A study of individual variability in second-language learners' performance in specific classroom tasks is presented as evidence that instruction in language for special purposes (LSP) has an important role to play. Subjects were 17 Singapore university students in a remedial English course; all had studied English since elementary school. The subjects performed four tasks: a language test; an essay; an interview; and a peer-group discussion. Performance on each task was analyzed for patterns of use of simple present, simple past, and present perfect tenses. Accuracy rates reflect variability in use of the tenses. Results indicate that the accuracy rate was highest for the discussion tasks, and lower for essay, interview, and language test, in descending order of accuracy. These figures suggest that use of tense/aspect varies across tasks. Further, contextual analysis of task performance looked at verb usage within four categories of context (verbal aspect, adverbials, serialization, implicit reference) for each task type. The verbal aspect category was found most problematic, followed by adverbials, serialization, and implicit reference in descending order. Overall, results indicate that context influences task accuracy rate, suggesting that LSP, which is context-based, is an important way to teach second languages. (MSE)
Introduction

To champion the cause of language for specific purposes is not a difficult task. At an age of political and economic globalization, the need for international understanding is all the more critical. Hence providing the support for courses which deal with communication in specific situations is necessary.

From the perspective of language research, interlanguage variability gives useful insights into how language functions in context. This paper presents the study of variability in the language of L2 learners performing specific classroom tasks. The results show that variation does occur in the language of an individual, and that it is caused by a complex array of factors which will not be considered in detail here. The outcome of this study is a clear indication that language use varies according to context. If language is taught for general purposes, it would mean a longer route for the learner to achieve success in his/her particular context. Perhaps certain language aspects may not even be made known to the learner if the specific context of language use is not taken into consideration. This study, thus, provides further reasons for the teaching of language for specific purposes.

Interlanguage Variability

The study of variability basically tries to understand the seemingly unsystematic behaviour of language that is produced by individual users of that language. In the process, the apparent deviations may be accounted for by various factors that can provide a systematic explanation for the variation. Although
there has been research into the unsystematic variation, for the purposes of this paper, it will not be considered.

Interlanguage variability is a vast area of research which initially investigated the subject from a sociolinguistic perspective. It was Labov's (1970) model for language variation that precipitated many variability studies (Dickerson 1974, Dickerson and Dickerson 1977, Schmidt 1977, Beebe 1980). His approach hinges upon the degree of attention that is paid to language that results in variability. These earlier studies focused on the phonological aspects of language. Basically, they found that phonological features varied according to linguistic context, and that generally, accuracy increased with greater attention paid to language. On the strength of their results, grammatical studies (Larsen-Freeman 1975, Tarone 1985) also examined the attention factor for its influence on variability. The variation patterns as found in Tarone's study are not as straightforward as in the phonological studies. Part results showed the reversed pattern of variation, that is, accuracy decreased with greater attention to language. The rest of her results did not have a definable pattern.

Clearly, the attention factor is an interesting consideration in variability, but certainly there is more to variation than this factor alone. Though the limitations to a strict focus on the attention factor is obviously not adequate (Rampton 1987, Parrish 1987, Tarone and Parrish 1988), it can still be useful as an elicitation tool for variability. By varying the amount of attention that is paid to language, the accuracy rates appear to vary accordingly. This factor is thus made use of in this study for this very purpose.

The Study

This study will be presented in two parts. Accuracy patterns are first established to determine if the attention factor in any way affects the accuracy rates of the tasks each subject has to do. Thereafter, contextual factors are analysed to account for the variation in accuracy.
Subjects
Seventeen Singaporean second-year university students with majors in the Science discipline were randomly selected from a remedial English course they were attending. Of the 17, nine were male and eight were female. They came from a background where Mandarin and/or one or more Chinese dialect(s) is/are used as a first language. They were aged between 19 and 24 years. All of them had been learning English since primary school but with varying amounts of classroom exposure to the language. Some learnt it as a foreign language, that is, English is used only during the period when it is taught, and Chinese is used as the medium of instruction for the other subjects. Whereas for the other respondents, English was the medium of instruction for all or most of the subjects apart from their English class. This difference in their school backgrounds is only one area of influence, and is assumed not to make much difference for two reasons. One, the subjects share in common their similar language backgrounds in the home and the social domains in which Mandarin and/or one or more Chinese dialect(s) is/are used. Two, their proficiency levels are similar as measured by a Qualifying English Test they had to sit at the start of their university education. Their grades made it necessary for them to attend the remedial English course.

