The recent tendency in language instruction is toward the functional approach which shifts focus away from structure and internal semantics toward communicative competence and the external uses to which language is put. The implications of this trend for methodology, materials production, educational technology, and in particular for the language laboratory are discussed here. The efficiency of the language laboratory is questioned. The main criticism is that it isolates the learner, thereby excluding visual, kinesic and proxemic information. Also, it has not been proven by any empirical surveys that the language laboratory as it now exists is doing the job it is supposed to. The evidence points towards the abolition of the classroom-laboratory and a corresponding increase in sound libraries and in the diffusion of a variety of audio-visual equipment. It is predicted that the next generation of language laboratories will be "video-laboratories" wherever they can be afforded. But any expenditure on expensive laboratory set-ups should be considered carefully in terms of returns. The switch to the functional approach will result in a move away from artificially constructed programs toward the use of authentic materials. (TL)
THE LANGUAGE LABORATORY: IMPLICATIONS OF THE FUNCTIONAL APPROACH - Philip Riley

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. For my immediate purposes 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 or the University of Lancaster study of the language of doctors in hospital casualty departments 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 CRAPEL.

It seems that the trend towards the functional approach will both continue and accelerate during the next five years. It is vital to ask what will the implications of that trend be in general for methodology, materials production, educational technology etc, and in particular for the language laboratory? 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. 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, negligible.

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. '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'.

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, it is possible to talk of 'functional drills'? Isn't that a contradiction in terms? It is possible to produce 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. The problem is compounded by the fact that, typically, many functions tend to occur in patterned sequences, which imposes almost insuperable logistic problems on the programmer.

The problem is multiplied by our own ignorance. We do not have as yet a taxonomy of functions which is adequate 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'? How do functions relate to other features such as focus, key, modalisation and modulation or irony, sarcasm, sympathy or humour?

Our ignorance in these matters is being slowly whittled away, but in the mean time 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. They will be based on and will incorporate authentic materials, since our ignorance prevents us from producing valid constructed materials. 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.

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 idealisation which is the automatic consequence of constructed materials. A 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. This situation is now changing as the functional approach shifts our focus away from structure and internal semantics towards the external uses to which language is put.

I cannot deny that all learners need to acquire the basic morpho-syntax of the language, but I will point out that this argument, which is becoming increasingly common, does disqualify the laboratory for advanced teaching. All learners need the basic morpho-syntax. But is the laboratory an efficient aid in acquiring this, and is it 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). I do not have time here to detail the major experiments which have been carried out to test this hypothesis. 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....'

Green's conclusions confirm the majority of experimental findings mentioned. Moreover, these experiments are comparative, and contrast results obtained from

instruction using the laboratory with those obtained from some other methods. 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 to 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 an efficient language-teaching tool. In the light of the research and development 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 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 '... 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'7. Too often the catalytic effect of language laboratories is limited to a rather desperate feeling that the expense must 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 that it improves the amount of individual attention he receives whilst allowing him to learn 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 individualisation 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? 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: some of its defects are inherent to the laboratory as we know it. The isolation of the learner is one of these. Another is that the laboratory also isolates and selects the verbal aspects of communication. It excludes visual, kinesic and proxemic information and it cannot simulate face-to-face exchange. Yet the functions of language can often only be understood or learnt in relation to what is being done in a given situation. For example, the analysis of videotaped spontaneous conversation confirms our intuition that the specification of particular attitudes or functions is often signalled kinesically (eg Crystal, 1970).

This exclusion of the non-verbal has one other important result, namely a bias towards the reporting functions of language and 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 conceptualised version of the situational context, whereas for the actors themselves, the language has to carry out many more functions.

These objections can be at least partially met by the use of authentic materials, including 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?' Manufacturers continue to increase the technical sophistication of their equipment without having carried out - as far as I know - any pedagogical research. 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 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 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 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 idealisation 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, incompleteness, switching, reversal, laughter, coughing, voice quality, etc) and phenomena such 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 these well-formed sentences we teach our learners to understand and produce in the laboratory. This idealisation of performance therefore seems ideological and not pedagogical. Even if we

8. For a fuller discussion of this and related topics, see Heddesheimer et al (1972 and 1973)
regard such phenomena as interference, it is interference our learners are going to need to deal with.

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. It is worth noting that the emphasis will be on comprehension rather than production.