NATIVE VS. NON-NATIVE JUDGMENTS OF ERROR GRAVITY. AN EXPERIMENTAL STUDY

1. Introduction

Over the last decade error analysis has gradually shifted the focus of its inquiry from investigating error frequency and typology to uncovering communication strategies and measuring degrees of comprehensibility and irritation. In other words, the more recent research has been concentrated on the other side of the same phenomenon, namely the native speaker's impressions and reactions to non-native use of a language. The necessity of a different approach was first recognized by James (1972), who wrote:

"... a linguistic approach to error analysis should at least attempt to explicate and rationalise the teacher's subjective evaluations (...) at the present time nothing is known about the relative gravity, from a native speaker's point of view. (...) Research is needed in this field." (James 1972:76; emphasis added).

However, the impetus for this valuable new area of research was provided by several studies assembled in Svartvik (1973), particularly those by Enkvist (1973), Gorosch (1973), Johanson (1973) and Nickel (1973). It has since then appeared appropriate to many an error analyst to investigate native-speaker judgments of errors. Some of the findings have been suggested for application to foreign language teaching, and specifically to methods of error evaluation.
Discussions of error gravity, evaluation and native-speaker
judgements touch upon divergent determinants. Therefore, most of the results are hardly comparable. There is, for instance, considerable diversity of sources from which individual researchers developed their data; thus, whereas a number of studies relied on the written production for error-laden sentences, Politzer (1978), Galloway (1980) and Ensz (1982), among others, used spoken samples. Some authors (e.g., Hughes and Lascaratou (1982) collected their material working with a homogeneous group of L2 learners, while others (e.g., James (1977)) preferred heterogeneous subjects; others still (e.g., Davies (1983)), invented their erroneous examples. Furthermore, hierarchies of error gravity were set up with respect to widely different criteria. Burt and Kiparsky (1974), concerned exclusively with syntactic errors, suggested two basic classes, viz. global and local errors\(^1\), according to the degree of communication hindrance. Guntermann (1978) and Palmer (1980) were mostly interested in error frequency and its relation to other issues. Several studies (e.g., Olsson (1973), Johansson (1978), Ervin (1977) (cited in Ludwig (1982)), Chastain (1980) and Piazza (1980)) investigated native-speaker reception of errors, particularly from the point of view of such gauges as comprehensibility, acceptability and irritation, while a few others (e.g., Janew (1977), Hughes and Lascaratou (1982) and Davies (1983)) were concerned with the differences in native vs. non-native speaker judgements and/or teacher vs. non-teacher judgements of error gravity. Politzer (1978), Delisle (1982), Ensz (1982) and Ludwig (1982) discussed different variables, such as age, sex, profession, education, etc., affecting evaluation of errors, whereas Davies (1983) voiced his doubt about comparisons of error evaluations by different bodies of assessors, thinking them to be coloured by the particular viewpoint from which any such evaluation is carried out\(^2\). More extremely, Albrechtsen, Henriksen and Faerch (1980) decided that a search for a hierarchy of error gravity is unproductive since all errors are equally irritating, exasperation being directly predictable from the number of errors,
irrespective of their types.

It follows from the above synopsis that the findings in the published literature on error evaluation and native-speaker judgements are rather diffuse, which makes sensible cross-study analyses difficult to embark on. Yet the relative incomparability of various reports referred to above ought not to dissuade other researchers from carrying out further experiments. After all, the area of inquiry at issue is still comparatively recent and its tenets have not as yet been adequately articulated. Besides, as rightly observed by Delisle (1982:39), error-gravity judgements are passed with respect to specific goals: "... if our goal is to achieve absolute linguistic correctness, all errors are equally serious and will be rated accordingly. However, if we define our objectives in terms of communicative success, then we will probably use a different rating scale." Consequently, the validity of results arrived at in individual studies should be assessed in regard to the particular ends underlying each of the experiments.

