Spelling Accuracy in Japanese EFL Students: Some Practical and Theoretical Implications

by Robert Mark

INTRODUCTION

The study of spelling errors is one which enjoys a long tradition in educational research, with Cahen, Graun and Johnson (1971), in their review of the published literature, citing papers published as early as 1914. However, far from being an exhausted field, it is still generating research interest and a particular thrust has been in the direction of spelling errors perpetrated by EFL students. Perhaps rather surprisingly, though, there has been comparatively little work done in this area (see Bebout, 1985, for a review of relevant studies). This may be because, in spite of offering what would appear to be a fairly contained area for research, the study of spelling areas, whether in native or non-native English, is not as straightforward as it might appear.

One area of potential pitfall is the method used to gain access to an individual’s spelling competence. At first glance, one might say: just use a spelling test. However, this presupposes a basis for the selection of words to be tested which, in turn, implies a hypothesis about why these words would be difficult. In EFL, the contrastive analysis of native and target languages as an indicator of possible difficulty is too well known to need explanation, but a study by Oller and Ziahosseiny (1970) on spelling shows that performance predictions based on contrast are not always in the expected direction. They found, for instance, that EFL students whose native language used the same Roman script as English made more spelling errors than those whose native language uses a non-Roman script. A further methodological problem arises from the fact that spelling tests are usually given orally so that the tester’s pronunciation of the target words becomes a factor affecting subjects’ responses.

The traditional alternative to the spelling test approach is to collect errors as they occur spontaneously in samples of written work. As early as 1932 it was pointed out by Fitzgerald, however, that such data may also suffer some bias since subjects may avoid trying to use some words of whose spelling they are unsure. The phenomenon of avoidance (of difficulty) in the linguistic production of EFL students is one which has attracted some interest in more recent times.

For example, syntactic avoidance has been documented by Schacter (1974), Swain (1975) and Kleinmann (1977; 1978), morphological avoidance by Perkins and Larsen-Freeman (1975), and semantic avoidance by Tarone, Frauenfelder and Selinker (1975) and Ickenroth (1975). It would not, therefore, seem beyond the limit of reasonable
expectation that spelling avoidance may also be a reality. Certainly on the basis of Fitzgerald's hypothesis (1932), Bebout (1985) eschewed the collection of spelling errors as they occur in free writing and devised an elicitation approach whereby written sentence frames with a missing word were presented to subjects who had to write down the word they felt was most appropriate in the given text. This, she felt, imposed a degree of constraint on the subject who could not, in theory, avoid the words he found difficult to spell. However, this idea of spelling avoidance itself rests on another assumption, namely that the individual has some insight into his own level of accuracy and is actually aware of which words he knows how to spell correctly and which words he is misspelling.

Superficially, there may be some intuitive validity to this idea since even highly educated native speakers have recourse to the dictionary on occasion to check the spelling of a word. However, even if we assume that native speakers have this degree of insight into their own spelling prowess, it may not be realistic to make the same assumption about EFL students. To reject spontaneous writing samples as a source of EFL spelling errors on the basis of presumed avoidance tactics may therefore be too dismissive. It seemed worthwhile to clarify this area of speculation and ascertain on more solid grounds how far EFL students are aware of their own spelling accuracy or inaccuracy since only then could the spelling avoidance thesis be supported or rejected. Accordingly, the following experiment was carried out.

METHOD

Subjects

Fifty subjects took part in the experiment, most of whom were undergraduates majoring in English (either linguistics or literature) in the Humanities Department of the Faculty of Arts of Shinshu University. The others belonged to other departments in the Faculty of Arts, but were taking English classes to obtain an English Teacher's License. Twenty-five of the subjects were Second Year students taking Oral Communications One. The other twenty-five were Fourth Year students in their graduation year. All subjects were native speakers of Japanese.

