

# TRAINING TEACHERS FOR CALL—SOME OBSERVATIONS

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The Institute of Language in Education is running an in depth induction research project into the feasibility of implementing CALL in local secondary schools. We are investigating the roles computers can play in language learning/teaching and the environments favourable to the introduction of computer use in a language classroom.

The investigation breaks down into several stages. Phase one is the basic training of language teachers. This includes an introductory course on CALL, followed by a series of thematic workshops. Phase two is visits to schools which show interest in this project, to offer on-site technical service and consultation. The last phase will be actual classroom observations. Of course these are not strict sequential stages. Up to this moment, we have experienced all three stages though not on an extensive scale.

In this paper, I would like to present some of the observations that we made during an Introductory CALL Workshop held in summer 1987. The two-week workshop we offered was conducted to prepare the teachers with the necessary experience and skills that would enable them to experiment with computer use in their language classrooms.

The objectives were:

1. to provide computer literacy sessions for the language teachers;
2. to arouse teacher awareness of the potential of computer use in ELT;
3. to boost teachers' confidence in using the machines as a teaching aid, if not as a partner;
4. to explore the possibility of and ways of integrating available computer resources into the curriculum;
5. to build the teachers' confidence in their ability to operate the hardware;
6. to expose them to the different possibilities of computer use in language teaching.

The workshop was organised thus:

Word-processing	7 hrs
Software evaluation	8 hrs
Talks & Demonstrations	22 hrs
Workshops & Discussions	8 hrs

Apart from the word-processing programme which was fundamental to the workshop and had to be run in the first two days in a very structured way, the rest of the component parts were interwoven. The time for software evaluation was honestly not enough. We selected some 45 pieces from our library of software for this, based on these criteria:

1. they would provide a full range of different language activities;
2. they were of varying quality and potential;



3. they could inspire creativity and imagination in classroom situations.

The participants felt that they did not have enough time to go through a reasonable number of items from the list.

Whether CALL can find its place in school depends very much on teachers' perceptions of and attitudes to using CALL programs. In other words, their methods of conducting a CALL lesson. That is why we asked our participants to design lesson plans. The main purpose was to encourage teachers to think creatively about what a program could be used for; therefore, our strategy was to stimulate the teachers' imagination and not to guide them with our own ideas.

By the end of the Workshop, we had 30 lesson-plans finished and were very much impressed by the effort and patience the participants demonstrated. I know it is unfair to analyse and comment on lesson-plans designed by teachers with no practical CALL experience. On the other hand, we understand that there is no accepted 'CALL methodology', so the whole exercise was beneficial to both parties concerned as an exploration.

The following are what I would consider misconceptions that teachers showed from the lesson-plans they devised:

### **On CALL software**

Of the 45 pieces of software we prepared for them to explore and to view for their respective pedagogical potential, the participants tended to confine themselves to the handful which they as teachers felt attractive. They spent so much time concentrating on certain types of programs that it became quite embarrassing constantly urging them to move onto some other pieces that we thought might give them a better perspective.

Only eight different programs were used in the lesson plans. All except one are what we know as dedicated language-learning programs. This suggests that the participants were too much bound by the belief that language-learning should be tied down to explicit practice of the language. So what they were looking for were the kinds of programs which would parallel the practice or test mode of their textbooks. They termed a program 'good' if they could identify the textbook image on the screen. This explains the enthusiasm for using the handful of programs we label the Hong Kong Polytechnic CALL Suite (11 out of 30) and Matchmaster (8 out of 30). Of course, there can be no objection to using any one type of program, but the danger is failing to look for what a program can do that a teacher cannot do, which I think is the real breakthrough that CALL can offer.

The outcome of this might be that teachers would become too software dependent and would link the feasibility of implementing CALL to the availability of 'good' programs. This I would argue is the passive side of this innovation.

### **On the humanistic nature of CALL**

The teachers tended not to see the humanistic potential of CALL software. During the workshops and software evaluation sessions, few participants



showed interest in experimenting with simulations and adventures, either out of their own interest or in connection with language teaching. In discussions with them, the impression I got was that simulations or adventures were seen as fun in their own right, but the teachers couldn't see the genuine language that such software can foster.

I strongly suspect that is because they are too much tied down by the school curriculum and so much 'inside' that environment that they fail to see that if students enjoy a certain language activity, chances are that they'll be doing a lot more learning 'on the side' than either party will be aware of. Perhaps a bit of the Summerhill spirit is what is needed—having confidence in the students as well as in oneself.

### **On hardware**

Many teachers felt that they couldn't conduct a CALL lesson because there wouldn't be enough machines for a class. They had the impression that CALL could only be implemented if each student could have a machine to himself. The language laboratory pattern of one machine to a student is the one they have in mind when imagining the use of computers in a language class.

Another reason for this might be that they couldn't see the difference between computer use and the use of textbooks and/or pen and paper.

Quite a number of the teachers explicitly expressed concern that without the presence and assistance of the computer teacher, they would not dare to operate the machines in front of the students. This is perfectly understandable as all of them were language teachers with hardly any technical background.

### **On pedagogy**

Many of the teachers seemed confused about just what computers can and cannot do. I tried to tackle this point from the lesson objectives and language content the teachers defined with relation to the development of the lessons themselves. It was rather difficult to look for a classifiable set of language aspects that the bulk of the participants wanted the computer to give a hand with, especially as the professional background of the group varied a great deal. A study in Canada showed that vocabulary, spelling and grammar contribute the major linguistic aspects addressed in CALL and they are mainly handled in the reading and writing mode. From the objectives and language contents of the lesson plans, I've drawn up a very much generalised table, (Figure 1) that shows agreement with these findings. But if one looks at the way the lessons are meant to be executed, there is a strong suggestion that participants were using the CALL software because they had been instructed to do so. Sometimes they failed to grasp the precise nature of what the program could do for them. For instance, a teacher suggested using a sample file in "Helter-Skelter" and defined the lesson objective as "at the end of the lesson, the students will be able to discriminate the 'e' sound in 'pepper', 'ay' in 'paper' and 'ee' in 'seat' ". That



seemed perfectly all right until one found the teacher required the students to say the words as they appeared on the screen to each other, and the teacher himself walked around to listen for mistakes!

Such misconceptions arise if a teacher is not clear of his own role and that of the computer's. I remember an illustration Mr. John Higgins gave in a talk at Lancaster University. He compared the role of the computer to the ancient Greek slave called a pedagogue. A pedagogue then was an educated slave taking care of his master's children. He was the bodyguard, the playmate, the tutor. His role was to amuse, to help and even to teach his young master. But he was never to initiate. He came only if he was called. He retreated once his task was finished. That I think is the way one should consider computer use in a language class. No more than as a 'slave' to learning.

