A small-scale study at a British university investigated two issues: the effect of task familiarity on language production; and the effects of the task on oral production. Three university students of differing language backgrounds, all non-native speakers of English, were interviewed in autumn and again 3 months later. On both occasions they were asked a range of general questions about their studies and reasons for choosing the university. In the first interview they were also asked to describe a short picture story, and in the second they were asked to recount the old story and a new picture story. Changes in the performance on the first story were analyzed for whether they: (1) could be attributed to knowledge of the first story; or (2) were also reflected in performance on the second story. Analysis looked at pauses (filled and unfilled), repairs, vocabulary complexity, and syntactic complexity. Results indicate that one student seemed largely immune to all effects of familiarity except in clause subordination. That student improved mainly in linguistic complexity, another improved only in fluency, and the third improved in both areas, suggesting different patterns of oral development. (MSE)
DIMENSIONS IN THE ACQUISITION OF ORAL LANGUAGE

Martin Bygate
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Introduction

This paper is a preliminary exploration of two questions: what is the effect of task familiarity on language production; and, more generally, in what ways does oral production on a given task improve? It reports a small pilot study for a larger investigation as part of the Oral Language Proficiency Project under way at Reading.

Curiously, although there has been enormous expansion in second language acquisition studies over the last twenty years, little attention has been paid to task-based development. Research in the seventies concentrated largely either on ethnographic studies aimed at understanding communicative competence, or on understanding child language acquisition. Since the early eighties, a major development in the context of language teaching and applied language studies has been to explore the nature of language use on specific tasks (cf. Brown & Yule, 1983; Bygate, 1987, 1988; Faerch & Kasper, 1983; Long & Porter, 1985). While the focus of these studies (and others) has quite rightly emphasised the patterns of language use, most writers have also recognised the need to widen the focus to study the nature of task-based development (eg. Long, 1989), since what matters most to us as teachers is the relationship between task and language development. This relationship is the focus of the present paper.

1.1 Previous Studies

Child language acquisition studies have already to some extent pursued this line. Snow (1987) studied the use of language in typical contexts (of explanation and definition) while Bruner (1983) reported a major project on the role of recurrent context in early child language acquisition. This field constitutes a rich variety of directions to explore in second language acquisition. The present paper limits itself to a consideration of the nature of improved performance on a given task, and the
extent to which this can be attributed to the familiar "task-practice" effect. Improvement here will be investigated on two dimensions - quantitative formal measures; and a small number of measures of fluency.

Various writers have explored characteristics of oral production on given tasks, although not from a developmental point of view. Long & Porter (1985) reviewed studies exploring the relationship between the incidence of negotiation of meaning and task type. Anderson (1985) reported a study in which task type influenced both listener involvement and speakers' performance. Faerch & Kasper (1983) included a range of studies focusing on L2 performance in which tasks are the independent variable. Most of those studies however were attempting to develop an inventory of strategies used in an arbitrary range of tasks. In a more controlled study, Poulisse & Schils (1989) reported a task effect in the use of communication strategies.

The negotiation of meaning and communication strategies are not however the only areas of interest for task-based research. In L1 studies, Tannen (1980) reported differences between the way Greek and American speakers carry out a narrative task. Using the same task as Tannen, Chafe (1980) analysed linguistic features of fluent production of L1 spoken discourse.

Such work has been less frequent in L2 studies. However, Dechert (1983) reported the performance of a non-native speaker describing a picture story from the point of view of the speaker's fluency. Lennon (1990) provides a rare developmental study, specifically of non-native speaker fluency, in which however the task type is uncontrolled conversational interaction. It could be argued that such studies are of potential use for an understanding of the dimensions of the development of fluency, but they are nevertheless some distance from applicability in teacher intervention. It is because tasks are a key element of teacher intervention (see Long, 1989; Nunan, 1989) that it seems of particular interest to observe how language performance develops, with the task being the controlled variable.

1.2 Effects of Task Familiarity

A well-known paper by Goldmann-Eisler (1961) reported the effect on pausing of the preplanning of a story-telling task. Goldmann-Eisler was able to show reduction in the amount of pausing as speakers were allowed more planning time. A more general argument concerning the nature of what might be called the practice effect has been proposed by Elinor Ochs (1979). The distinction between spoken
and written language, she argues, is less illuminating than that between planned and unplanned speech. The characteristics of planned speech are closer to those of written text, with fewer editing features and, as Goldmann-Eisler showed, probably with less pausing. It could therefore be argued that one of the factors promoting proficient performance (which would include fluency) would be familiarity with the task.

