THE LANGUAGE LABORATORY :
IMPLICATIONS OF THE FUNCTIONAL APPROACH

C.R.A.P.E.L.
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Although largely based on experience and on research at present being carried out in the C.R.A.P.E.L., my paper today is in many ways an exercise in prophecy. Now, like most prophets, I do not intend to make much use of words like "if", "maybe", "or", "perhaps" — though I hope that you will provide them for me. After all, whoever heard of a prophet saying "Taking one thing with another, it seems possible that the end of the world may well be nigh"? Of course, by reading this paper, I may just destroy a great thesis: but I think it is important, — in language teaching, as in all other aspects of life where technology is increasingly impinging, — to try to avoid "future shock" (Toffler, 1971).
As you know, during the last five years or so, researchers in applied linguistics have been paying increasing attention to the twin concepts of language functions and communicative competence (Widdowson, 1973). I take it that I do not need to define these concepts here, nor do I intend to go into any of the topic's fascinating theoretical aspects, but rather to concentrate on its linguistic applications and implications. For my immediate purposes, then, I shall take it as axiomatic that, in the words of Dell Hymes (1971), "There are rules of use without which the rules of grammar would be useless", and that to know and to be able to apply those rules is to possess "communicative competence".

Attempts are already being made to assimilate the insights and to meet the demands created by this new shift of interest. Projects such as the University of Birmingham investigations into the language of the classroom (Sinclair et al. 1974), or the University of Lancaster study of the language of doctors in hospital casualty departments (Candlin et al. 1974), are one manifestation of this. Another is the production of functionally-based teaching materials which are not so situation-specific, by research centres such as the C.R.A.P.E.L. (See P. Riley, "From fact to function", in this volume). The use of these materials has so far usually been limited to the institutions which have produced them, but such work is clearly beginning to influence commercially-published and therefore widely-available courses, if only superficially.

Given that all this work is in progress, it seems that, — as results are published and popularized, — the trend towards the functional approach will both continue and accelerate during the next five years. It is obviously vital, therefore, for those of us involved in language teaching to ask ourselves what the implications of that trend will be in general for methodology, materials production, educational technology etc., and in particular for the language laboratory, which in the eyes of the public, students and administrators at least, is the epitome of modern language teaching. Again, it is pretty clear that, for a variety of reasons, the effects of the functional approach will be felt first at the more advanced levels and then filter down: this is especially true of the present transitional period.

This prediction will no doubt cause the world-weary classroom teacher to sigh deeply. After all, hasn't he just been through the so-called "Chomskyan Revolution"? And has it really, in terms of what is being done in the classroom, has it really made any difference? He is still giving his students structural drills, even if the theoretical justification for doing so has changed (e.g.
Brown, 1966). And anyway, weren't transformational drills being done long before Chomsky was even a gleam in the eye of the M.I.T.? "Change the active sentences into the passive... Change these past tenses into the future." Plus ça change. To label these drills "Transformational" is at best a nod in Chomsky's direction, at worst a fad, and in either case the influence of his work on language-teaching practice remains, as he said it would (Chomsky, 1966), negligible.

But why should the impact of the functional approach be any different?

Because, fundamentally, it does not concentrate on structure. For all their differences, the structuralist and the transformational approaches both concentrate on syntax. Admittedly, this is disguised by the nomenclature and by the considerably greater power and sophistication of TGG, but it is well to keep in mind that the title of Chomsky's most influential work is Syntactic Structures (Chomsky, 1957). "Learning a language" has become synonymous with "learning the rules of structure of that language". It is against the very narrowness and poverty of that definition, with its exclusion of all social and interactional considerations, that we are now reacting. The greater power of TGG rules was an improvement on the earlier structuralist descriptions, but they still had to be learned by heart, — or "internalised" or "acquired" or whatever; the difference in terminology at this level is trivial.