<i>Program</i>	<i>Language aspect/skill</i>	<i>Mode</i>	<i>Level (Form)</i>	<i>Activity</i>
<b>H.K. Polytechnic CALL Suite:</b>				
Sequencer	Vocabulary	Reading	1	Pair
Gapper	Vocabulary	Reading	4	Group
Sequencer	Discourse	Reading	6	Group
Scrambler	Coherence	Reading	1	Group
Gapper & Scrambler	Vocabulary	Reading	1	Group
Gapper	Vocabulary	Reading	1	Group
Gapper	Grammar	Reading	1	Individual
Scrambler	Coherence	Reading	4	Group
Prepositions	Grammar	Reading	5	Group
Articles & Auxil. & preps	Syntax	Reading	4	Group
Sequencer & Gapper	Grammar	Reading	1	Group
<b>Matchmaster</b>				
Matchit	Coherence	Reading	5	Pair
Matchit	Coherence	Reading	5	Group
Matchit	Comprehension	Reading	3	Pair
Matchit & Gapper	Grammar	Reading	4/5	Group
Matchit & View	Integrated	Reading/W	3	Pair
Matchit	Vocabulary	Reading	5	Group
Matchit	Grammar	Reading	4	Pair
Snap	Discourse	Reading	6	Pair
<b>Helter-Skelter</b>				
Odd Man Out & Cloze	Vocabulary	Reading	1	Individual
Odd Man Out	Vocabulary	Reading	1	Individual
Helter-Skelter	Vocabulary	Reading	1	Group
Odd Man Out	Pronunciation	Reading	1	Pair
<b>Pinpoint</b>				
Pinpoint	Comprehension	Reading	4/5	Group
Pinpoint	Comprehension	Reading	2/3	Individual
<b>Best Four (Language)</b>				
Face Maker	Grammar	Writing	3	Group
Face Maker	Grammar	Writing	1	Individual
<b>Textplay</b>				
Space Out	Dictation	Writing	2	Group
<b>Sentence Sequencing</b>				
	Grammar	Reading	2	Individual
<b>ABC</b>				
	Composition	Writing	3	Pair

Figure 1



### **On authoring facilities**

Most of the software the participants suggested using comes with an authoring facility, which means teachers can type in their own text files to be used by the program. Of the 30 lesson plans, 28 contained text files keyed in by the participants. This I would suggest is a good sign. But indiscriminate use of the facility lays one open to the criticism the participants themselves made during the two weeks: what's the point of using this expensive equipment if the same job can be done with pen and paper?

I raise this point because there were quite a number of participants tempted by this facility who simply transferred a whole exercise or text from the textbook onto the computer screen. Such classroom activities tended to be designed in the strict "drill and practice" style, making one wonder if the lesson could have better been executed without the computer at all.

It was interesting that one teacher in his lesson plan argued that students would be motivated by this 'new' activity. I wonder how 'new' it is for a Form 3 student to fill in a passage with articles and prepositions by using a keyboard. Teachers themselves are fascinated by this new innovation. By the time they get more used to the machines, this phenomenon hopefully will disappear.

### **On preparation time**

When being asked to anticipate difficulties in implementing CALL in their own classes, most teachers said that they could not afford the time to prepare the lesson. Comments like "It takes too long on preparation", "don't have time to prepare", and so on confused us until they explained in the discussions that it would take them a very long time before they could design a program for language teaching purposes. Some other teachers said that they could not afford the time to integrate the software into the school curriculum.

Obviously the first comments came from a misunderstanding of CALL, while the latter comment reminded us of the heavy workload every teacher takes up.

### **Examples of CALL Lessons**

I would like to stress again the point that there can not be one single correct method of using computers in a language class. It is very much the teacher's way of manipulating the computer as a resource that is important. Despite the misconceptions that I have talked about, there were teachers who saw more of the potential of CALL almost intuitively. I would like to describe three lessons designed by the same group of teachers attending our Summer Workshop to show what a CALL lesson may look like.

The first lesson was designed for a Form 3 class, aimed at practising the description of facial features of people. The teacher starts by describing a crime situation to the class, then divides the class into small groups of policemen and witnesses. The witness groups are shown pictures of the suspects, while the police groups sit at the computers with the program



"Face Maker". The interview takes the form of questions from the police group and answers from the witnesses. The police groups type in the responses to 'draw' the face of the suspect on the computer screen. When satisfied, they compare these faces with the pictures held by the witnesses.

One merit of this lesson is that the teacher is able to design activities around a free-standing computer program, making the best use of it. He does not need to spend hours and hours on preparation. All he needs to do is to dump several pictures from the screen before the lesson starts. Students on the other hand, have got authentic materials to practice with. Communication is essential, and fits perfectly with the general philosophy of communicative language teaching, i.e. genuine language use to bridge an information gap.

Looking at the structure of the lesson, the teacher is to spend five minutes in briefing the class on the crime situation, another five in assigning groups and pictures. The students then would have 25 minutes on the main activity, leaving five minutes at the end to compare and talk about their pictures, if it is a 40 minute lesson.

Contrasting this lesson plan with the misconceptions I mentioned earlier, we should look at the program used, time to prepare for the lesson, the number of machines required, the learning environment created, and the language addressed. A summarising table like Figure 2 can then be drawn up for the purpose of the evaluation:

<b>Program Used:</b> <i>Face Maker</i> —screen: attractive, simple, colourful —graphics: simple and attractive —instructions: simple, very readable —overall: pedagogically flexible
<b>Preparation Time:</b> minimal
<b>No. of Machines Required:</b> 2 (as designated in the lesson plan)
<b>Learning Environment:</b> —group work —informal —motivating (immediate feedback, graded achievements, etc.)
<b>Language Addressed:</b> grammar—adjectives

*Figure 2*



Of course there are weaknesses in such a lesson plan. The most obvious one is the limitation and restriction of the vocabulary, in this case adjectives. This is precisely the point where the teacher has to identify and assert himself, by designing follow-up activities to compensate for what the program has failed to do.

In this example the teacher designed a follow-up lesson in which the students were to write a short description on the suspect, based on what they had done. The language produced this time would be in the written mode, from the students' own hand, and would swing the learning process back to the conventional syllabus.

Another lesson was designed for dictation purpose. We all know that dictation can be a rather boring exercise for students. The conventional way is that the teacher goes straight to the exercise, making the students doubt if their previous revision or preparation was enough. This teacher suggested using a simple program called 'Space Out' for revision and motivation. The program works like this. A text with no punctuation or spaces at all is presented on the screen. Users have to add in punctuation marks and spaces to reconstruct the passage into a meaningful text. Of course the computer activity in this case is done in small groups. When that is finished, the actual dictation exercise would start.

This has the merit of tackling all the syntactic and lexical knowledge previously learnt in a subtler than usual manner. The teacher manages to use the computer as an aid in his teaching in this sense; and of course, dictation can be fun.

The third lesson exploits the computer as a motivational device. The teacher keys in the first part of a suspense story and, by making use of the 'Sentence Sequencer' program designed by D. Foulds and A. Cheung at the Hong Kong Polytechnic, is able to jumble up the sentence order in a random way. The students are asked, in small groups, to rearrange the text and to finish the story by using the simple word-processing program VIEW on the same machine.