The argument would illuminate the foreign language learner's experience in various ways. For one thing, familiarity with a task would mean that a learner would have less work to do in planning the message. Familiarity with the information to be communicated would reduce the work involved in planning individual messages. And familiarity with its organisation would in principle improve overall planning and execution. The effect would be to improve performance.

There may be two major effects of task familiarity. One effect might be greater fluency. Alternatively, if fluency were not gained, there might be a gain in accuracy or in lexico-grammatical range. The question then is, how does performance improve, and does performance on a given task improve in the same way as performance on other tasks at the same point in time? Answers to questions of this sort could be expected to be of interest to teachers and testers, since such information would help to predict the kind of effect on performance of carrying out familiar rather than unfamiliar tasks. Teachers as well as testers could use this information in selecting tasks. This approach could also contribute to our understanding of language use. These then are the purposes of the study reported in this paper.

1.3 Focus on Analysis

Two important areas of interest in oral language performance are the language used, and the fluency of production. A number of measures of performance have been used in the past.

With respect to the language produced, development could be looked for in the overall organisation of the discourse (eg. narrative or descriptive structure, cf. Linde & Labov, 1975); in the syntactic units employed by speakers (eg. T-units or c-units, cf. Crookes, 1990; sentence complexity cf. Crystal, Fletcher & Garman, 1976); in the range of expressions and lexical items (range of vocabulary); in the incidence of
ammatical error; and in the ability to handle on-line problems of expression communication strategies). A thorough attempt to understand language development would need to take account of all these dimensions. This report will limit its observations to a discussion of complexity in vocabulary range and complexity in clause-structure. The assumption would be that a person repeating a familiar task would be more likely to demonstrate more complex language: a wider range of vocabulary, more subordinate clauses, and greater clausal quantity than when doing an unfamiliar task.

Fluency can be identified through analysis of the incidence of pausing, and rough the occurrence of repair (see Lennon, 1990, for a similar approach). It could be worth considering for a moment how fluency might be seen to develop with task familiarity.

Dechert (1983) suggests that speakers develop particular sequences of language which are uttered with greater fluency and less pausing, which he terms "islands of liability". In his view, the speaker may have difficulty marshalling language to move from one area to another, and the transitions are marked by greater pausing and hesitation. Dechert's task is the one used in the present study.

It should be stressed here that it is in no sense our view that pausing is a mark of non-native speaker dysfluency and therefore something to be eradicated from native language. Beattie (1980), examining native speaker recordings, suggested that in certain kinds of oral performance (tutorials), speakers will alternate between fluent and dysfluent passages of speech. However, the explanation provided by Beattie for the dysfluent sections is not that these indicate inadequate proficiency but rather the fact that at certain points in the discourse, speakers need to undertake general long term ("distal") message planning. Once the speaker has sorted out the direction of the message, fluent speech can be resumed. Thus, as Fulcher (1987) points out, hesitation and pausing is characteristic of native speaker talk. However, since pausing can be seen as a function of the planning load, the effect of task-familiarity on pausing in non-native speech is worth some study.

Indices of increased fluency may take different forms. For our present purposes we will limit our observations to the amount of pausing, and the amount of self-repair, the prediction being that both pausing and self-repair would decrease, at least up to a point, with increasing task familiarity (see Lennon 1990 for a contrasting finding).
2. The Study

A pilot study was set up at the University of Reading to examine the effects on performance of repeating a task. Non-native students were interviewed in Autumn 1990 (Time 1) and then again three months later (Time 2). Subjects were students of different language backgrounds who were studying on preparatory EAP courses at Reading. They were interviewed by experienced native-speaker interviewers. On both occasions the students were asked a range of general questions about their studies and reasons for choosing Reading as a suitable place for higher academic work, and were then asked by their interviewer to describe a short picture story used in Dechert 1983. On the second occasion, when the first story was familiar to them, the students were also asked to recount a new picture story. Interview sessions were audio- and video-recorded, and the recordings transcribed and analysed.