Materials

Thirty words were selected from those commonly misspelled in a survey previously conducted on the spelling performance of Second Year and Fourth Year students in the above-mentioned Humanities department. These had been collected from the final examination compositions of Oral Communications One students and from various thesis papers (rough drafts) of Fourth Year students from the past three years. Of the words selected for this study, roughly half were taken from the Fourth Year theses and half from the Second Year examinations, but all were high-frequency words which would have been within the lexical capacity even of the Second Year students. Sentence frames
were then built up around these words, designed to elicit the word in question.

*Example* target word: planning

sentence frame: We are p................. on taking a trip to Hokkaido during this summer vacation.

As much care as possible was taken to ensure that the context would elicit the desired word. Where several possible alternatives could fit into the blank, additional cues were given by supplying the first, and sometimes also the last, letters of the targetted word. As a further check, the test was given to two native speakers of English. (The complete test is presented in Appendix B).

**Procedure**

Copies of the elicitation test were distributed to subjects in class along with copies of a specially-prepared instructions sheet (Appendix A) Briefly, subjects were required to write a word to fit in the blank space in each sentence. In addition, they were asked to assess their feelings about their accuracy in spelling each word by writing 4 if they were sure they had spelled the word correctly, 3 if they felt it was probably correct, 2 if they felt it was probably wrong and 1 if they felt it was definitely wrong. Papers were then collected and each was marked to obtain the total number of correct spellings for each student to get a score for accuracy. By totaling the self-assigned marks out of four for each word, a confidence score was also obtained for each student.

**Results**

In spite of all efforts to reduce variation in elicited responses, 227 out of the total 1500 responses obtained were different from the target words (114 of these variant responses were from Second Year students, and 113 were from Fourth Year students). It did not appear that this was an active attempt on the part of subjects to avoid these words for the sake of more-easily spelled alternatives because many of them were more difficult than the target word e.g., where terrible was given instead of *tired*, *previous* instead of *entire*, and *roughly* instead of *really*. Responses left blank, which appeared 31 times, despite the fact that students were told to fill in a response even if they had to guess at the target word being sought, were included as part of the variant response group. In a few cases, the response given was a viable but unanticipated alternative to the target word, but largely this tendency arose out of failure on the part of subjects to guess what the “right” word was, and says more about their knowledge of vocabulary and sensitivity to context cues than about spelling.

Turning to spelling, the first, rather striking, point that emerged was that, out of the 1500 responses, only 338 (or 22.5%) were misspellings. This is surprisingly low in view
of the fact that the target words were those commonly misspelled in the writing samples from which they had been drawn. Two possible explanations could account for this:

a) The student populations were different. The writing samples were, in fact, produced by different students from those doing the elicitation task. However, there are no reasons (i.e. based on general academic performance) to suspect that the student populations differed as regards to their competence in English.

b) The different test conditions were responsible. Students may make more spelling errors in spontaneous essay writing, especially under examination conditions, than in special tests where they know attention is focused on spelling.

The second point was that the relative number of errors made by Second Year and Fourth Year students showed a substantial difference. The more advanced group made 138 errors, while the Second Year group made 200 errors. This translates into a ratio of 41: 59% of all errors and simply indicates that students do, in fact, show a general improvement in spelling with increased exposure to the language. However, when we turn to students’ perception of their accuracy, this difference between the two groups disappears.

Tables 1 and 2 show frequencies for the four self-rating scores for correctly spelled words and misspellings respectively. Chi-square tests applied to the data did not reach significance in either case, thus not allowing rejection of the null hypothesis of no difference between the two groups.