## **Conclusion**

In these examples there is room for further investigation, such as identifying what type of language the students use, the style of exchanges, the style of learning, the peer learning/checking activities, and so on. These need to be done in actual classroom observations and are not within the scope of this paper. What we can state, however, at this point is the value to teachers in terms of stimulating their imaginations and encouraging rethinking of methods that CALL lesson planning fosters.

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# USING COMMERCIALY-AVAILABLE SOFTWARE TO PROVIDE A SELF-ACCESS COMPUTER-BASED LEARNING ENVIRONMENT FOR THE DEVELOPMENT OF WRITING SKILLS

Jonathan J. Webster

## Introduction

As the title suggests, the focus of my paper is on what software is immediately available on the market which makes the personal computer a resource for a writing skills development program. On-line dictionaries, word games, style checkers have a role to play alongside the word processing software in providing students in tertiary-level institutions with a self-access learning environment. Important writing skills can be taught and reinforced through their association with tools students are likely to keep using long after their participation in such a program. These tools, however, need to be fully integrated within a learning environment which addresses the real and the felt needs of students in tertiary-level institutions in a multilingual setting.

## Addressing real and felt needs in a multilingual setting

In a multilingual setting, students may have difficulty becoming aware of and overcoming those cultural and linguistic habits of one language/dialect that interfere with and hinder effective communication in another. Students for whom English is a second or foreign language are usually most aware of their limited range of vocabulary, as well as their difficulties with spelling, punctuation and grammar. Such felt needs are perhaps the most amenable to a mechanical solution, and software developers have been quick to respond. The availability of word games, spelling checkers and style checkers certainly should help to alleviate that feeling of insecurity which often becomes a preoccupation when writing.

Beyond these more obvious needs are others which are no less real. Students in an ESL/EFL setting also need to pay attention to their organization of ideas, as well as the texture of their writing. In other words, there must be coherence and cohesion in the written text.

Robert E. Longacre, in a paper delivered at the Third LACUS Forum 1976 entitled, "Generating a Discourse from its Abstract," states what is essentially true of discourse in general: "The sentences of a discourse must not only be properly linked to each other; they must also *cohere* lexically. This coherence requirement is best met by assuming that every discourse has an underlying macro-structure or *abstract* which dictates the consistent choice of particular lexical items throughout the discourse" (1977:355). Further on in the same paper, Longacre compares the process of discourse development to the development of an animal from its embryo, and concludes, "The development from the germ to the viable infant must, of course, be



according to the DNA specification. So here we assume that there is some kind of overall notion of the whole discourse which acts as a constraint on how it may be developed, fleshed out, and covered over in the end" (357). Coherence in a written text reflects a top-down writing strategy in which the writer's choice of words and arrangement of clauses depends on his/her awareness of the overall organization of the text.

Cohesion, on the other hand, provides what Halliday and Hasan call 'texture'. As they explain, "the concept of cohesion accounts for the essential semantic relations whereby any passage of speech or writing is enabled to function as a text" (1976:13). Cohesive devices such as cataphora, ellipses, and apposition are features found in mature writing. Discussing the features of mature and immature writing, Mark Sharples states the following (1985:32):

The most common clause or sentence link of immature writers is "then", usually a product of "what next" composing strategy, with the writer treating the generation of each sentence as a separate task and tacking one event onto another in a simple linear sequence. A mature writer will coordinate by expressing a relation between clauses and sentences by means of an adverbial phrase such as "Next morning", or will vary the links to include causality, inference or contrast. Cohesive devices such as ellipses, cataphora, and apposition demand the ability to abstract syntactic patterns and to delete or substitute repeated words or structures.

EFL/ESL students face additional difficulties arising out of differences in cultural expectations with respect to the presentation of arguments and structuring of information.

### *Ongoing research at Hong Kong Baptist College*

Two research projects have recently been begun at the Hong Kong Baptist College which are intended to address these real and felt needs. The first, *Computer Assisted Composition* (CAC) has as its main objective the design of a self-access computer-based learning environment for developing the writing skills of students at the College. A unique emphasis of the project is the attempt to build a CBL environment for developing writing skills using features available with word-processing software already on the market and likely to be used by students long after their participation in such a program.

Lotus Symphony has been chosen for the project for the following reasons:

- a. Symphony is integrated with spreadsheet, graphics, database, telecommunications, and windowing capabilities;
- b. Symphony's own add-in programs which include a spelling checker and outline manager;
- c. Symphony's Command Language (SCL) which permits the creation of sophisticated programs inside the Symphony worksheet.

The aim is to acquaint students with those features which support the components of the writing process, namely, pre-writing, writing/revising,



formatting and polishing. SCL provides the means for creating a shell into which the software's capabilities may be explored and fully realized and the student's own writing thereby enhanced.

There are three stages in the project methodology;

- (i) needs assessment,
- (ii) program design, and
- (iii) product implementation and assessment.

Following design of the program, we plan to incorporate it into existing courses to complement in-class work. Assessment of the usefulness of the program will be based on feedback from student and staff participating in the project.

The goal of the second project is to design a program for parsing text according to Halliday's Functional Grammar. Based on his *Introduction to Functional Grammar* (1985), I am constructing a parser to assist in the analysis of texts. The program will interface between the user and the text along lines of an expert system posing questions, presenting alternative analyses where necessary, leading to an analysis of the text in terms of clause complex, theme-rheme, information, cohesion, mood and modality, and transitivity.

As Halliday notes, "Among the particular tasks for which this grammar has been used are: analysis of children's written composition; analysis of teacher-pupil communication ('classroom discourse'); analysis of the language of textbooks including textbooks being translated into other languages, comparison of different registers or functional varieties of English; stylistic analysis of poems and short stories; analysis of foreign learners' perceptions of how their English could be improved . . ." (xv).

Halliday's Systemic-Functional Grammar has long attracted the attention of those working in computational linguistics, most notably Terry Winograd from Stanford University. While the systemic portion of Halliday's grammar is currently stored on computer (1985: xv), the text upon which the Functional Grammar Parser is based is Halliday's most recent work which he distinguishes from previous work in the following manner: "what is presented here is not the systemic portion of a description of English, with the grammar represented as networks of choices, but the structural portion in which we show how the options are realized" (1985:xv).

The parser and the interface will be written using Turbo Prolog and Turbo C, both products of Borland International. Work on the parser is beginning with the formulation of a Prolog database of facts about the structure and function of language which will serve as a basis for bracketing and labelling linguistic units. Besides the facts that Turbo C routines can be called by Turbo Prolog. Turbo Prolog also has the ability to access Symphony files. The Functional Grammar Parser can easily be used to analyze written work composed using Symphony's word processor.