Comparisons were made between students’ performance on story 1 at times 1 and 2, and between their performances on stories 1 and 2 at time 2. Four subjects were selected from a larger sample for this initial report. The purpose of the study then is to see whether any changes in the telling of the story 1 by time 2 are attributable to familiarity with the story, or whether those changes can also be found in the telling of story 2.

2.1 Units of Analysis

The transcripts were analysed using the following measures.

1. Individual pauses: filled, unfilled:
   instances of consecutive filled and unfilled pauses count as a single unit of dysfluency - the argument being that filling is simply a way of extending a pause; this will contribute to the total amount of pause time but will not reflect the number of decision points; pausing is therefore taken as an indication of the number of selection or access problems encountered by the speaker.

2. Repairs including:
   false starts, repetitions of words or utterances, incomplete fragments, redundant repeated words are counted individually - this reflects the speaker’s uncertainty about the lexical decision; a repetition of a word may occur in order to maintain discourse coherence both for speaker and listener where the speaker has paused
and not found a more suitable lexical item; such a repetition may not have the same function as repetition without a preceding pause which may simply be providing thinking time before producing the following string; nonetheless pause+repetition can reasonably be interpreted as a mark of dysfluency since it signals the need to recover coherence in the interlocutor’s short-term memory in the case of a word change, the dysfluency is in the speaker’s slow and inaccurate lexical accessing. Whole utterances are counted as single units of dysfluency where they repeat or rephrase a message which was already expressed in an immediately preceding sequence of discourse (individual words are not counted, even though it could be that the longer the repetition the more covert planning time may be being created); repetitions are not taken into account where these occur at other points in the discourse with a different discourse function.

3. Vocabulary complexity:
   type: token ratio was calculated in this study using number of fluent words as the total number of tokens.

4. Syntactic complexity:
   syntactic complexity was gauged by calculating the ratios of:
   a) total number of words to the number of finite clauses;
   b) number of subordinate clauses to the number of main clauses;
   c) the total number of clauses.

2.2 Hypotheses

The Hypotheses were as follows:

H1 There would be fewer indices of dysfluency as identified under section 2.1.2 above in the retelling of story 1 than on the two tellings in unfamiliar mode (story 1 at time 1, and story 2)

H2 There would be a wider range of vocabulary items, and greater syntactic complexity as measured by incidence of main and subordinate finite clauses, in familiar mode than in unfamiliar mode.
3 Results

Results on the two sets of measures are presented in Tables 1 and 2.

Table 1: Comparison of fluency measures on the three tasks

<table>
<thead>
<tr>
<th></th>
<th>TASK 1(1)</th>
<th>TASK 1(2)</th>
<th>TASK 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratio pauses:</td>
<td>S1 .40</td>
<td>.24</td>
<td>.22</td>
</tr>
<tr>
<td></td>
<td>S2 .27</td>
<td>.11</td>
<td>.23</td>
</tr>
<tr>
<td></td>
<td>S3 .18</td>
<td>.19</td>
<td>.10</td>
</tr>
<tr>
<td>no. of words</td>
<td>S1 .42</td>
<td>.17</td>
<td>.38</td>
</tr>
<tr>
<td></td>
<td>S2 .13</td>
<td>.07</td>
<td>.12</td>
</tr>
<tr>
<td></td>
<td>S3 .09</td>
<td>.09</td>
<td>.08</td>
</tr>
<tr>
<td>Total</td>
<td>S1 .82</td>
<td>.41</td>
<td>.60</td>
</tr>
<tr>
<td></td>
<td>S2 .40</td>
<td>.18</td>
<td>.35</td>
</tr>
<tr>
<td></td>
<td>S3 .27</td>
<td>.28</td>
<td>.18</td>
</tr>
</tbody>
</table>