It may, therefore, be concluded that both groups were equally confident about the accuracy of their spelling, whether they were spelling words correctly or incorrectly. This can be seen more clearly in Table 3 which shows the

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>Confidence Ratings for Correctly Spelled Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>Second Year</td>
</tr>
<tr>
<td>4</td>
<td>450</td>
</tr>
<tr>
<td>3</td>
<td>75</td>
</tr>
<tr>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>539</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TABLE 2</th>
<th>Confidence Ratings for Misspelled Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>Second Year</td>
</tr>
<tr>
<td>4</td>
<td>87</td>
</tr>
<tr>
<td>3</td>
<td>87</td>
</tr>
<tr>
<td>2</td>
<td>23</td>
</tr>
<tr>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>200</td>
</tr>
</tbody>
</table>
percentages of correctly and incorrectly spelled responses rated as 3 or 4. In view of the high percentages obtained for both groups, a situation is revealed in which the confidence in spelling accuracy shown by the students taking part in this study far outstrips their actual accuracy, with this phenomenon not being significantly affected by level of competence in English. This may be further shown by working out the percentage mean confidence scores and percentage mean accuracy scores for the two groups and comparing them. This data is shown in Table 4 and it can be seen that for both groups, the accuracy score is considerably less than the confidence score. In addition, while the difference between Second Year and Fourth Year students on their confidence score is only 3.3 the difference between them on accuracy is three times as great (9.3).

<table>
<thead>
<tr>
<th></th>
<th>Correctly spelled</th>
<th>Misspelled</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Second Year</strong></td>
<td>97.4</td>
<td>87.0</td>
</tr>
<tr>
<td><strong>Fourth Year</strong></td>
<td>96.9</td>
<td>91.4</td>
</tr>
</tbody>
</table>

**TABLE 4 Confidence vs. Accuracy**

<table>
<thead>
<tr>
<th></th>
<th>Second Year</th>
<th>Fourth Year</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Mean Confidence Score</td>
<td>90.9</td>
<td>94.2</td>
<td>3.3</td>
</tr>
<tr>
<td>% Mean Accuracy Score</td>
<td>73.5</td>
<td>81.6</td>
<td>9.3</td>
</tr>
<tr>
<td>Difference</td>
<td>17.6</td>
<td>12.6</td>
<td></td>
</tr>
</tbody>
</table>

**Discussion**

The subjects in this study showed themselves to be somewhat confident about their spelling accuracy, a tendency that is particular striking when, in fact, they are spelling words wrongly. The figures obtained point to an overwhelming lack of awareness on the part of these students that they did not know how to spell the words in question and, therefore, lead to a re-appraisal of the concept of avoidance in linguistic production. Kleinmann (1977) has made the point that “...an individual cannot be said to be avoiding a given syntactic structure, morpheme or lexical item, which he does not have in his linguistic repertoire.... To be able to avoid some linguistic feature presupposes being able to choose not to avoid it, i.e., to use it” (p.96). The findings suggest that a corollary must be added to this. It may not be enough to say that the absence of a particular structure does not indicate avoidance if that structure is unknown to the subject. We must also say that the presence of an incorrectly expressed form or structure does not signify that the individual has chosen not to avoid it.

The choice of whether or not to avoid rests not only on whether or not the individual has the particular item in his linguistic repertoire but also on whether or not he has a
sufficiently high level of self-monitoring skill to judge his level of mastery of the item in question. If this degree of insight is absent, the individual may simply assume that what he produces is correct so that the need for avoidance does not arise. This would seem to have been the case with the subjects in this study: they simply did not know that they did not know. Therefore, avoidance tactics did not come into play at all.

In the Introduction, reference was made to the presupposition by Fitzgerald (1932) and Bebout (1985) that writers avoid words they do not know how to spell and that, therefore, collecting errors from free writing samples will not yield a true picture of an individual's level of spelling accuracy. The findings obtained show this presupposition to be erroneous, at least for the students taking part in this study. In addition, even a fairly restricting elicitation test as was used here did not result in eliminating non-target responses, many of which were as difficult or more difficult than the words targeted. This would seem to erode whatever advantage may derive from the use of specially-constructed elicitation tests as a controlled method of collecting spelling errors and would suggest that collecting errors from free writing samples may be as effective—and certainly simpler than—conducting special elicitation tests. Another point to be noted is the low number of errors that were collected from this elicitation test which had been constructed on the basis of common errors committed by similar students on examination compositions. The effect of different test conditions on spelling accuracy was not a focus of the present study, but it is one which would seem worth further investigation.