2. Rationale for the present study

In the closing section of his article of 1977 Carl James wrote:

"We introduced an additional dimension into the study by comparing the judgements of native speakers and nationals teaching English. (...) Perhaps interested teachers who read this report will refine and replicate the work: their results would certainly be more interesting than my own." (James 1977:124) underlining added).

Our study is a response to James's. To date, as much as we are aware, no experiments involving native vs. non-native evaluations of the English production of Polish learners have been undertaken. Therefore, our findings ought to be interpreted as a pilot study.

The present investigation follows James (1977) in that native-speaker judgements of errors are compared with those of non-native raters. However, important adjustments are made in
the selection of bodies of judges as well as in the data collection procedures, the details of which modifications are explained below. In this respect, our study parallels that of Hughes and Lascaratou (1982) and to some degree also that of Davies (1983), both of which also claim to have replicated James's experiment.

3. The experiment

The study reported in this paper derives in part from a larger experiment meant to determine the place of a particular lexical error in a hierarchy of other lexical, morphological and syntactic errors. We accomplished our original task, the details of which are set forth in our earlier study (Majer 1983:187ff), by computing native English speakers' evaluations. For the purpose of the currently presented investigation we have reduced the number of error categories while extending the population of subjects by incorporating a body of nationals, i.e., Polish teachers of English.

Prior to the experiment we had two basic hypotheses, viz.: (i) that the group of nationals would tend to be less tolerant of error than either of the native-speaker groups, and (ii) that the rank order of error gravity in the group of nationals would differ considerably from the hierarchies established for the other two groups. These convictions stemmed from the findings reported by other writers, above all James (1977) and Hughes and Lascaratou (1982).

3.1. Material

Thirty-two error-laden sentences originating from samples of spoken and written production in English by intermediate and intermediate-advanced Polish learners were selected to exemplify four cases of error in each of the eight categories listed in Table I (asterisked versions are erroneous; their correct versions are in parentheses).
<table>
<thead>
<tr>
<th>ERROR CATEGORY</th>
<th>EXAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verb Form/Tense</td>
<td><em>I want to became an English teacher.</em></td>
</tr>
<tr>
<td></td>
<td>(I want to become an English teacher.)</td>
</tr>
<tr>
<td>Number/Concord</td>
<td><em>Money are important in everyone's life.</em></td>
</tr>
<tr>
<td></td>
<td>(Money is important in everyone's life.)</td>
</tr>
<tr>
<td>Word Order</td>
<td><em>This work will be to me very interesting.</em></td>
</tr>
<tr>
<td></td>
<td>(This work will be very interesting to me.)</td>
</tr>
<tr>
<td>Pronouns</td>
<td><em>Children should always listen to they parents.</em></td>
</tr>
<tr>
<td></td>
<td>(Children should always listen to their parents.)</td>
</tr>
<tr>
<td>Articles</td>
<td><em>He went to bed with the bad cold.</em></td>
</tr>
<tr>
<td></td>
<td>(He went to bed with a bad cold.)</td>
</tr>
<tr>
<td>Prepositions</td>
<td><em>I think it is rude to laugh with people.</em></td>
</tr>
<tr>
<td></td>
<td>(I think it is rude to laugh at people.)</td>
</tr>
<tr>
<td>Vocabulary</td>
<td><em>She got a job as a typewriter.</em></td>
</tr>
<tr>
<td></td>
<td>(She got a job as a typist.)</td>
</tr>
<tr>
<td>Spelling</td>
<td><em>You will be in trouble if you lose that money.</em></td>
</tr>
<tr>
<td></td>
<td>(You will be in trouble if you lose that money.)</td>
</tr>
</tbody>
</table>

Table I

Wherever more than one error had occurred in the original samples, we made corrections, so that the test sentences eventually contained single problems to be analysed by the judges. We also adopted James's (1977) stance regarding recognition of errors. Thus, the assessors were made to locate errors in no further contexts than sentences containing them. There were no supporting contexts. According to James, if one overlooks the condition of immediate context, one can hardly study errors and their evaluation, "... since one admits indeterminacy: some people can say it is an error, others that it is not - and they are both right" (James 1977:116; emphasis original). Actually, studies of the relationship between contextual acceptability and error evaluation constitute an error-perception problem in its own right (cf. for instance the study
by Enkvist (1977) and several works reviewed there).

