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OF SOME LIMITS TO AUTONOMOUS PROGRAMMES IN LANGUAGE LEARNING

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In recent years, research has stressed the similarities which exist between L1 acquisition and L2 language learning processes.¹ On the assumption that the second language learner is engaged in making hypothesis about the language and testing them - in the same way as the child acquiring his mother tongue - the conditions for successful learning are described as being:

- Facilitation of hypothesis making (lots of data available)
- possibilities for hypothesis testing (errors not only accepted but encouraged)
- self-generated motivation (meaningful communicative activities)²

These imply the rejection of the traditional teaching situation where the input is carefully pre-selected, errors are reproved, motivation somehow sustained by various types of chocolate medals, and communicative activities consist in answering questions to which the teacher knows the answer. Such a situation would counteract the strategies specific to the human being trying to learn a language and as G. Kennedy puts it: 'It is not learning second languages which is difficult, it is learning them in classrooms'.³

However similar may be the language learning processes in L1 and L2,

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- 1 See Ervin-Tripp, 1974. Is second language learning like the first? TESOL Quarterly, 8, 111-127, and Raven, R. 1974. The development of WH-Questions in first and second language learners. In J. Richards (ed.) 1974.
 - 2 See Richards, Jack C. 1974. Error analysis: Perspective on second language learning, London: Longman.
 - 3 See Kennedy, Graeme 1973. Conditions for language learning. In J.W. Oller, Jr., and J.C. Richards (eds) 1973.

there is a point where the native and the non-native speaker differ and this is at the level of strategies of communication when performing a certain task.

Research has already shown that there are differences between L1 and L2 performances, i.e., people do not perform as well in the second language, even when they have reached a high level of proficiency in L2.⁴ The 'deficit' of the L2 performer is not only dependent on his proficiency in that language but also on the complexity of the task. Obviously, it is easier to summarize a 'fait divers' than a scientific article.

It has to be noticed, however, that the deficit is not necessarily easy to pinpoint because humans are extremely sophisticated in their means of covering it up.⁵

What I want to stress here is that performing a task in L1 (T1), is very different from performing the same task in L2 (T2).

The difference is due to a number of factors, which, put together, have the effect of slowing down the performance but more often lead to breakdowns in communication. I will mention only a few of them;

First of all, there are the constraints imposed by short-term memory. In L2, we keep less words in our short-term memory store and, for instance, it will slow down the decoding-encoding process in the course of a conversation, so that we might have difficulties taking the floor at the appropriate moment.

Either we might not have had the time to understand what the other has just said in time, miss our turn, and forget what the previous exchange was about in the process of decoding what comes next, or, at a lower level of proficiency, we might even miss the fact that we were offered the floor, because we do not decode the prosodic features which give us the cue.

4 See Dornic, S., 1975 Human information processing and bilingualism. Reports from the Institute of Applied Psychology, University of Stockholm.

5 For instance, interpreters usually prefer interpreting from L2 to L1 because they feel their expression is more 'nuanced' and accurate in their first language, but it also allows them to cover up slight comprehension errors more elegantly.

In the encoding process too, we might run into difficulties; pauses at clause boundaries are going to be slightly longer because sentence planning is less efficient and it might be interpreted as a turn-taking point by the others because - for instance, they do not rely too much on our prosody, making allowances for the fact that we are not native speakers - and so on, all these tiny differences leading to interruptions, fights for the floor, and generally speaking, making exchanges more complex than between native speakers,

There will be interferences from L1 too, which can slow down our performance by bringing in irrelevant information under the form of lexical meanings or connotations imported from our first language.⁶ The availability of the L2 lexicon can be impaired by this overcrowding effect.

Above all, the L2 performer will be less sensitive to the redundancy built in in L2, and will be less able than the native speaker to make use of it. He will get less information from the language - this time using 'information' in its technical sense - because his ability to reduce uncertainty by eliminating probabilities is never as good as that of a native speaker - this has been amply demonstrated by experiments making use of noise - At all levels, phonological, grammatical, lexical, semantic, the non-native displays an inability to function with reduced redundancies because, as Spolsky puts it, 'he cannot supply from his knowledge of the language the experience on which to base his guesses as to what is missing'.⁷

I have mentioned these few factors very briefly to show that the processing of L2 is more consuming and that decision making is more demanding because it involves more complex search procedures.

6 See Treisman, A.M. The effect of irrelevant material on the efficiency of selective listening. (1964) Am. J. Psychol. Vol. 77 pp.533-46.

7 See Spolsky, B. What does it mean to know a language, or how do you get someone to perform his competence? in J.W.Oller, Jr. and J.C. Richards (eds.) 1973.

Thus, performing T2 successfully not only implies different operations, but also more operations. Different, because they are more complex and less successful (generally speaking, thresholds are higher), and more, because, if T2 is performed successfully, you must have developed enough repair strategies to make do with an impaired system. Note that I am not saying that you never have to use repair strategies in L1 but it is a question of degree. If, for some reason, one part of your system is faulty in L1 it is accidental, whereas in L2 the norm is that the whole system is slightly faulty all the time.