Table 2: Comparison of complexity measures on the three tasks

<table>
<thead>
<tr>
<th></th>
<th>TASK 1(1)</th>
<th>TASK 1(2)</th>
<th>TASK 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocab ratio</td>
<td>S1 .63</td>
<td>.65</td>
<td>.63</td>
</tr>
<tr>
<td>type:token</td>
<td>S2 45</td>
<td>.34</td>
<td>.44</td>
</tr>
<tr>
<td></td>
<td>S3 .36</td>
<td>.32</td>
<td>.31</td>
</tr>
<tr>
<td>Clause ratio</td>
<td>S1 6.0</td>
<td>6.00</td>
<td>6.55</td>
</tr>
<tr>
<td>no. words:</td>
<td>S2 .07</td>
<td>7.28</td>
<td>6.86</td>
</tr>
<tr>
<td>no. clauses</td>
<td>S3 7.60</td>
<td>6.73</td>
<td>6.00</td>
</tr>
<tr>
<td>Clause ratio</td>
<td>S1 .08</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>subord: main</td>
<td>S2 .08</td>
<td>.29</td>
<td>.14</td>
</tr>
<tr>
<td>clauses</td>
<td>S3 .07</td>
<td>.50</td>
<td>.12</td>
</tr>
<tr>
<td>No. of clauses</td>
<td>S1 14</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>S2 15</td>
<td>22</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>S3 15</td>
<td>20</td>
<td>21</td>
</tr>
</tbody>
</table>
3.1 Interpretation and Discussion

3.1.1 Hypothesis 1

Hypothesis 1 would predict lower ratios on Task 1(2) than in the other two columns in Table 1. The total figures do indeed tend to support this hypothesis for Students 1 and 2. Student 3 however goes against the trend. Her ratios are virtually the same for task 1(1) and 1(2), and both are higher than for task 2. That is to say, she is more fluent on task 2 with which she is unfamiliar. Student 3 may differ from the other two students in terms of general proficiency, and we might note that she is from Sri Lanka where English is widely used as a second language. The other two students are from EFL backgrounds. In their case, fluency is highest in the familiar mode (ie. task 1(2)).

Students 1 and 2 perform consistently more fluently on tasks 1(2) and 2 than on 1(1), both with respect to a decrease in repair and in pauses. While we can of course make only the most tentative of remarks about these results, they first suggest an overall improvement over the 3 month period. It is worth noting that in the case of Student 1, the improvement with respect to pausing appears to be generalised in the same strength from familiar to unfamiliar tasks. However, for Student 1 on pauses, and both Students 1 and 2 on repairs, the increase in fluency is very limited on the unfamiliar task. In other words, there is some evidence not only to support the hypothesis that fluency will be positively influenced by task familiarity, but also to suggest that learning will be potentiated by familiarity of task.

3.1.2 Hypothesis 2

A second way in which task familiarity could be expected to influence performance is in the increase of linguistic complexity. Hypothesis 2 allows for the fact that the degree of increase in complexity may be enhanced by task familiarity. It remains an open question whether fluency and complexity improve simultaneously. It could be that one would improve at the expense of the other.

Taking the results student by student, Student 2 improved in complexity on all measures on both familiar and unfamiliar tasks at time 2, with the exception of vocabulary type-token ratio. (Indeed one might note at this point that the type-
token measure of vocabulary range, does not reveal any notable trend in improvement for any of the students. This could be because no improvement took place in vocabulary range or because this is not a sufficiently sensitive measure for this purpose.) In addition, Student 2 showed a notable familiarity effect on task 1(2) which is consistent with hypothesis 2. This student appears to have improved therefore both in terms of fluency and linguistic complexity.

It is striking that Student 3 becomes more economical in terms of words over the three tasks, while at the same time improving in the number and complexity of clauses. A familiarity effect may have been responsible for the high incidence of subordinate clauses in task 1(2). The suggestion might be that this learner has improved principally in terms of syntactic performance.

Finally, with regard to Student 1, we note a lack of improvement in terms of linguistic complexity on all of the measures in table 2. This suggests that this student’s improvement can be largely located in her increased fluency.

Conclusion

Two main suggestions could be made on the basis of this preliminary study. All relate to possible differences between learners. First of all, Student 3 seems largely immune to the effect of familiarity in all except clause subordination. The other two students on the other hand do seem to respond to the familiarity of the task.

Secondly, we would note that while Student 3 seems to improve mainly in terms of linguistic complexity, Student 1 seems to improve only in terms of fluency, and Student 2 seems to improve on both sets of measures. This suggests that there could be at least three different patterns of oral language development; in fluency, in linguistic complexity, or in both.

Various other variables will need consideration. For one thing, is there a ceiling effect on a given task; at what point does maximum fluency set in? A further point concerns the possible effects of more concentrated practice resembling the kind provided by teachers. And finally it remains to be seen what results will emerge from the study of a larger sample.
REFERENCES


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