Four control error-free sentences were also added and thus the total of experimental items reached 36. They are listed in the Appendix, where they appear in the same random order as in the questionnaires.

3.2. Subjects

There were three groups of raters, viz.:(ii) ten native-speaking teachers of English, none of whom had either taught in Poland or claimed to know any Polish; all were graduate students from University of Pittsburgh, Pennsylvania, and from UCLA; (ii) ten non-teachers, i.e. native English speakers with no language instruction experience and probably little contact with foreign speakers at work; all of them worked for the U.S. League of Savings in Chicago as file or office clerks, in all likelihood none having completed college education; (iii) ten Polish-speaking teachers of English, six of whom taught English majors at the English Department, Pedagogical University, Bydgoszcz, while four were secondary-school teachers from Bydgoszcz and Łódź.

The two native-speaking groups of our experimental population differed slightly in the age variable. The teachers (\( \bar{x} = 24.1 \)) were on average five years younger than the non-teachers (\( \bar{x} = 29.3 \)). However, we believe that the age factor did not play any important role in the experiment. At any rate, it could not have been as significant as in either Politzer's (1978) or Delisle's (1982) study. From the point of view of the age variable, the group of nationals (Polish teachers) can be placed exactly between the native-speaking bodies of judges (\( \bar{x} = 26.9 \)).

Likewise, we dismiss as insignificant the dialect affiliation variable, i.e. inter- and intragroup regional linguistic differences among the respective native-speaker evaluators. Where the native English groups do differ significantly, however, is in the education variable, and the said factor is certainly going to be considered in the analysis to follow.
3.3. Method

In contradistinction to judgment tests, i.e. those investigating subjective measure of error gravity by means of eliciting impressionistic, unprincipled evaluations of errors, ours was an objective error-gravity count in that the subjects were requested to perform certain tasks as well as express judgments. To put it in a different way, the experiment belongs in the category of operation tests, i.e. ones requiring that the subjects rewrite the test sentences introducing corrections and changes, so that the experimenter might measure the degree of their correct interpretation, consistency etc. (cf. Quirk and Svartvik 1966:32ff; Johansson 1978:22).

The experiment was administered individually to each participant in the form a written questionnaire. The test subjects were informed that the samples had all been produced by foreign learners of English and were requested to underline the error and to grade each sentence on a scale from 0 (the sentence is thought to contain no error) to 5 (the sentence contains a very serious error), 1 indicating that the error could easily be excused, while 2, 3, and 4 standing for intermediate degrees of gravity. Additionally, the raters were invited to give brief comments on their judgments.

3.4. Results and discussion

Our results provided more evidence of the liability of native speakers to evaluate learner errors more leniently than non-natives. The overall differences in the three groups' scores are presented in Table II. They show that the Polish teachers assigned grades which were on average one point and .8 points higher than those of the American non-teachers and the American teachers, respectively.

<table>
<thead>
<tr>
<th></th>
<th>POLISH TEACHERS</th>
<th>AMERICAN TEACHERS</th>
<th>AMERICAN NON-TEACHERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVERAGE INDIVIDUAL</td>
<td>3.35</td>
<td>2.54</td>
<td>2.34</td>
</tr>
</tbody>
</table>