A consequence of this is that the strategies of communication for performing T1 (S1) are going to be different from the strategies of communication for performing T2 (S2) and the difference has to be taken into consideration when you specify the learning objectives and learning activities for a language learner.

To deal with this problem, there are two main options. The first one is to simplify T2 to the point where S1 becomes efficient. For example, divide T2 into T2a....T2b....T2n where T2a....n are so simple that they can be equated to S1....n so that the problem of differences in strategies of communication disappears.

The best example of this approach would be programmed learning. Whether you have a grammar-based, or a function based syllabus is here irrelevant. What is important is that the various elements involved in the target-task are serialized one way or the other. Such simplifications will make decision making very easy for the learner because responses will always be highly predictable, and verbal search will be reduced to the minimum. With such an approach, which can become highly sophisticated, particularly with the developments of technology, you ensure success within the scope of the mini-tasks, thus keeping up motivation, but you go against the learner's strategies of problem-solver, particularly if you programme your materials so as to prevent errors from occurring, and you reduce considerably the data available to the learner, who is already a part-time learner as compared to

a child learning his first language. Above all you assume that the addition of the mini-tasks will ensure success when performing T2. By doing so, you overlook an important aspect of language in use,⁸ but also, you have to transform T2 so much that it becomes a long-term objective, and whatever be the contents of the units or exercises, (even if they are called 'functional') the actual communicative function the learner is fulfilling during all this time is 'request for confirmation'.

As far as Interferences from L1 are concerned, you can take them into account, but only in contrastive terms, at the stage of the planning of the materials, i.e., by controlling the input, and assuming that areas of difficulties will coincide with the differences between the two languages, which we know is far from being true.

Lastly, by de-composing T2 you will avoid major problems outlined above. By working on one input channel at a time, you will by-pass the great difficulty the learner has in integrating verbal and non-verbal information, and by working on closed sub-systems within the language, you will favour rote-learning and language-like behaviour at the expense of the creativity inherent in language behaviour. Once again, I insist on the fact that I am not thinking of language lab types of drills only but also of carefully built materials meant to activate functions in the class-room.

I hasten to say that this approach does not necessarily prevent the learner from performing T2 appropriately in the end! In spite of the serializing, he will still be able to induce the underlying rules governing the language, and he will have done an enormous amount of operation learning and skill training. However, there will still be a wide gap between $T_1 + T_2 + \dots + T_n$ in real life and $S1a + \dots + S1b + \dots + S1n$ and $S2$. Confronted with the actual situation, the learner will have to develop masses of repair strategies suddenly to cover up his deficiencies. He might be able to do this very

8 See Richterich's concept of 'adequation scale' in *Systems development in adult language learning 1973*, Council of Europe, Strasbourg.

quickly and efficiently, but often, he will try to avoid real life situations and will seek refuge in more learning.⁹

The second option is to define S2, taking L2 operating constraints into account from the very beginning. The aim is to help the learner develop strategies enabling him to perform T2 with an impaired system, by confronting him with the target situation, and helping him develop a complex network of relations between the various elements of the situation.

In this perspective, language learning is still dealt with in terms of 'what do I need to learn to do T2' but the linguistic system is viewed from a different angle. You take redundancy and creativity into account at the expense of the learner's security, by making great demands on his problem-solving abilities by pushing him to produce errors and to take risks.

An advantage is that you do not interfere with the process of language learning as such, but also, because the learner is faced with situations where he has to cope (even if these situations are simulations) he can exploit the positive face of his deficiencies from the start by developing strategies of avoidance. For strategies of avoidance, I refer you to E. Tarone's series of examples.¹⁰ To those, one would have to add such things as the use of fillers giving one the time to build up one's sentences without losing the floor, sets of devices to intervene efficiently on the course of a conversation, such as asking people to speak more slowly or asking for words or sentences to be repeated etc.

Obviously, to be able to exploit his 'deficit' the learner will have to learn a lot of language and he may then have to resort to serialised materials to train specific skills, but these will then become meaningful and will be to the point.

⁹ Adults in particular have an alarming tendency to under-estimate their knowledge and insist on being taught languages 'as if they knew nothing'.

¹⁰ See E. Tarone, Andrew D. Cohen, and Guy Dumas. A closer look at some inter-language terminology: A framework for communication strategies. Working papers on Bilingualism No.9. April 1976, pp.76-94.

It seems to me that a careful mix of both options is necessary if we want learners to succeed within a reasonable period of time.

This is where I come to the problem of autonomous programmes. In a self-directed learning set up the organisation of the situation is left to the learner, and the way he is going to do this is going to reveal what his preferred learning strategies are.