I see the Functional Grammar Parser as being particularly useful in aiding analysis of written texts at the clause level. Not only will the parser quickly



identify the cohesive markers in a text, but also may even help in discovering the rhetorical organization of a text. On this point, Halliday comments,

"When we come to consider the rhetorical organization of a text, this too can be discovered from a reading of the clause patterns, in this case those having to do with functional sentence perspective; what are the elements that function predominantly as theme, and what are the elements that function predominantly as news."

The Functional Grammar Parser begins to address the need for including assessment of written texts at the clause level. As it is, however, the FGP remains a linguist's tool. To make it useful to the non-specialist user in a self-access computer-based learning environment, a linguistically sophisticated, user-friendly interface-plus-interpreter would be required. The Functional Grammar Parser is a first step toward filling a gap left by the failure of commercially-available software to address the need for clause-level assessment in a writing development program.

### **Designing a CBL environment for developing writing skills**

One example of a CBL environment for developing writing skills is the Athena Writing Center Project which is part of an Institute-wide experiment at M.I.T. to integrate modern computer and communication capabilities into all phases of the educational process. Principal Investigator with the Project is Dr Janet Horowitz Murray. According to the project description, the Centre "will serve as a model of the pragmatic, efficient application of computer technology to the teaching of writing" (1985:65). Software being developed to be used at the Writing Center and Workshop includes:

- (1) an editor/formatter;
- (2) a windowing utility for use in commenting on and revising papers;
- (3) outlining devices, including some specialized "template" outlines keyed to particular tasks, such as engineering theses;
- (4) manipulable verbal models and word "games" to enhance student understanding of the richness of language, including (1) a model of English etymology and (2) a series of exercises to stimulate the creativity of poetry students, as well as to increase their understanding of the workings of poetic form;
- (5) diagnostic routines for grammatical and stylistic problems;
- (6) tutorials in common errors, including English as a second language;
- (7) software to allow for in-class editing and collective composition;
- (8) exercises for alleviating writer's block and for facing 3 a.m. panic.

A number of the features just listed are already available on the market. My point is this, why not incorporate these ready-made tools into our writing programs. I will cite only a few examples. It is not my intention to list all the software available, rather only to alert to the kinds of tools the reader already in use. These tools, moreover, need to be integrated into a learning environment. The components of a self-access computer-based learning environment for developing writing skills include pre-writing, writing/revising, formatting and polishing. In the pre-writing component,



one begins to formulate his/her ideas into a coherent whole with a view to how the text will impact upon the intended audience. In the next phase, recalling Longacre's analogy, this skeletal organisation is fleshed out through a recursive process of writing/revising. Once the writer is satisfied that the draft fulfills his/her objectives, it is then ready to be polished and set up in the appropriate format.

### **Using an outline manager**

An outline manager encourages the writer to organize his/her ideas according to a conceptual framework conceived at the pre-writing stage. Lotus Symphony and Microsoft Word, the former a spreadsheet with word processing capability, the latter a dedicated word processor, both have outline managers. Both also allow windowing. The outline can be created in one window while the text appears in the second. The two windows can be viewed simultaneously.

Outlining helps to focus the writer's attention on the conceptual framework of his/her text. This perspective on the text should continue in the creation of text. While writing/revising the text, should the writer feel that a certain point belongs elsewhere in the text. The writer can call up the outline of his/her text on to the screen in a separate window viewed along side of the text and modify the outline. Simultaneously that part of the document corresponding to that point in the outline shifts accordingly. Or the writer can delete a subsection from the outline and the corresponding portion of the text is deleted from the document. Outlining promotes a perspective of the text as a structure of ideas.

On the one hand students can devise their own outlines from scratch. However if the object of instruction involves texts which in the words of Sharples (1985), "conform to general frameworks which prescribe an ordering of concepts to fit a convention of style or a common order of events" (p. 34), it may be useful to present learners with templates to model their work after. The detail of such templates will vary depending on the maturity of the learners and the type of text being written. For example in the book *Thesis Projects in Science and Engineering* (1980), Richard Davis suggests the following list of items to be included in a thesis proposal:

1. Background
2. Problem
3. Scope
4. Assumptions
5. Summary of Current Knowledge
6. Standards
7. Approach
8. Materials and Equipment
9. Other Support

The outline manager can also be used to provide a highly structured environment in which the student writer is prompted step by step through the creation of a text. To illustrate, I will cite an example from a seminar



I gave with Dr. Mohson Ghadessy earlier this year in Singapore for the Singapore Association of Applied Linguistics. (See Webster, Jonathan J. and Ghadessy, M. "Form and Function in English Business Letters: Implications for Computer-based Learning" in Ghadessy, M. (Ed.) *Registers of Written English*, London: Frances Pinter, 1988.) In the seminar we were discussing the form and function of business letters with attention to the pedagogical implications for CBL. The example which follows uses Microsoft Word's outline processing tool.

Suppose you are the learner and you have been asked to reply to a letter of enquiry regarding your products, where would you begin? Into Window 1 you load the MODEL document, and in Window 2 the PROMPT document (see Screen 1 in Appendix 1). Both documents are shown in outline view. Upper case "T" in the selection bar along the left hand side of the window indicates a line of text. Lower case "t" in the selection bar shows there is body text collapsed below the headings "Acknowledge and respond" and "Invite". To begin the session, the learner starts printing in Window 2. Without going into detail about the mechanics of the program that run behind the scenes, I will go through the steps that lead the learner through the writing process.

In Screen 1 there is a prompt at the bottom of the screen—"Dear WHO?"—asking to whom the letter should be addressed. We enter "Sirs" above the prompt next to "VALUE:". The prompts continue as shown in successive Screens 2 through 4 taking the learner step by step through the construction of a reply:

<i>Prompt</i>	<i>Screen</i>	<i>Enter</i>
Dear WHO?	1	Sirs
First acknowledge the letter received	2	Thank you for your letter of 9 June 1986.
Any item enclosed?	3	Please see the enclosed . . .
Do you wish to invite further contact	4	Please feel free to contact me . . .

Once the prompt routine is completed the letter composed by the learner is printed out (see Document 1).

Note that in Window 1 of Screen 5 we have expanded the body text under the heading "Acknowledge and respond." This is done simply by moving the highlight to the heading, holding the shift key and pressing and plus key (+) on the numeric keypad. To hide the text below the heading one moves the highlight and presses the minus key (−) on the numeric keypad.

The MODEL texts are actual letters, While the models chosen should be grammatically correct, it should be pointed how the learner's own wording may be an improvement on the model text. In the example cited, the rather stilted "undersigned" might be better replaced by the object pronoun "me" in the sentence, "Please do not hesitate to contact me . . ."



The prompt sequence can be either kept brief with few in number, or expanded and their number increased, depending on the learner's need. The prompt sequence should in any case familiarize learners with the general outlines of various letter types. Prompts may be regarded as a kind of checklist of ideas as to how to develop and structure a business letter.