The obvious temptation is to try to replace structural drills by some kind of functional drills. Of course there is no harm in trying, but it can be dangerous: we find in certain commercially-produced courses instructions such as "Teach function X by drilling structure Y". If his experience of the functional approach is limited to such materials, the teacher can be forgiven for thinking that it is just another set of new labels, but with the mixture as before.

Strictly speaking, though, is it possible to talk of "functional drills"? Isn't that a contradiction in terms? Is it possible to practice a function? Isolated from the relevant situation, doesn't an utterance die and leave only its skeleton? To survive, doesn't it need its natural habitat — which certainly excludes the language laboratory. Of course, the use of authentic materials will go a long way to meeting these objections, in the same way as a zoology student will learn more about their ecology by watching animals in films than he will by looking at them in cages at the zoo. This is one reason why the use of authentic materials is a necessary corollary of the functional approach.
As regards oral expression, we can try to counter these objections, again by the use of authentic materials, but also by ensuring "sincerity" in our exercises, that is, by making it possible for the student to give honest factual answers, in keeping with his role and personality. To do so, however, does mean accepting further severe restraints, which entail even greater programming difficulties: open-ended drills are notoriously difficult to control. As if this weren't enough, the problem is compounded by the fact that, typically, many functions tend to occur in patterned sequences, which imposes almost insuperable logistics problems on the programmer.

To cap all this, the problem is then multiplied by the most powerful factor of all — our own ignorance. We simply do not have as yet a taxonomy of functions which is anything like an adequate foundation for the construction of a programme of drills. We do not know what the functions of language, of any language, are, nor what relationships hold between them. Is it valid, for example, to posit the existence of a function "Expression of opinion" in English? And if it is, how does it relate at various levels to, say "Communication of facts" or "Hypothesis"? And how do functions relate to other features such as focus, key, modalisation and modulation (See F. Roussel, in this volume), and even irony, sarcasm, sympathy or humour?

Our ignorance in these matters is being slowly whittled away, but in the meantime it will continue to limit and determine the nature of the materials produced. They will be fragmentary, dealing with one function or sequence at a time. They will be provisional, since further analysis is bound to have repercussions, making a process of continued revision necessary. And they will be based on and will incorporate authentic materials, since our very ignorance prevents us from producing valid constructed materials. Taken together, it can be seen that these factors militate against the traditional serial-development courses and favour modular presentation, a trend which is already well under way in response to the related demand for materials dealing with highly specific communication situations.

A further consequence of the restraints I have been discussing will be to throw the weight of the laboratory behind Listening Comprehension work. The potential of the tape-recorder as an "aural blackboard" for the demonstration and exemplification of a rich variety of uses, situations, accents, voices, subjects, has hardly been tapped as yet. This is largely due to the process of idealization which is the automatic consequence of constructed materials. I shall return to this point later: for the moment, though, it is worth remarking that
this bias towards Listening Comprehension work can only hasten the development of sound libraries at the expense of laboratories.

So long as structural considerations dominated the choice and definition of teaching objectives, neither the adequacy nor the relevance of the language laboratory was really questioned. It is this situation which is now changing, as the functional approach shifts our focus away from structure and internal semantics towards pragmatics, the external uses to which language is put. "Ah ha!" I hear you cry. "But at least you admit that, within its own terms, the language laboratory is doing a good job out there in the field. Those terms may be too narrow, the objectives too limited, but you can't deny that all learners need to acquire the basic morpho-syntax of the language."

No I can't deny it — though I will just point out in passing that this argument, which is becoming increasingly common, does disqualify the laboratory for advanced teaching. All learners, then, need the basic morpho-syntax. But is the laboratory an efficient aid in doing so, and, secondly, is that job relevant to the acquisition of communicative competence?

It seems widely accepted that, in the words of Edward M. Stack, "The most important advance in language teaching efficiency is the language laboratory" (Stack, 1971).