Tense/Aspect
The simple present, simple past, and the present perfect are three tense/aspect forms examined in this study. Tense/aspect forms were used to focus this study on variability largely because the subjects found this grammatical item difficult to master. In a survey of ten essays written by students in a similar remedial English class, tense/aspect was found to have the highest error rate. The full range of verb tense/aspect forms were not used as it is difficult to elicit them under more or less natural circumstances.

Tasks
Each subject had to do four tasks: a language test, an essay, an interview, and a peer-group discussion. These tasks were administered in class over a three-week period. None of the subjects were aware that their performance in these tasks was to be used for research until they had finished doing them.
-Language Test-
The subjects were given two non-technical passages to do, to ensure that no one was disadvantaged by technical assumptions. They had to provide the appropriate tense/aspect for the given base verbs. Passage A has ten blanks and Passage B 13 blanks. There was no time limit for this task which was supposed to focus the subjects' attention strictly on language form.

-Essay-
The subjects had to write an essay on 'Matchmaking' in about 500 words. Since matchmaking was of topical interest at the time, it was effective in provoking strong reactions. The subjects could take as long as they needed to complete the essay in class. This task, although still a written activity, directed the attention to the entire discourse rather than just the language form.

-Interview-
The interview was conducted by a native speaker of Singapore English. To create a certain amount of tension for the subjects, in contrast with the next task along the attention continuum, the interviewer had to be a total stranger. The anxiety is assumed to increase the subjects' awareness of language form as well as content. Although the assumed formality may not be equated with more attention to speech, it is valid to say that the subjects were paying more than normal attention to their speech for two reasons. One, an interview situation focuses on the oral performance; and two, the tape recorder was placed in full view of the subjects to create a self-conscious awareness of their speech.

The interviews took between ten and twenty minutes each. The subjects were questioned on various topics that allowed them to talk freely about themselves and their experiences.

-Peer-group Discussion-
This task involved small groups of two to three either all male or female subjects. They were given an article to read and respond to. The small groups were asked to discuss their reactions amongst themselves
in preparation for a class discussion between the male and female groups. This took about half an hour. For the purposes of this study, only the small group discussions were used as data.

To ensure that this task represented an activity that required the least amount of attention to language form, the discussion was strictly amongst peers and the tape recording was kept discreet. Non-subjects who were disguised as note-takers for the discussion tape-recorded the session without the knowledge of the subjects. There was one such member for every small group. On completion, the subjects were told of the recording and permission to use the data was sought.

Procedure

The oral tasks were fully transcribed and the inaccuracies counted. As long as the tense/aspect form is inappropriate for the sentence it appears in, it is considered an inaccurate use of the verb form. Repetitions were omitted to prevent distortion of the data. In places where corrections were made, only the second or last verb form was counted. Where there was ambiguity in the phonological ending, e.g., manage(d) to, the word was omitted from the count. Only finite verbs were included, except for the modal auxiliaries. The other exceptions included formulaic expressions, imperatives, and not properly formed tense/aspect e.g. he given up.

Passive verbs were treated no differently from the active ones since the use of the passive changes the subject/agent relationship and not the tense/aspect meanings. Inaccuracies in voice alone were not considered errors for the purposes here. Similarly, with the progressive aspect, its semantic differences do not change with the different tense/aspect use. Hence, inaccuracies in using the progressive aspect were ignored for this study.
Results and Discussion

Accuracy rates are used to indicate the variability of the use of the three tense/aspect forms. The performance of the subjects on each of the four tasks is as follows:

<table>
<thead>
<tr>
<th>Task</th>
<th>Total No. of Verbs</th>
<th>Total No. of Errors</th>
<th>Error Rate %</th>
<th>Accuracy Rate %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language Test</td>
<td>379</td>
<td>106</td>
<td>28.0</td>
<td>72.0</td>
</tr>
<tr>
<td>Essay</td>
<td>568</td>
<td>43</td>
<td>7.6</td>
<td>92.4</td>
</tr>
<tr>
<td>Interview</td>
<td>2644</td>
<td>443</td>
<td>16.8</td>
<td>83.2</td>
</tr>
<tr>
<td>Discussion</td>
<td>1135</td>
<td>53</td>
<td>4.7</td>
<td>95.3</td>
</tr>
</tbody>
</table>

Table 1. Accuracy Rates for the Four Tasks

From the table above, the discussion task is the most accurate with 95.3%. This is followed by the essay with 92.4% and the interview with 83.2%. The language test has the lowest accuracy score of 72.0%.