However, the most interesting question posed by the findings is surely why these students were so confident they were right when they were wrong. As a first step in answering this question, it may be useful to compare the performance of the students in this study with that of participants in two other studies who were asked to give self-ratings on the accuracy of their responses to see whether similar patterns emerge or whether this test's subjects were special or different.

At the outset, however, it must be pointed out that such between-studies comparisons are limited because of differences in the area and type of material tested. Thus, Yule, Yanz, and Tsuda (1985) had Japanese learners rate the accuracy of their own responses to a listening test. The binary nature of the response decision involved (i.e. a choice between the two words in a minimal pair) allowed the utilization of measuring procedures for monitoring performance borrowed from Signal Detection Theory which were rather different from the analysis used here. Additionally, the focus of their analysis was on individual differences rather than on group tendencies. Notwithstanding these differences of approach, it is interesting to note that they did uncover a pattern of “very confident wrong answering”, although it is difficult from their data to derive how significant this was for the whole group so that direct comparison with this study is not possible. They also found a pattern of non-confident correct answering which was almost non-existent among this test's subjects.
In a subsequent study, Yule, Damico and Hoffman (1987) applied the same analytical procedure in a test–retest situation conducted on a listening task over a seven week period during which time students participated in a pronunciation/listening course. They found that one group's accuracy scores improved but their self-monitoring skill did not. This seems to be in agreement with my findings that Second Year and Fourth Year students did not differ significantly in their confidence scores. It is of interest to note, therefore, that the subjects in Yule et al.'s experiment (1987) came from a wide range of language-speaking groups, arguing perhaps for some kind of generalized tendency to reach a plateau on this particular measure. On the other hand, it must also be underlined that the period separating test and re-test sessions in the study of Yule and his associates was only seven weeks, whereas the period separating the Second Year students and Fourth Year students in this study was, on average 2.3 years. It would seem to be justifiable to expect the development of greater personal sensitivity to one's own English spelling performance over a two year period of study within an English department. However, it must also be reiterated that several students who took this test were not English majors, though they all have been taking English courses to obtain their English Teachers Licenses.

In summing up, these other studies do indicate that other groups show some of the confidence characteristics found in the students in this experiment but that there may be grounds for concluding that these characteristics are more pronounced in my subjects (i.e., there were very few cases of non-confident correct answering) and that they seem to be very resistant over time despite extensive language training. It may, therefore, be reasonable to assume that the high confidence scores shown by my subjects may be a feature characterizing the particular group this sample represents and to try to answer the question of why they were so confident on this basis.

For example, since they were all native speakers of Japanese, an argument could be developed that they approached the process of English spelling with a set of inappropriate assumptions. Spelling in Japanese is regular in the sense that the spelling of a word is always predictable from its pronunciation, except for perhaps a few of the Katakana (foreign) words incorporated into the language. Spelling in English on the other hand, is most certainly not. It is true that certain patterns or families of similarities do exist, but membership cannot always be predicted and there are many exceptions. Japanese speakers could, therefore, be theorized as approaching English spelling with the expectation that it is regular. Thus, just as they would normally assume, with justification, that their Japanese spelling would always be accurate, so also, by extension, would they assume their English spelling to be accurate. Spelling, in other words, may not be an area of linguistic concern to them. However, appealing as this theory may be, it cannot really explain the facts. My subjects were university students and even those at the Second Year level must have been long acquainted with the reality of the irregularity of English
spelling since all had studied English for about six years at school.