According to Pask's work,¹¹ there are two major types of learners, corresponding to two distinct learning strategies. Pask calls them 'serialists' on the one hand, and 'holists' on the other. This finding, that people are fundamentally one or the other is in itself extremely interesting but Pask's research shows further that if you impose on learners the strategy which does not correspond to their 'type', they do not learn properly and do not retain what they have learnt.

Thus, if offered both possibilities, the 'serialist' is going to be tempted by step by step procedures and programmed courses, and if there is a language lab available, all chances are that he is going to make extensive use of it.

The 'holist', on the other hand, is going to avoid rote learning and will try to exchange with native speakers from the very beginning, whatever be his difficulties. Both might feel happy about it - since the use of their preferred strategy is motivation generating - but they might lose on efficiency if they do not learn to become versatile before they start working in autonomy so as to be able to switch strategies depending on the kind of task they engage in.

One can predict a danger of 'pidginisation' for the 'holist'. He will develop just enough language to be able to succeed in the particular situations he is interested in, and, if not shown the advantages of training specific

11 G. Pask. Educational methods using information about individual styles and strategies of learning. S.S.R.C. project H.R. 1424/1. Final Report 1973.

areas of the language, might ceiling at a much lower level than the one he could achieve in a reasonable time. He might also waste a lot of time because he makes use of too much irrelevant information. (In this connection, the problem mentioned yesterday, concerning the 'Eurocenters', seemed to be typical of 'holist' students).

For the serialist, on the contrary, his tendency to 'operation learning' will make him incapable of launching himself in real life situations and if the only avoidance strategy he develops is silence, he will get very frustrated and might give up at the crucial moment of transfer.

This is why I would like to suggest that in a language learning resource center,

(1) Students are tested with the specific aim of revealing their preferred strategy. One could use the 'cartoon' test devised by Pask, or, maybe, another version where the elements of the cartoons are actual L2 elements.

(2) Amongst the resources available there should be materials appealing to both types of learners. In our private study language laboratory at Cambridge we have a set up which offers typically 'serialist' materials only, and although I was not able to conduct a systematic enquiry (because it is almost impossible to trace people who do not come any more), the students who stopped coming and whom I was able to interview (about 20 within the past two years) were without exception typical 'holists' who condemned the set up because of the style of the materials. To try to counteract this effect, the only thing we have been able to offer to our students are lists of native speakers of the language who live in the area and who have agreed to help such students.

12 I heard the following judgements:

- 'It does not take into account the fact that I am a human being and that I already know a language'.
- 'I hate step by step programmes'.
- 'I can already communicate lots of things even with very little language and I cannot do that in a booth'.
- 'I do not have to learn all this in detail since, in real life, I can make use of my brains to guess what is coming'.

The people for whom our materials seem to be useful are foreigners who live in Cambridge, have to work via the medium of English, and have worked out for themselves that - say - their ability to understand intonation leads them to make blunders all the time and have consequently decided to come to the lab to work on that particular problem. They are - in the case of 'holists', people who have become versatile enough to see the point of serialization in language materials.

(3) Students should be trained to become versatile - so as to be able to choose relevant materials during the preparation stage.

It can be done by showing the pitfalls and the dangers of each strategy. Thus, students will become aware of the fact that both strategies are useful. Here are some suggestions:

For 'serialist' people:

Use cloze procedures to demonstrate the redundancy of language.

Generally speaking, make use of open-ended exercises.

Make your students analyse the recordings (audio or video) of L2 performers engaged in various types of transactions, to set off the importance of repair procedures.

Make use of simulation techniques similar to those described by M. Phillips.

I must mention here the major problem of the learning history of your students. It is quite possible that adults after ten years of secondary school, may have developed into staunch unsuccessful 'serialists', even when they are 'holists'. The 'holist'/'serialist' difference will appear only in the context of self-directed learning systems where students are left to develop their own strategies and are responsible for the organisation of the learning task.

For 'holist' people:

You can easily show that a global approach can be catastrophic. For instance, if you apply your 'skimming' reading techniques to L2 before you know the language well enough, it is very easy to miss a negation and to

understand the reverse of what was meant by the author.

It is also easy to show that there is a limit to repair procedures and avoidance strategies. (Cf. Monty Python records)

Lastly it is important to show people who are tempted by comprehension learning rather than operation learning, that in the case of language, it is necessary to go through a vast amount of automatic type of behaviour and that explicitness of rules does not entail success in their application. This is particularly important when your students are linguists, or, generally speaking, intellectuals.

In this paper I have tried to show that letting the learner follow his own strategies can be detrimental to him because it might lead him to fail to cope with the specific difficulties inherent in L2 communication. Finally, I would like to stress the need for research in the following areas:

- (1) The difference between L1 and L2 performance and the nature of the factors which intervene in this difference.
- (2) The impact of the 'holist'/'serialist' difference on strategies of language learning (in the context of self-directed learning).
- (3) The feasibility of developing efficient techniques to predict learners' strategies. to help people become versatile.