Obviously I do not have time here to detail the major experiments which have been carried out to test this hypothesis — Keating (1963), Large (1963), Freedman (1969), Jalling (1969), Smith (1970) and Green (1974). But I think you will agree that a reasonable overall verdict on the efficiency of the language laboratory is "Not Proven". For example, in the University of York experiment reported by Green, which is the most recent and in some ways the most rigorous of all, the data led to the following conclusions:

"...a group of pupils using a language laboratory as an aid in their learning of German showed no detectable difference over a period of three years in either performance or attitude, from a matched group of pupils that did not use the language laboratory... To judge from the continued growth of language laboratory installations in schools, both teachers and administrators assume that they are beneficial to pupils. Our study does not justify the assumption..."

1 For a critical survey of these experiments, see Holec (1971).
Green's conclusions confirm the majority of experimental findings mentioned. Moreover, it is important to point out that these experiments are comparative, that is, they contrast results obtained from instruction using the laboratory with those obtained from some other method which does not involve laboratory use. Too often, experiments which are claimed to show the superior efficacy of the language laboratory are "introverted", comparing one laboratory method or programme with another.

Despite this evidence, there is current a vague but strong belief that the laboratory is particularly effective with beginners and intermediate students. This belief has to be vague for two reasons: first, no experiments have been aimed (as far as I know) specifically at advanced students; and secondly, there is no definition as to what is meant by "advanced" here. This partly explains the paradox that, while the laboratory is being praised to the skies, it is usually left for the most junior and unqualified staff to work there. The senior teacher, accustomed to being the only source of information and therapy, feels his status and authority diminished and prefers to take the advanced students outside the laboratory (Bennett, 1974).

The absence of any satisfactory definition of just what "advanced" means in phrases like "an advanced learner" or "an advanced level" results from the nature of the problem we are discussing, namely, that there never can be a definition which is based on structural considerations but which succeeds in satisfying functional requirements.

From our point of view today, this is significant, as it highlights the restraints on the language laboratory as it is used at present, while at the same time giving a clear indication of the directions we must take if the laboratory is to remain — I would even say become — an efficient language-teaching tool. In the light of the research and developments referred to above, it can be seen that the continued use of language laboratories could only be justified if they could be shown to make some direct, marked and exclusive contribution to the acquisition of communicative competence. This claim is reinforced by the increasing evidence that its practical and methodological advantages have been greatly exaggerated. Take, for example, the common belief that the laboratory acts as a catalyst within a given institution. This is true — but its final results are by no means always an improvement, as there is a strong tendency to what has been aptly labelled "...pedagogical totalitarianism... where the laboratory is expected to do everything, a breach of the fundamental rule that a
specific technology should both imply and determine a specific pedagogy." (Holec et Kuhn, 1971) Too often the catalytic effect of language laboratories is limited to a rather desperate feeling that the expense must, — somehow, anyhow! — be justified. This in turn results almost automatically in the exclusion, for financial reasons, of all other types of audio-visual equipment and materials, with absolutely no guarantee whatsoever that the priorities are pedagogically correct.

Similarly exaggerated are the claims that the laboratory enables the learner to evaluate and correct his own performance, and, secondly, that it improves the amount of individual attention he receives whilst allowing him to learn at his own rhythm. In abstract, technical terms, there may be a certain truth in these claims, but in practice they simply do not occur. I do not have time to go into the reasons why not and must restrict myself to the observation that individualization of attention has been confused with isolation of activity, giving rise to the absurd situation that the most social of all activities is supposed to be learnt in solitary confinement.