Perhaps a more fruitful line of thinking may arise from consideration of Krashen's construct of the monitor (1975; 1977) which, as part of the learner's internal system concerned with conscious language processing, may perform an editing function on his or her linguistic output. Since “the more self-confident and the less self-conscious a learner is, the less reliance he or she places on the monitor” (Dulay, Burt Krashen, 1982, p.77), the high confidence shown by the students in this study that their incorrect responses were correct could mark them as monitor under-users. In other words, they may have a store of “learned” knowledge about spelling rules and patterns (which would surely not be unexpected at university level) but they do not make maximum use of this knowledge to edit their output. However, it is wise to bear in mind that my findings rest on the performance of a small group of Japanese EFL students and that care must be taken not to build too much on what are, after all, limited results. Indeed, extensive research is needed involving larger and more diverse samples of students to establish the concept of the monitor and its relationship to the learner's confidence on a more empirical basis.

To sum up, the findings of this paper involves what may be a very localized phenomenon whereby one particular group of EFL students has been shown to exhibit a well-marked tendency (over-confidence) about their accuracy in the performance of one skill (spelling). Further field work is obviously needed to ascertain the extent to which this tendency may be found in other groups and in other skills.

NOTES

1. These scores were obtained as follows:
   Percentage mean confidence score-average of the ratings for the group divided by the maximum theoretically possible rating score (i.e. number of words x maximum rating score, or 30 x 4) multiplied by 100.
   Percentage mean accuracy score-average number of correctly spelled words for the group divided by the number of words, multiplied by 100.

REFERENCES


Language Learning, 27, 93-108.

APPENDIX A Students’Instructions Sheet
Please read the following carefully
1) What you are about to do is part of a research project. It has nothing to do with grades or marks. The way you answer the questions will have no effect whatsoever on your grades for this or any other course.
2) On the attached page, you will find 30 sentences or phrases where you have to supply the missing word that you think best fits in the blank space. In some cases, the first letter(s) (and sometimes the last letter also) is written to help you guess what the word is.
3) Please try to put a word in each blank. Do not leave any not filled in.
4) This next step is very important for my research. For each of the words that you write in the blank spaces, write in front of each sentence:
   4) if you’re sure you’ve spelled the word correctly
   3) if you think the way you’ve spelled it is probably correct
   2) if you think the way you’ve spelled it is probably wrong
   1) if you’re sure you’ve spelled it wrong.
5) Writing one of these numbers is very important. Do not forget to do it, otherwise you’ll spoil the research project.
6) Thank you for taking part in this project.

APPENDIX B The Spelling Test
1) She bought the blue dress although her sister said that she pr________________ the red one.
2) It was r____________y difficult to understand what he was saying.
3) Students must work hard in order to pass th_________r exams.
4) When you feel t__________, you should go to bed.
5) I have known Mari for ten years. She is my best _________________.
6) Most people agree that Princess Diana was very b________________.
At the beginning of the lecture, the speaker gave a brief...n to his topic.
are fifteen students in the class.
He teaches at the university. He is a p...r.
Shinshu is known for its delicious soba n....
The committee did the topic for three hours.
In order to cure the patient, the doctor must give him the right m....
She has many c....s to wear since she became a fashion model.
The t....is getting more polluted each year.
The study of how the mind works, of mental health and mental illness is called
In the winter we like to go to the mountains to go s....g.
Please pay...to what I am saying.
When there are many things to c....from, it is sometimes hard to decide.
Okinawa has many nice b....s with white sand.
My father's brothers are my
We usually feel quite fresh at the b....of the new term.
Thirty-eight, thirty-nine,....
She is s....for her final exam right now.
The e....class was absent. Not a single student showed up.
For some sports you have to buy expensive clothes and e....t.
This summer we are pl....g to go to Hokkaido.
The green vegetable found in Yakisoba is called c....
The opposite of top is....
We c....d all the suitcases upstairs because the elevator was out of order.
I b....along a sandwich to the ballgame in case I got hungry.