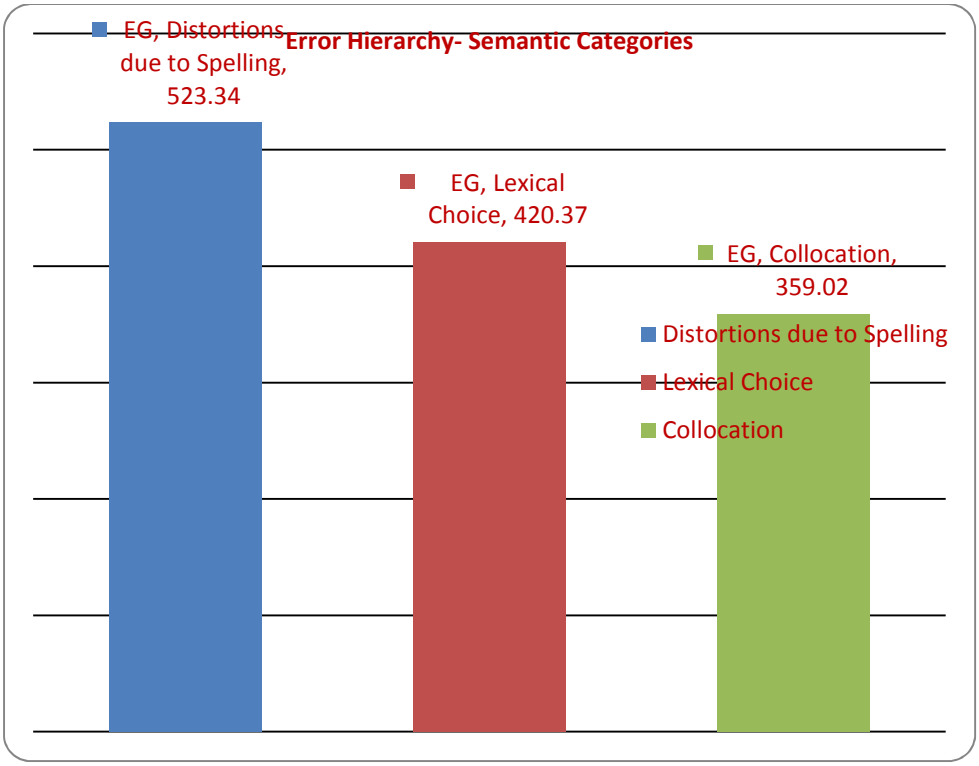
forms are considered as *serious*. In addition, errors committed in *collocate choice* are considered as *less serious.*

Hierarchy of Different types of Semantic Errors

Rank	Categories	No. of Errors	EG
1st	**Distortion due to Spelling**		
	Misordering	765	275.07
	Omission	649	248.27
			Total 523.34
2nd	**Lexical Choice**		
	Assumed Synonymy	650	251.07
	Homophony	410	169.3
			Total 420.37
3rd	**Collocations**		
	Wrong Forms	495	195.1
	Collocate Choice	427	163.92
			Total 359.02
Total		3,396	

Table(04): Error hierarchy of Semantic Categories

As has been presented by the Table 04: ***Distortion due to spelling*** category occupies the 1st rank with an EG of **523.34**. The second rank is occupied by ***lexical choice*** with an EG of **420.37**. The final rank/ 3rd rank is occupied by ***collocations*** with an EG of **359.02**. This hierarchy of errors is presented through a graph below which clearly shows the difference between the EG scored by different categories.



Conclusion

From the above discussion it becomes clear that in between the semantic errors there are some errors which need prior and immediate attention than other errors. In other words, some types of semantic errors are more grave than the other type of semantic errors. The gravity has been calculated by applying a statistical method based on the frequency of the different types of semantic errors.

Numerous studies have been conducted on Error Analysis by several researchers in different languages regarding SLA. In case of Odia language a handful of works have been carried out in this field. As far as Error Gravity is concerned, it is an entirely new dimension for the concerned language. Thus, the present study will perhaps offer the Odia and also the non-Odia students, teachers, researchers, syllabi designer's valuable insights and pedagogical leads in order to improve the English language learning situation.

References

Al-Shormani, Mohammad, G. Q. 2010. *L2 Acquisition and Syntactic and Semantic Error Gravity in University Learners' English of the Arab World*. Unpublished Ph.D Dissertation, CALTS, University of Hyderabad, India.

Corder, S. P. 1967. The Significance of Learners' Errors. IRAL, 5, 4, pp. 161-170.

Davies, E. 1983. Error Evaluation: the Importance of Viewpoint. *ELT*, 37, 4, pp. 304-311.

Guntermann, G. 1978. A Study of the Frequency and Communicative Effects of Errors in Spanish. *Modern Language Journal*, 62, pp.249-253

Hughes, A. and Lasacaratou, C. 1982. Competing Criteria for Error Gravity. *ELT*, 36, 3, pp. 175-182.

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