Table II
<table>
<thead>
<tr>
<th>ERROR CATEGORY</th>
<th>POLISH TEACHERS</th>
<th>AMERICAN TEACHERS</th>
<th>AMERICAN NON-TEACHERS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\bar{x}$ POINTS DEDUCTED</td>
<td>ORDER OF GRAVITY</td>
<td>$\bar{x}$ POINTS DEDUCTED</td>
</tr>
<tr>
<td>Verb Form/Tense</td>
<td>4.65</td>
<td>1</td>
<td>2.92</td>
</tr>
<tr>
<td>Pronouns</td>
<td>4.05</td>
<td>2</td>
<td>2.95</td>
</tr>
<tr>
<td>Word Order</td>
<td>3.95</td>
<td>3</td>
<td>2.45</td>
</tr>
<tr>
<td>Number/Concord</td>
<td>3.82</td>
<td>4</td>
<td>2.85</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>3.77</td>
<td>5</td>
<td>3.20</td>
</tr>
<tr>
<td>Prepositions</td>
<td>3.29</td>
<td>6</td>
<td>2.57</td>
</tr>
<tr>
<td>Spelling</td>
<td>2.91</td>
<td>7</td>
<td>2.65</td>
</tr>
<tr>
<td>Articles</td>
<td>2.75</td>
<td>8</td>
<td>2.65</td>
</tr>
<tr>
<td>Error-Free</td>
<td>0.97</td>
<td>9</td>
<td>0.65</td>
</tr>
</tbody>
</table>

Table III

By and large, the above results (Tables II and III) correspond to those obtained by James (1977), Hughes and Lascaratou (1982) and Davies (1983). However, on close inspection one can also notice some important differences. For instance, whereas in the James study the native speakers are more tolerant of vocabulary and pronoun errors than of tense and concord errors, our populations of native-speaking judges tend to evaluate in the opposite way. Such results would at least be comparable with Hughes and Lascaratou's, but then their bodies of native speakers see to be more sensitive to spelling and word-order errors.
Similar discrepancies can be observed if we compare the results obtained in the group of nationals. Thus, in James (1977) the non-native assessors are most stigmatised by errors of case and vocabulary, while the Polish teachers of the present study, as well as the Greek teachers of the Hughes and Lascaratou study, are least tolerant of verb form tense errors. Yet, in the latter report the nationals also heavily penalized errors of number and concord while being more lenient to word-order deviations, both of which facts run counter to the results reported here.

Although, curiously enough, the American non-teachers in our study appear to tolerate spelling errors, which are in turn most resented by the corresponding body of raters in Hughes and Lascaratou (1982), the remaining error categories in that group form basically comparable hierarchies.

The results presented in Table III also lend support for our hypothesis no. 2; the hierarchy of errors set up for the group of nationals (Polish teachers) is largely different from the rank orders of gravity formed by average evaluations in both of the native-speaker groups. To be sure, between themselves the two native-speaking bodies of raters differ in the rankings of error-gravity order; however, the absolute measurements expressed in terms of figures yield much less striking differences.

We shall now proceed to the indentification of objectives with respect to which the three groups of experimental subjects must have performed their evaluations. A lot of cues to help the present writer in these matters were expected to show in the results of the operations requested by the instructions, including the potential comments. It has to be stated, however, that the subjects' cooperation in performing the operations additional to the very judgments of error seriousness was not totally satisfactory. Hence in the following we would like to signal only the most markedly pronounced tendencies.

3.4.1. Attitude

The findings more or less reflect the variance reported in Davies (1983); while the native speakers (particularly the
non-teacher group) explicitly or implicitly communicated that they had enjoyed rating the test sentences and that they realized the learner's hard task of expressing himself accurately in the target language, the nationals occasionally stated that they were only too familiar with certain errors which escape eradication despite frequent correction and they generally showed less enthusiasm for cooperating in the experiment.

The Polish teachers probably also felt that their own competence in English as well as their grading skills were being tested, which may be an overriding determinant of three striking differences between the scores in that group and the native speakers' scores, viz. (i) the nationals rated more severely for fear of underestimating error gravity; (ii) the nationals exercised greater caution not to overlook errors, and their questionnaires generally contained carefully considered responses, whereas in the American non-teacher group, for instance, there were quite a few zero-grade markings since certain errors did not attract enough attention to be spotted by those judges; and (iii) the nationals rated the control (error-free) sentences higher than the other two bodies of assessors (cf. Table-III).