These figures show a variable pattern in the same individual's use of tense/aspect across different tasks. The results indicate the effect of the type of language activity on the learner's output. The accuracy levels are not consistent for any one individual across tasks.

The attention factor which has been the basis for the design of the tasks appears to have only partially influenced the results. The pattern of accuracy is neither one that resembles the outcome of the phonological studies which have shown that more attention to language form is more likely to produce more target-like forms, nor vice versa which was apparent in Tarone's (1985) study. Two of the four tasks here are consistent with Tarone's findings. The language test which requires the most attention to language form has the lowest accuracy rate and the discussion task which supposedly requires the least...
attention to form has the highest accuracy rate. The essay and the interview, on the other hand, conforms to the reversed pattern. The essay which supposedly requires more attention to form than the interview is more accurate than the interview. This interesting outcome demands a mix of explanations to account for its lack of consistency. A contextual analysis of the tense/aspect use is explored in this study in the hope of it providing explanations for the variational pattern.

Contextual Analysis

In Schumann's (1987) study of temporality the baslang speech of five adult second-language learners, he found that a pragmatic analysis of his data was most telling of the way in which his subjects used language to express temporality. The functional categories of analysis he used are adverbial, serialization, implicit reference, and calendric reference. For the present study, these categories are adopted, though with some modification. The adverbial category is combined with calendric references to form one category. Serialization and implicit reference categories are adopted as they are. A new category, verbal aspect, is added. These modifications offer a better coverage of the situations found in this study. A more detailed description of each category is given below.

1) Verbal Aspect
This category applies mainly to the present perfect which behaves differently from the simple present and simple past forms. The temporality of the present perfect is governed by the conditions of the verb rather than by the context. It is generally accepted that it has limited retrospection (Quirk et al 1972) which means looking back from the point of NOW. This quality of limited retrospection or perceived present relevance seems to be integral to perfect aspect. It does not require temporal adverbials or contextual cues to set the time although these can provide additional restrictions on the time reference.
2) Adverbials

This category refers to temporal adverbials alone, including calendric references. The adverbial governs only one clause at a time.

3) Serialization

This occurs when the temporal reference point is fixed by the sequence of events and is reflected in the actual temporal order of reported events.

4) Implicit Reference

This category applies when the time frame is inferred from a particular context or situation. It includes references to knowledge of the world, shared knowledge between speaker and listener, writer and reader, on-going discussion of a topic, and any other reference to events or states not directly mentioned in the clause. This category does not apply to a 'serialised' verb.

These contextual categories are used to assess the verb accuracy rates in each task and the results are given in the table below.
### Table 2. Error Rates of Verbs used in the Contextual Categories for the Four Tasks