This example is highly simplistic. It illustrates only one potential application of an outline manager. The usefulness of such a structured approach depends on the maturity of the writer and the type of text being written. As the writer becomes more mature in his/her writing, of course the need for prompts would diminish. However, the outline manager as a word processing tool, to be used in conjunction with the writing of the document, should hopefully become part of the writer's habit.

Dear sirs,

As indicated

[# Overstated or Pompous : SHOWED, SHOWN, SUGGESTED]

in the accompanying : ENCLOSED (for letters)]

[# Overstated or Pompous : NOW]

press release, presently : DEVELOPING, CARRYING OUT]

[# Vague adverb : DEVELOPING, CARRYING OUT]

we are implementing : DEVELOPING, CARRYING OUT]

[# Overstated or Pompous : DEVELOPING, CARRYING OUT]

a new advertising campaign which will soon be completed. : DEVELOPING, CARRYING OUT]

[# Wording—PASSIVE VOICE : DEVELOPING, CARRYING OUT]

Its effectiveness : DEVELOPING, CARRYING OUT]

[# Hackneyed, Cliche, or Trite : DEVELOPING, CARRYING OUT]

will be based : DEVELOPING, CARRYING OUT]

[# Wording—PASSIVE VOICE : DEVELOPING, CARRYING OUT]

on the fact that : DEVELOPING, CARRYING OUT]

[# Hackneyed, Cliche, or Trite: Weak. Omit and state the fact.] : DEVELOPING, CARRYING OUT]

we're making a study : DEVELOPING, CARRYING OUT]

[# Longwinded or Wordy : DEVELOPING, CARRYING OUT]

of methods in a survey. Hopefully, : DEVELOPING, CARRYING OUT]

[# Hackneyed, Cliche, or Trite: I HOPE, or omit.] : DEVELOPING, CARRYING OUT]

by now you have received a xerox : DEVELOPING, CARRYING OUT]

[# Trademark : DEVELOPING, CARRYING OUT]

of our survey. We'd like to facilitate : DEVELOPING, CARRYING OUT]

[# Overstated or Pompous : DEVELOPING, CARRYING OUT]

an early response from you. We want to present a report : DEVELOPING, CARRYING OUT]

[# Longwinded or Wordy : DEVELOPING, CARRYING OUT]

to you of our findings ASAP. : DEVELOPING, CARRYING OUT]

[# Hackneyed, Cliche, or Trite: Be specific.] : DEVELOPING, CARRYING OUT]

So far the consensus of opinion : DEVELOPING, CARRYING OUT]

[# Redundant : DEVELOPING, CARRYING OUT]

is approximately : DEVELOPING, CARRYING OUT]

[# Misused often : DEVELOPING, CARRYING OUT]

what we expected. of course, we can not : DEVELOPING, CARRYING OUT]

[# Spelling : DEVELOPING, CARRYING OUT]

prepare for the market to the fullest possible extent : DEVELOPING, CARRYING OUT]

[# Longwinded or Wordy : DEVELOPING, CARRYING OUT]

until we hear from you. And, since the criteria is : DEVELOPING, CARRYING OUT]

[# Usage in question : DEVELOPING, CARRYING OUT]

rather technical, it's absolutely essential : DEVELOPING, CARRYING OUT]

[# Redundant : DEVELOPING, CARRYING OUT]

to receive your input. : DEVELOPING, CARRYING OUT]

Our marketing plan centers around : DEVELOPING, CARRYING OUT]



[# Usage in question  
the customers you want to contact. Actually,  
[# Vague adverb  
we could care less  
[# informal or Illiterate  
what the competition does. But, let's not wait on  
[# Informal or Illiterate  
them to make the first move.

: CENTER ON]  
: This is weak. Consider omitting.]  
: COULDN'T CARE LESS]  
: WAIT FOR]

Figure 1

SUMMARY FOR: EXAMPLE 2. TXT

Suspect problems marked: 25

GRADE SCHOOL						HIGH SCHOOL				COLLEGE GRADUATE				GRADUATE SCHOOL									
3	4	5	6	7	8	9	10	11	12	Fr	So	Jr	Sr	+1	+2	+3	+4	phd					
*—Flesch Grade Level (Reading Ease: 70)																							
SENTENCE STATISTICS																							
Number of Sentences:						11				Short (< 14 words):				8 (73%)									
Average Length:						13.3 words				Long (> 30 words):				0 ( 0%)									
End with "?":						0 (0%)				Shortest (# 4):				9 words									
End with "!":						0 (0%)				Longest (# 1):				22words									
WORD STATISTICS																							
Number of Words:						147				Average Length: 4.6 letters													
SPECIAL STATISTICS (as estimated % of Sentences or Words)																							
Passive voice:						2 (18% S)				Prepositions: 20 (14% W)													

Figure 2

**Using checkers for style and spelling**

When it comes to polishing the text, there is no shortage of software tools available. I will discuss two examples, one is a style checker called Grammatik II from Wang Laboratories, the other a spelling checker called Turbo Lightning from Borland International.

The 'wonders' Grammatik II claims for itself include:

- (i) finding typographical errors, eg. doubled punctuation and words;
- (ii) finding unbalanced and omitted punctuation and capitalization errors;
- (iii) identifying clumsy, hackneyed, trite, misused, pretentious, redundant and wordy phrases (see Figure 2 from GII's instruction manual);
- (iv) generating a list of all the words in the document numerically and alphabetically.

In addition, GII generates a readability analysis and statistical Summary Report which also shows the count and percentage of passive voice patterns and prepositions (see Figure 2 from GII's instruction manual).

To use such a tool effectively, the user must be able to evaluate the validity of judgments made by the program. The problem I see with a tool such as this, espeically for ESL/EFL students, is that the user may be intimidated by the software and feel compelled to make changes to perfectly acceptable prose.

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Most are familiar with the on-line dictionaries that serve as spelling checkers. For any who are interested, a review of 31 spelling checkers available on the market appeared in PC Magazine (Vol 6 No. 17, Oct 13, 1987). Another review of thesaurus programs appeared in an earlier issue of PC Magazine (Vol. 6, No. 13, 21 July 1987).

One spelling checker plus thesaurus which has attracted considerable attention for its speed and unique design is Borland's Turbo Lightning. It comes with four versions of the Random House Dictionary ranging in size from 130,000 to 10,000 words. Lightning even maintains a small dictionary of common first-pair-inversions. If you type "fo" or "hte", Lightning calls your attention to the error and suggests "of" or "the" among the words you most likely intended.

The most interesting feature with Turbo Lightning is that the manufacturer has revealed the inner workings of the Lightning interface thereby providing access to and control over Lightning's data compression techniques and sound-alike algorithms. An example of the usefulness of this interface engine is a collection of word games and solvers called Lightning Word Wizard. Besides the fact that the games can access any of the four versions of the Random House Dictionary, the games display an attractive interface and machine response is fast. The games and solvers include:

*Games*

- Akerue! Discover the hidden words concealed within the game board.
- Mix up Unscramble the word before the time runs out.
- That's Rite Detect the misspelled word. Or in the most difficult level of the game, determine the word that doesn't belong in the list of synonyms you're shown.
- Word Hunter Unravel the clues to discover which word the Wizard is 'thinking' of.