3.4.2. Language background and acceptability

The results appear to support the claim made by Nickel (1973:27) that native speakers judge errors less severely owing to their "... better knowledge of the target language as such and especially of the wide scope of its norms." The acceptability criterion can also depend upon the likelihood of an error being made by a native speaker (cf. Piazza 1980:426). Analogically to the Hughes and Lascaratou study, the factors of competence were most markedly articulated in the assessment of some of the word-order errors (particularly in the American teacher group).

On the other hand, however, the Polish teachers had greater access to the learners' intended meanings being able to recognize which L1 rules had been transferred. Hence the much lower degree of error misinterpretation in the group of
nationals as opposed to the group of American non-teachers, for example.

3.4.3 Comprehensibility and violation of basic rules

It follows from both the error hierarchies and crossgroup comparisons as well as from the additional comments offered by several judges that the native-speaker groups were guided in their judgments by the criterion of intelligibility (cf., Hughes and Lascaratou 1982:477). This would account for their having rated the verb form/tense errors lower than did the nationals. The said errors (see Appendix) do not seem to be highly detrimental to comprehensibility. Their relatively high positions (third) on both the rank-order-of-gravity charts corresponding to the native-speaker groups' judgments may well be due to their irritability.

Another piece of evidence lending support to the above claim is the fact that vocabulary errors were adjudged high gravity (first and second position) deviations. Those errors also attracted a few comments from some of the American teachers showing that the problems of intelligibility and irritation in the reception of vocabulary errors may be related by means of inverse proportion: the lower the intelligibility, the higher the irritation.

On the other hand, the basic pattern evident in the evaluations of the Polish teachers is that errors were judged with respect to linguistic correctness. In other words, the nationals showed an overconcern with the perfection of form while being less sensitive to communicative effects of learner errors. Thus, in accordance with the above-identified strategy, they penalized most severely those errors which attested to the infringement of basic rules, such as verb forms, pronouns and word order. These results correspond to those of Hughes and Lascaratou (1982).

On the strength of our data, we are inclined to adhere to the claim expressed by other investigators of error gravity and native-speaker reactions, namely by Ervin (1977), Galloway (1980) and Ludwig (1982), that native speakers are more
interested in what foreign speakers say than in how they say it; hence their greater focus on the message rather than on grammatical accuracy, which is nevertheless non-native teachers’ focus of attention.

4. Summary and conclusion

In the present study we have attempted to demonstrate how the same grammatical, lexical or orthographic errors can be viewed differently with respect to the question of seriousness by different assessors. To the best of our knowledge, attempts of this kind involving native-speakers’ judgements of Polish learners’ errors in English have not as yet been made.

The results of our experiment have revealed an interesting gradation in reliance on certain criteria for evaluating errors. Polish teachers on an average judge more severely than native speakers and they tend to relate individual errors with the problem of formal perfection and with the question of error persistence despite efforts at eradication. Native English-speaking teachers, however, are on an average more tolerant of errors infringing upon the basicness of rules, but they appear to be more stigmatised by errors most detrimental to comprehensibility, particularly when the foreign speakers’ intended meanings are obscured for them, i.e. when they are not familiar with those speakers’ native language. Still, their linguistic sophistication as well as overall education variables allow them to show a more systematic and consistent evaluation strategy than that of linguistically naive non-teachers, whose general attitude to learner errors is even more lenient, yet whose ultimate judgements are somewhat unpredictable. It is believed (e.g. by Ervin (1977) and Galloway (1980)) that those judges, actually sometimes the only ones in natural foreign-language situations, are most accepting to second-language communications.

It is hoped that gradual progress in investigating the perception of errors by native speakers will eventually provide Polish teachers of English with interesting insights into the
reception of Polish-English interlingua. From the pilot experiment presented in this study and from the comprehensively surveyed error-evaluation literature it follows that greater attention has to be paid to such aspects of errors as their effects on intelligibility and irritation - severe consequences from the point of view of communication.