Earlier, I asked two questions: Is the language laboratory as it now exists doing the job it is supposed to do and is that job relevant to the acquisition of communicative competence, with the rider that only if it is can its further use be justified. My answer to the first of these questions was "not proven". What about the second? When we discussed the programming of functional drills, we saw that there are enormous difficulties involved which will push the use of the laboratory towards listening comprehension work based on authentic materials. In itself, this is to be welcomed as a healthy precision, an antidote to the idea that you can teach anything in a laboratory. But it is dangerous to treat this and other defects as if they were simply matters of software: change the materials a bit, add a few new switches and — Shazam! — the language laboratory will enter the Functional Era unscathed. This is just not so: some of its defects are inherent to the laboratory as we know it. The isolation of the learner is one of these. Another — so obvious it seems almost trivial — is that the laboratory also isolates and selects the verbal aspects of communication. It excludes visual, kinesic and proxemic information, indeed almost every form of physical activity because it cannot handle them and because it cannot even simulate face-to-face exchange. Yet the functions of language can often only be understood or learnt in relationship to what is being done in a given situation. Just try following a television programme with the vision switched off: it is extremely difficult to do so. Partly this is due to the absence of, say, gestural cues (Birdwhistell, 1971): for example, the analysis of videotaped spontaneous conversation confirms our intuition that the specification of particular attitudes or functions is often signalled kinesically (e.g. Crystal, 1970).
But this exclusion of the non-verbal has one other important result — so important that it alone may well vitiate the use of the laboratory for functional use, namely a bias towards the reporting functions of language and towards verbal over-explicitness. As David Wilkins has pointed out (Wilkins, 1972), materials produced by course designers on the basis of intuition or memory reflect a conceptualized version of the situational context, whereas for the actors themselves, the language has to carry out many more functions. As a machine for learning in, the laboratory is inadequate, just as home — as opposed to a house — is much more than a machine for living in. Such definitions fail to take into account essential social features.

It will be seen that, again, these objections can be at least partially met by the use of authentic materials, including in this case, visual ones. It is not difficult to predict that the next generation of language laboratories will be "video-laboratories" — where they can be afforded. Before that happens, on the basis of the arguments I have been putting forward, should we not pause and ask ourselves "Is it worth it?" In terms of cost-effectiveness, can more laboratories be justified?" I may be getting cynical in my old age, but it does seem highly suspicious to me that manufacturers continue to increase the technical sophistication of their equipment without having carried out — as far as I know — any pedagogical research: are you disappointed with the results achieved with your laboratory? Buy a bigger, better one with six new kinds of flashing lights. Yet their influence on administrators is often greater than that of educationists. This is not just a professional demarcation dispute; fundamentally it is a moral one. Questions of investment and reputation apart, the evidence points towards the abolition of the classroom-laboratory, with a corresponding increase in sound-libraries and in the diffusion of a variety of audio-visual equipment, both throughout the institution and at home.

I would like to finish by concentrating for a minute on a theme which has been running through this paper, the idea that the switch to the functional approach will result in a move away from artificially-constructed programmes and towards the use of authentic materials (I have not had time to consider the implications of this for the role of the teacher and the programmer, though obviously they will be important). I have tried to indicate some of the reasons why this move should take place: these included, firstly, the deficiencies inherent in the physical nature of the laboratory; secondly, our ignorance concerning language functions; thirdly, programming difficulties and, lastly the need to avoid the bias towards the reporting functions. A consequence of this move, and a most striking one, will be the reaction against the idealization of language. This process has been justified partly for technical, acoustic reasons, partly
by the Chomskyan emphasis on competence at the expense of performance, it has resulted in the abolition from language laboratory materials of some of the commonest features of speech — hesitation, incompletion, switching, reversal, laughter, coughing, voice quality, etc., to say nothing about such phenomena as background noise or static. This downgrading of features regarded as imperfections of performance is not really surprising, as, from the purely syntactic point of view, they can be shown to be junk. Yet native speakers go on obstinately refusing to produce those well-formed sentences we teach our learners to understand and produce in the laboratory: this idealization of performance therefore seems ideological and not pedagogical or even common-sense. Because even if we regard such phenomena as interference, it is interference our learners are going to need to deal with.

But more to the point is that, when seen in the context of the interaction as a whole, such features take on considerable significance, as when, for example, hesitation is used for a polite refusal, or an exclamation is used to signal attention or interest or sympathy. During the next few years it will not seem unusual when a teacher says that he is teaching his students hesitation or swearing in English. Here again, it is worth noting that the emphasis will be on comprehension rather than production.

\footnote{For a fuller discussion of this and related topics, see Heddesheimer et al. (1972 and 1973).}
BIBLIOGRAPHY