*Solvers*

- CrossSolver Rapidly finds the word you need by using Turbo Lightning's dictionary.
- FixUp Quickly solves anagrams; for example, it can solve 5-letter anagrams in about 10 seconds.
- Code Cracker Multiple-replacement cipher that decodes messages coded using the telephone number pad.

Lightning is no ordinary spelling-checker; PC Magazine goes so far as to say:

"Spreadsheets allowed number-oriented people to do things with personal computers that they could never do before. All the outliners, word processors, and other tools for word people never made the PC into the promised creativity machine it was supposed to be for word- and fact-oriented people.

Lightning, in a stroke of originality, has forever changed all that."



## Conclusion

Those of us familiar with some example of word processing software can probably testify to its impact on our own writing habits. Revision is no longer a chore. Drafts are all the more tentative. After all, one can always print another draft with some further alteration. There is no getting away from the fact that using a PC for word processing makes a difference. For some of our colleagues, however, the new technology is an imposition. They are set in their ways and resistant to change. However for the sake of our students who will most likely have to work with this new technology, let us begin to inculcate good work habits that fit the available technology. Our pedagogy cannot afford to ignore the tools that can improve the performance of our students as well as improve their competitiveness in a marketplace that looks more and more disapprovingly on the computer illiterate.

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APPENDIX

1	Attention:
T	Dear Sirs
t	Acknowledge and respond
t	Invite
	Closing
T	Yours faithfully
T	
T	
T	
T	
T	
T	Enc.
	◆

2	
t	Lesson 1

VALUE: Sirs  
Dear WHO?  
Level 1 [ ] ? Microsoft Word: LETTER 1. DOC  
Screen 1

1	Attention:
T	Dear Sirs
t	Acknowledge and respond
t	Invite
	Closing
T	Yours faithfully
T	
T	
T	
T	
T	
T	Enc.
	◆

2	
t	Lesson 1

VALUE:  
First acknowledge the letter received.  
Level 1 [ ] ? Microsoft Word: LETTER 1. DOC  
Screen 2



1

Attention:

T Dear Sirs

t Acknowledge and respond

t Invite

Closing

T Yours faithfully

T

T

T

T

T

T

Enc.

◆

2

t Lesson 1

VALUE:  
Any item enclosed?  
Level 1 [ ] ? Microsoft Word: LETTER 1. DOC  
Screen 3

1

Attention:

T Dear Sirs

t Acknowledge and respond

t Invite

Closing

T Yours faithfully

T

T

T

T

T

T

Enc.

◆

2

t Lesson 1

VALUE:  
Do you wish to invite further contact?  
Level 1 [ ] ? Microsoft Word: LETTER 1. DOC  
Screen 4



1

Attention:

T Dear Sirs

Acknowledge and respond

T Thank you for your interest in our products. Enclosed are some catalogues for your reference and retention.

T

t Invite

Closing

T Yours faithfully

T

T

T

T

2

t Lesson 1

COMMAND: Alpha Copy Delete Format Gallery Help Insert Jump Library Options Print Quit Replace Search Transfer Undo Window

Select option or type command letter

Level 1 [ ] ? Microsoft Word: HINT 1. DOC

Screen 5

1

Attention:

T Dear Sirs

Acknowledge and respond

T Thank you for your interest in our products. Enclosed are some catalogues for your reference and retention.

T

Invite

T Please do not hesitate to contact the undersigned should you require further information.

T

Closing

T Yours faithfully

T

2

t Lesson 1

COMMAND: Alpha Copy Delete Format Gallery Help Insert Jump Library Options Print Quit Replace Search Transfer Undo Window

Select option or type command letter

Level 1 [ ] ? Microsoft Word: HINT 1. DOC

Screen 6



**Attention:**

**Dear Sirs**

**Thank you for your letter of 9 June 1986. Please see the enclosed materials which should help to answer any questions you might have about the products we carry.**

**Please feel free to contact me again should you have any questions.**

**Your faithfully**

**Enc.**

**Document 1**



# CODE SWITCHING OF HONG KONG TERTIARY STUDENTS IN *COLOSSAL ADVENTURE*

Anthony C. M. Cheung and Betty S. N. Tse

## I. INTRODUCTION

The employment of adventure games in TESL has been looked upon favourably by many authors including Papert (1980), Harrison (1983), Higgins and Johns (1984), Molloy (1986), Miller and Burnett (1986) and others. For example, Higgins and Johns have maintained that with such games, there is "usually even richer use of the [target] language" (p.64). Miller and Burnett point out that language educationists who hold a holistic view look upon adventure games as providing opportunities for "actively engaging the student using a language in a problem solving context" (p.162).

A project involving two pairs of Hong Kong tertiary students working on *Colossal Adventure*, a microcomputer version of a text-only adventure games has recently been conducted at the Hong Kong Polytechnic. As will be reported in greater detail later, the subjects communicated predominantly in the second language. On the basis of the data collected, this paper investigates the code-switching phenomenon of Hong Kong tertiary students who worked on adventure games as English exercises. This paper has three objectives. First, it attempts to investigate the circumstances in which the subjects switched from English to Cantonese, that is from their second language to their first language. Second, it studies the circumstances in which the subjects switched from Cantonese to English, that is from their mother tongue to their second language. Third, it strives to identify instances of lexical substitution and attempts to provide explanations relating to the phenomenon.

Code-switching is a typical behaviour of bilinguals or multilinguals. This bilingual behaviour is characterised by alternative code choices or communicative strategies. Saville-Troike (1982) and Hudson (1980) define *code* as "a neutral term used to refer both to a language and to a variety of a language". According to sociolinguists such as Ervin-Tripp (1969), Gumperz (1971) and Hymes (1977), *code switching*, *code swaying*, *code mixing* and *interference* are terminologies for describing the phenomena of inserting a code/language into another. Gumperz and Hernández-Chavez (1971) have stated that "the greater part of the instances of true code switching consist of entire sentences inserted into the other language text" (p. 319), while Gibbons (1978) thinks that *code switching*, especially that of a rhetorical type, often takes place at sentence or phrase boundaries, but may involve clauses, phrases or words inserted into a base language.

However, it would appear that claiming that this claim is all too arbitrary. Therefore, in this paper, the working definition of *code switching* is inclusion in conversation both linguistic and paralinguistic elements which are characteristic of two or more codes.



This paper has four major sections. Following the Introduction, Section II describes the design of the experiment. Section III presents and discusses the key findings in relation to the switching of codes of the subjects. These include statistics for turns and VDU input; switches from English to Cantonese and vice versa, and instances of lexical substitution. Finally, conclusions drawn from the findings will be presented in Section IV.