NOTES

1 Global errors are those which affect overall sentence organization, e.g. word-order errors and errors in the use of sentence connectives. Local errors, on the other hand, are those which affect single constituents in a sentence and do not hinder communication significantly. For further details see also Burt (1975).

2 The different viewpoints, available to some evaluators while being unavailable to others, may also be influenced by such factors as teaching priorities, the syllabus being used or the foreign-language course requirements.

3 The group of nationals consisted of Greek and Moroccan teachers of English, respectively in these two studies.

4 The test subjects in these studies were adolescents of ten to seventeen.

5 For communicative error analyses in which the effect of the error is called its degree of irritability see Johansson (1975) and Johansson (1978). The trend represented by these works and subsequent studies by other writers differs widely from the methodology adopted for the purposes of this paper, which draws from studies such as James (1974), James (1977), Hughes and Lascaratou (1982) and Davies (1983).

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APPENDIX

Test sentences used in the experiment (underlining added).

1. Number)Concord We received some informations from the travel agency.

2. Vocabulary Chess can learn us patience and concentration.

3. Preposition I will leave on the beginning of August.

4. Error-Free Neither of us has passed the exam.

5. Verb Form)Tense I want to became an English teacher.

6. Spelling You will be in trouble if you loose that money.

7. Word Order I am sure that he will tomorrow agree with me.

8. Vocabulary She got a job as a typewriter.

9. Article To get married is difficult problem.

10. Verb Form)Tense They are married a long time.

11. Pronoun He told that he might be late.

12. Number)Concord Money are important in everyone's life.
13. Error-Free  She didn’t buy the dress because it didn’t suit her.

14. Pronoun  Children should always listen to they parents.

15. Article  The miner’s job is a very dangerous.

16. Preposition  I wish to study on the university.

17. Word Order  Just look how much trouble are you causing.

18. Spelling  I thing space exploration is a waste of money.

19. Error-Free  I wish I earned more money.

20. Article  He went to bed with the bad cold.

21. Vocabulary  I only did five mistakes on the last test.

22. Number)Concord  There are six millions dogs in France.

23. Preposition  She answered to all my questions very frankly.

24. Verb Form)Tense  I am not interesting in sports at all.

25. Vocabulary  Mary didn’t say us that the party was off.

26. Spelling  Rolls-Royces are so expensive that only reach people can afford them.

27. Number)Concord  My hair looked dirty, so I had to wash them.

28. Verb Form)Tense  Do you afraid of ghosts?

29. Pronoun  To get a new car I would have to have any money.

30. Article  The best motorcycles are produced in the Japan.

31. Error-Free  He asked if he would hear from her soon.

32. Pronoun  I don’t like women which talk all the time.

33. Word Order  This work will be to me very interesting.

34. Preposition  I think it is rude to laugh with people.

35. Spelling  I know a restaurant where you can have a good mill.

36. Word Order  To England I went when I was still a child.
RODZIME A NIERODZIME SĄDY O WAŻKOŚCI BŁÉDÓW. STUDIUM EKSPERYMENTALNE

Streszczenie

W artykule porównano oceny względnej ważności błędów gramatycznych, leksykalnych i ortograficznych, popełnionych przez średnio-zaawansowanych uczących się języka angielskiego wydane przez trzy grupy sędziów: polskich nauczycieli języka angielskiego, amerykańskich nauczycieli języka angielskiego jako języka obcego oraz Amerykanów nie-nauczycieli. Stwierdzono, że nauczyciele polscy oceniają błędy uczniów przeciętnie znacznie surowiej i przy pomocy innych kryteriów niż rodzimi rozmówcy języka angielskiego. Autor niniejszego eksperymentu pilotażowego proponuje rozszerzenie badań nad ważnością błędów w celu dokładniejszego poznania kryteriów oceny języka ucznia przez rodzimych użytkowników danego języka obcego oraz względnego dostosowania sądów nauczycieli do tych kryteriów w procesie dydaktycznym.