<table>
<thead>
<tr>
<th>Pragmatic Category</th>
<th>Used</th>
<th>Wrongly Used</th>
<th>*</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Language Test</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Essay</td>
<td>81/379</td>
<td>48/81</td>
<td>59.3</td>
<td>2</td>
</tr>
<tr>
<td>Interview</td>
<td>74/2688</td>
<td>32/74</td>
<td>43.2</td>
<td>3</td>
</tr>
<tr>
<td>Discussion</td>
<td>27/1135</td>
<td>22/27</td>
<td>81.5</td>
<td>1</td>
</tr>
<tr>
<td><strong>Adverbial</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Essay</td>
<td>117/379</td>
<td>41/117</td>
<td>35.0</td>
<td>1</td>
</tr>
<tr>
<td>Interview</td>
<td>55/568</td>
<td>5/55</td>
<td>9.1</td>
<td>3</td>
</tr>
<tr>
<td>Discussion</td>
<td>193/2644</td>
<td>65/193</td>
<td>33.7</td>
<td>2</td>
</tr>
<tr>
<td><strong>Serialization</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Essay</td>
<td>291/568</td>
<td>24/291</td>
<td>8.3</td>
<td>2</td>
</tr>
<tr>
<td>Interview</td>
<td>1261/2644</td>
<td>231/1261</td>
<td>8.1</td>
<td>1</td>
</tr>
<tr>
<td>Discussion</td>
<td>445/1135</td>
<td>14/445</td>
<td>3.2</td>
<td>4</td>
</tr>
<tr>
<td><strong>Implicit Reference</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Essay</td>
<td>100/379</td>
<td>13/100</td>
<td>13.0</td>
<td>1</td>
</tr>
<tr>
<td>Interview</td>
<td>84/568</td>
<td>9/184</td>
<td>4.9</td>
<td>3</td>
</tr>
<tr>
<td>Discussion</td>
<td>1116/2644</td>
<td>117/1116</td>
<td>10.5</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>652/1135</td>
<td>16/652</td>
<td>2.5</td>
<td>4</td>
</tr>
</tbody>
</table>

* Ranking within each pragmatic category for the percentages of wrongly used verbs for the four tasks.

# Ranking across the pragmatic categories for the percentages of wrongly used verbs for each of the four tasks.

(1=highest 4=lowest)

Table 2. Error Rates of Verbs used in the Contextual Categories for the Four Tasks

Table 2. gives a rough indication of how the categories might influence the accuracy rates of the tasks.

They show that (referring to #):
1) the verbal aspect category is indeed the most problematic with the percentages of wrongly used verbs being the highest for all the four tasks.

2) the adverbial category is clearly the second most problematic. It has the second highest percentages for all the tasks.

3) serialization has the third highest percentages for wrongly used verbs in the essay, interview and the discussion, and the lowest for the language test.

4) implicit reference, has the lowest percentages for wrongly used verbs in the essay, the interview and the discussion, and third lowest for the language test.

To confirm or reject the ranking of the contextual categories for the four tasks, two statistical procedures are used. The first is a one-way analysis of variance (ANOVA) followed by a multiple comparison of means to give the confidence level for the degree of difference between the means.

An analysis of variance of the data is set out below:

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>sum of squares</th>
<th>degrees of freedom</th>
<th>mean square</th>
<th>F-ratio (observed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between treatments</td>
<td>15291.0457</td>
<td>3</td>
<td>5097.0152</td>
<td>29.08</td>
</tr>
<tr>
<td>Within treatments</td>
<td>11217.7103</td>
<td>64</td>
<td>175.2767</td>
<td></td>
</tr>
<tr>
<td>Total about the grand average</td>
<td>26508.7560</td>
<td>67</td>
<td>39.5087</td>
<td></td>
</tr>
</tbody>
</table>

F-ratio (observed) = 15291.0457 / 11217.7103 = 29.08

Table 3. The ANOVA Table
Having established that there are treatment effects, a multiple-comparison procedure is needed to show the degree of difference each contextual category has on the accuracy rates. The Duncan multiple range test is used for this procedure.

The results are given below:

Alpha (significance level) = 0.05

Degree of Freedom = 64  Mean square error = 175.277

Means with the same letter are not significantly different.

<table>
<thead>
<tr>
<th>Duncan Grouping</th>
<th>Mean</th>
<th>N</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>45.084</td>
<td>17</td>
<td>1 (Verbal Aspect)</td>
</tr>
<tr>
<td>B</td>
<td>25.196</td>
<td>17</td>
<td>2 (Adverbial)</td>
</tr>
<tr>
<td>C</td>
<td>9.113</td>
<td>17</td>
<td>3 (Serialization)</td>
</tr>
<tr>
<td>C</td>
<td>8.202</td>
<td>17</td>
<td>4 (Implicit Reference)</td>
</tr>
</tbody>
</table>

Table 4. The Multiple Comparisons Table

The groupings clearly show that Verbal Aspect has the greatest influence over the error rates in the tasks with the highest mean value of 45.084, followed by the Adverbial with 25.196. The C groupings show that Serialization and Implicit Reference are not significantly different as the means are very close, but together they represent one category with a similar degree of influence over the error rates.