## II. DESIGN OF THE EXPERIMENT

In the experiment, two pairs of Hong Kong Polytechnic students who were adventure game novices were asked to work on *Colossal Adventure*. As reflected in their public examination grades, one pair was more proficient in English than the other. The 'strong' subjects had both scored Grade 'A's in English in both the HKCEE and the HKALE examinations. They are referred to as A and B in the subsequent analysis. The 'weak' subjects only had a pass in English in the HKCEE, the lower level examination. They are referred to as C and D. In a pre-work preparation session, the subjects were given a clue sheet which included all the verbs and directions that the program understood. Next, the objective of the game was made known to them, i.e., they were to locate and enter the cave where most of the treasures were hidden. The students were asked to look upon the game as an English exercise and that there was one rule that they had to follow: they had to speak to one another in English while working on the game. Finally, their consent to being video-recorded during the experiment was sought. Appendix A provides full details of the clue sheet.

The subjects then came in pairs and each worked on the game for eight hours in a two-week span. Their work at the first and eighth hours were video-recorded. During each of the recording sessions, the experimenter was only present at the studio at the beginning and final stages to attend to the switches. For most of the time, the subjects were left alone in the room. The absence of the experimenter and other personnel was to cause the least disturbance. Therefore, a rather relaxed environment was created. From the recording, one could tell that the subjects were not at all bothered by the presence of the hardware. They worked on the game seriously and communicated predominantly in English in quite a natural manner.

Two video cameras were used. One focused on the subjects and the other on the VDU screen. Both types of input were fed into a special effect generator and a split screen image was recorded. The subjects appeared on the top half of the screen while the VDU display appeared at the bottom. Audio tapes were duplicated to facilitate the transcription process. Subsequently, the transcripts of the four hours of recorded data were completed. These transcripts were labelled as S1, S8, W1 and W8. S1 is the transcript of the first hour's work of the strong pair. S8 is the eighth hour of the same pair. W1 is the first hour of the weak pair. W8 is the eighth hour of the latter pair. Moreover, in the subsequent discussions, the abbreviations



S1, S8, W1 and W8 are also employed to represent the various working sessions of the pairs as described above.

III. PRESENTATION AND DISCUSSION OF RESULTS

In this section, the findings relating to code-switching are discussed. First of all, statistics for the turns uttered by the subjects and VDU input relating to the four video sessions are presented. This is summarised in Table 1.

	S1	S8	W1	W8	OVERALL
Turns	A: 483 B: 477	A: 580 B: 635	C: 514 D: 440	C: 801 D: 851	
(single item turns)	158	271	184	712	1325
total	960	1215	954	1652	4781
VDU Input					
(with utterance preceding)	98	437	226	745	1506
(no utterance preceding)	0	117	14	90	221
total	98	554	240	835	1727

Table 1 A Summary of Statistics for Turns and VDU Input

From Table 1, one could see that the number of turns uttered by both pairs of subjects during the first hour were alike. However, the weak pair had a significant increase of turns at the eighth hour, from 954 in W1 to 1652 in W8. Almost half of the W8 turns were single item turns. Comparing the number of turns to the number of VDU inputs, at the first hour, both pairs executed relatively less VDU input and made lengthier utterances. At the eighth hour, on the other hand, the number of turns which consisted mainly of single items increased. This was coupled with a large increase of VDU input. It was evident that the subjects were aware that the eighth session was their final one at the game. they were speeding along attempting to make further progress.

L1 Sequence

Throughout the four hours' work, only two instances of the subjects speaking to one another in the mother tongue were recorded. These are provided in example [1.1] and [1.2] below.

[1.1] W1/11-12

D: Move west

VDU Input: WEST (D)

\*\*\*C: Move west, go west, go to the heaven (5)  
down the river, OK? (1)



*"down" is stressed*  
*"down" the river, OK" seems to be uttered in an*  
*impatient and urging tone*  
*C doesn't want to move WEST, "go to heaven" is*  
*perhaps a realisation of the BOOH factor*  
*This is the first occurrence of C's suggestion of*  
*going down the river but is ignored until he breaks*  
*into Cantonese some 60 turns afterwards*

D: We are, we are, in here (2)

*"here" is stressed*

D: We are, we are, in here (2)

*"here" is stressed*

C: Yes

*"yes" seems to be uttered in an annoyed manner*

D: Building is here (3)

\*\*\*C: Down the river

*The second occurrence is uttered in an annoyed manner*

D: We, we must enter the building first (1)

C: And then /ŋɔ̌ dei/, we, we out the building OK, (?) (1) agree?  
 (1) we stand outside the building

*(we)*

D: We must get the lamp first (1)

C: Take, take

D: Get the lamp, get the lamp, get the lamp,  
 we must get the lamp first (5)

VDU Input: GET THE LAMP (D)

D: Then go, into the building, we [move

C: [No (1)

*"no" is stressed*

D: There's some [coins in the building

C: [OK OK, OK OK (5)

VDU Input: EAST (D)

*They enter the building because the issue of going*  
*down the river is irrelevant for the time being*

D: [Get, we must get, get the, get the keys first

C: [Down, down

C: Get the key OK? (6)

VDU Input: GET THE KEYS (D)

D: Then move down

C: Down

VDU Input: DOWN (D)



- D: See any treasure there (2)
- C: Then (1) no coins, [no coins here
- D: [No coins,  
no coins (12)
- C: /həv[fa: n/
- D: [We've, we have already get the,  
get the, get the coins, move upward  
(very annoyed)
- C: Upward, [yes
- D: [Up (1) U-P, up again (2)  
VDU Input: UP (D)
- C: OK (1)
- D: We have keys, and [lamp
- C: [No use, the keys (1)
- D: On hand (4) we have the key and the lamp,  
and the keys and the lamp  
[on hand
- \*\*\*C: [(E) no use, down the river OK? (1)  
E=click  
"down the river OK" is uttered in an impatient and  
annoyed manner  
The third occurrence of "down the river", C is  
getting impatient and wants to key in but D pushes  
his hand aside
- D: (?) empty bottle here (2) the empty,  
bottle must be, [useful
- C: [No use
- D: Get it, get it first (8)  
VDU Input: GET THE BOTTLE (D)
- C: (E)  
E=click
- D: Then we move out the building
- C: Yes (1) out the building
- D: What (?) it's, it's better to go (1) east, better to go east
- C: Go east
- D: Better to go east (5)  
VDU Input: EAST (C)
- D: This is this, the hill is here  
D sketches
- C: (E) (5) (E) (13) use the, empty bottle to collect the ash  
E=click, sigh



D: (gig) no use, it's no use (3)

VDU Input: EAST (D)

D: At the cliff edge

C: Drop the bottle, drop the empty bottle (gig) (8)

C: [Be more s- (1)

D: [Please this no use (2)

VDU Input: DROP THE BOTTLE (D)

D: Please be more specific (E)

E=click

C: Perfect (5)

D: See, perhaps we've better go north (2)

VDU Input: NORTH (D)

C: Perhaps you're right (E) (?)

E=/ji:/

D: You're surrounded by an ex-, expanse of jagged rocks

C: (?)

D: No way, there's no way, better go south

C: South (8)

VDU Input: SOUTH (D)

D: [We then move west (E)

C: [South west (2)

E=click

VDU Input: WEST (D)

C: (E) (12)

E=click

D: This is the volcano (1)

C: /hɑ:ŋ lɔɪ hɑ:ŋ huɪ dəʊ hɛɪ li: dəʊ ji: ɡɑ:/,  
/mɪŋ m mɪŋ leɪ ji: ɡɑ:/ { (?)

D: [ /ŋɒ mɪŋ ɳɑ: , ɳɒ mɪŋ/

(now we are moving round and round in the same place,  
do you understand now?)  
(yes, I do, yes)

C: /leɪ jɪŋ ɡɔɪ , tau si:n jɪŋ ɡɔɪ hɛɪ , kʌm fɑ:n/  
/jʌt bæʊ lɒk ɡɒ/ river /ɑ: mɑ:/

(you should, just now you should take a step down,  
back to the)

D: /ji: ɡɑ: lɒk ɑ:/ , /lɒk ɑ: , lɒk , lɒk ɑ:/ , (7) you mean we (2)

(now let's go down, down, down, down)

C: Go



- D: Get back to our [original (?) position  
 C: [Go west yes, go west  
 D: (?) see, let's see  
 C: Go west (3)

VDU Input: WEST (D)

In example [1.1], C had to resort to his mother tongue to get his point across to D, i.e., to go down to the river. In the transcript, turns marked with \*\*\* are those which C attempted to make the suggestion. He did it three times in English but failed to get D to agree with him. Eventually, some 60 turns after his initial suggestion, C had to put his views across in Cantonese. In the first part of C's Cantonese utterance, he explained to his partner the current state of affairs, i.e., their current location. He then made an information request to solicit D's feedback as he uttered /mɪŋ m mɪŋ lei ji: ga:/ meaning "do you understand now?" D responded by saying that he understood it. However, as the request was given in Cantonese, the reply was also echoed in the same code. C then went on to make a suggestion in Cantonese which D expressed agreement in the same code. Nevertheless, to get down to the river the subjects had to decide on and execute a specific command. After D had conveyed his agreement, there was a pause of seven seconds. Apparently, both subjects were searching for an appropriate command. After the pause, C switched back to English to make an information request as he uttered "you mean we". Eventually, C came up with a concrete suggestion: "go west" and subsequently the command was typed in and executed. In this example, C employed the mother tongue as a final resort to get his views across to his partner. As a result, D shared his views and both subjects subsequently worked in closer harmony.

[1.2] W1/2

- C: Climb up (1)  
 D: Leading, leads down [leads down the well  
 C: [Leads down, OK  
 D: (?) we must, ah move (1) down  
 C: Down (2)

*D types in DOWVN*

- C: (E) /tsɒ ge/ (1)

*E=click; (it's wrong)*

- D: /gɔɪ a: /

*(correct it)*

*D presses the COPY key by mistake*

- C: Hm (2)

VDU Input 19: DOWVN (D)



In example [1.2], after some discussions, the subjects decided to move "down". D then typed in the command on the keyboard. However, he got it wrong. He mistyped *DOWVN* instead. C spotted this and stated that there was an error. In his haste, he broke into Cantonese to utter this. D seemed to be influenced by this sudden burst into the mother tongue and responded with a suggestion in Cantonese as well. D suggested that they should correct the typing the error. Nonetheless, as the subjects were still not too familiar with the keyboard, after D had pressed the COPY key, he pressed the RETURN key. The command which had a wrong spelling was then executed.

### Intra-turn L1 Occurrences

As stated previously, only limited occurrences of Cantonese utterances were recorded in the data. There were only twelve instances of intra-turn L1 utterances. Sometimes a subject may try to express an idea in haste which could cause him to accidentally switch to his mother tongue. As the prescribed rule of the exercise was that the subjects were to communicate with one another in English, the person who violated the rule usually realised this quickly and switched back to the second language. Examples [2.1] to [2.5] illustrate this.

#### [2.1] S1/15

A: Oh the grate, oh, the keys

B: Oh (1) [yes, the keys

A: [You have to use the keys (1) get, /m həɪ, m həɪ, m/,  
no, not get the keys (2) use the keys now (1) hm, unlock (1)  
unlock the grate

(no, no)

In example [2.1], *grate* reminded A of the keys. Both subjects then referred to the list of verbs provided in the clue sheet to look for a verb which was related to *keys* and accepted by the program. A first uttered "use". She next suggested "get". But she soon found out that these verbs did not exist in the clue sheet. In her haste, she uttered "/m həɪ, m həɪ, m/" to indicate that the verbs were inappropriate. As soon as she realised her switch of codes, she made an immediate attempt to comply with the prescribed rule of the experiment and switched back to English. She reiterated the item in the second language as she uttered "no".

#### [2.2] W1/7-8

D: The hill is on [(?) buildings, west (2)

C: [Go to east

C: Back to the east, OK?

*C types in "EAST"*

D: West, no, we, we can move west only (3)

*D deletes "EAST"*



C: West end, a path oh yes, west west west

D: West, we (3)

*C types in "WEST"*

C: /həɪ m həɪ/? [Yes? (is it)

D: [Yes

*C presses the SHIFT key by mistake*

C: Return (4)

*VDU Input: WEST (C)*

At the beginning of example [2.2], the subjects could not decide whether they should go east or west. C typed in "EAST" on the keyboard but D argued that they could "move west only". D deleted the command as he was uttering this. As C checked the information provided on the screen, he agreed with D and typed in "WEST" instead. However, C was still uncertain. After a three second pause, C apparently became a bit anxious and impatient. He seemed to have forgotten temporarily the exercise constraint and made a confirmation request in Cantonese with his partner as he uttered "/həɪ m həɪ/?" He quickly realised this and switched back to English and reiterated the item in the second language as he uttered "yes?" However, as C was reiterating his request in English, C was ready with a reply and he uttered "yes" to express his agreement simultaneously with C's reiterated request. Eventually, the command was executed.

[2.3] W8/3

C: Hm-hm, OK, oh, [we, we go to bridge or,  
get oil?

D: [Say P-L

D: Bridge, we get the two treasure first

C: OK /tse həɪ/ (?) (1) go the bridge OK (2) oh, this, this (?)  
south, first?

*(that is)*

D: South (1) [first

C: [South yes

*VDU Input: S (D)*

In example [2.3], C provided D with two choices, namely, "go to the bridge" and "get oil". D chose to go to the bridge as he intended to get two more treasures. C then uttered "OK" to acknowledge this. At the same time, he tried to figure out a specific command so as to get to the bridge. He uttered "/tse həɪ/" in Cantonese meaning "that is". But he soon realised his switch of codes and switched back to English after a one second pause. Subsequently, he suggested moving "south" and the command was typed in and executed.