The results for these contextual categories when related to the tasks can provide a meaningful explanation of the accuracy rates.

1) Language Test

This task has the highest percentage of wrongly used tense/aspect forms. This may be attributed to the high percentage of verbal aspect categories (21.4%) and adverbials (30.9%), relative to the other tasks.
With the high concentration of these two categories in the language test, it is understandable that this task has the lowest overall accuracy rate.

2) Interview
This task with the third highest accuracy rate has the second highest percentages of serialization (47.7%) followed by the implicit reference category (43.2%). The percentages of wrongly used verbs in these two categories are the highest (18.1% and 10.5 respectively). Only a small percentage of verbal aspect and adverbial categories were used.

3) Essay
The essay has the second highest accuracy rate. The category with the highest percentage used is serialization (51.2%) followed by the implicit reference category (32.4%). The verbal aspect and the adverbial categories constitute only a small proportion of the verbs used.

4) Discussion
The discussion task is the most accurate. The percentage for implicit reference is the highest (57.5%) for verbs used and for verbs wrongly used, it is the lowest (2.5%). Serialization has the third highest used (39.2%) but the lowest wrongly used (3.2%). Also for this task, verbal aspect and adverbial categories were hardly used.

It is clear that the contextual function of tense/aspect is an important consideration in explaining the accuracy rates of the learner's performance on the four tasks. The most significant correspondence between the contextual categories and the tense/aspect forms is seen in two of the tasks: the language test and the discussion. The low accuracy rate for the language test is influenced by the frequent occurrence of verbal aspect and adverbial categories. Conversely, the high accuracy rate of the discussion task is influenced by the low occurrence of these same categories.
As for the other two tasks, the essay and the interview, their differences are not easily explained. Both these tasks have a greater number of serialization and implicit reference categories than verbal aspect and adverbial categories. From the multiple comparisons table, serialization and implicit reference categories belong to the same group with a similar degree of influence over the accuracy rates. Hence even these contextual categories cannot account for the accuracy pattern. Other overriding factors must come into play. This could include a host of other factors such as mode difference, planning time, discourse structure, and topic differences, which will not be considered in this paper.

Implications for LSP

The results from this study reveal two important points. One, there is no doubt that the individual language user produces variable language output depending on the activity s/he is involved in. This is especially so with L2 learners since they are still in the process of language discovery. It is more difficult to establish what the learner has learnt and what s/he does not know, or what s/he does know but does not consistently use. Hence, this brings me to the second point concerning the context.

The variability found in this study shows the influence of the context over the accuracy rates of the tasks. The many factors found in the situation in which the language is produced all contribute to the output, though in varying degrees. While the attention factor is significant at the two extreme cases of the attention continuum, the contextual categories also play a part. However, they alone cannot account for the entire variability pattern.

If this micro aspect of language, the tense/aspect forms, is so governed by the context of use, more so are the macro areas of language. In teaching language to L2 learners, it makes sense to consider the context of use to help the learner understand the needs of the situation in order to cope with the language learning process. From the study of variability, it seems that some of the difficulty the learner may have may not be that of general proficiency, but that of specific proficiency needs within specific contexts of
use. Identifying specific areas of difficulty for the learner is a faster and more direct way of dealing with his/her needs. The language demands of one context would be different from another context, especially those found in the workplace. Even within the same context, it is useful to anticipate difficulty in specific sections, for example, the use of tense/aspect in the discussion section of a report.

With the context of use in mind, LSP courses should be better designed to meet the needs of the language user. This, of course, does not apply just to L2 users but to L1 as well. For the latter, it is not a question of proficiency but appropriacy of language choice. If this is specifically dealt with, the whole process of learning to communicate effectively in any given situation becomes more efficient.

Conclusion

This study of language variation has shown that language varies with the context of use. The accuracy patterns of one grammatical item, tense/aspect, have provided an indication of the complex ways in which language responds to the context. To account for the pattern has involved considering the attention factor and contextual categories. Even these factors alone do not fully account for the pattern. Nevertheless, it is clear that variation is an inherent part of language use. With this are implications for LSP courses, both in the design and the teaching of such courses. The need for LSP courses that take into consideration the intricacies of contextual language use is all the more urgent in our modern world.

REFERENCES


