

The role of the psychology of language in applied linguistics

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There are several ways of determining the role and scope of the psychology of language in applied linguistics. One way is simply to look at what is actually being done in the field, and if this is one's method, a vast array of studies on various aspects of syntactic, morphological and conversational acquisition in both first and second language acquisition immediately presents itself (cf. Cook, 1978 and the literature surveyed there). In the case of second language learning research, there is also, of course, the investigation of language learning, perception and production strategies and motivational and situational (mostly pedagogical) variables. But the overwhelming magnitude of the research soon makes it clear that confusion would reign supreme if we tried to define the scope of a psychology of language only by looking at what is being done, without also asking what it is that stimulates this work, i.e. *why* it is being done.

An apparently straightforward answer to this is that, negatively, the parameters of psychology in language learning and teaching research are already indicated by the fact that it is not the only subject that informs applied linguistics. Traditionally, there have also been inputs here from linguistic and educational theory. Positively, however, one may say that there are also *inherently* set limits and bounds that determine what a psychology of language can do. One attempt at giving some kind of order to the multitude of studies is found in the work of McDonough (1977). Following the suggestions of Glaser (1976), the role of psychology in applied linguistics is here defined by several parameters. First, there is the analysis of 'competent performance', i.e. the processes and strategies of language perception and production (which categorizes studies as those by Tarone, 1981; cf. too Cook, 1977, and, in the case of second language learning, the work on concepts describing the initiation and production of utterances as in the monitor model – Krashen, 1978: 2 and 1980). Since these are often assumed to depend on the cognitive capacities of the learner, they must be explained by a description also of the *development* of competent performance (cf. McDonough, 1981: 6; Glaser, 1976: 18). The study of these mental capacities, mechanisms and

states in learners received a new stimulus from the work of Chomsky (cf. McDonough, 1981: 5, 98 f.). It inspired work on the acquisition of language leading, for example, to generative grammars being devised for various stages in the child's acquisition of negation (cf. Clark & Clark, 1977, 348 ff. and the discussion and references there) and other structures. Whether or not research tried to give such a characterization to the innate language ability of learners, Chomsky's work has continued to exert influence even in approaches that are not classifiable strictly within the mentalist/anti-mentalist dichotomy (cf., e.g., the terms in which the interlanguage hypothesis is phrased – Selinker, 1972: esp. 228 ff.).

A second category of psychological research that is not strictly psycholinguistic, as the above, focuses on, amongst other things, the 'external' (in terms of linguistic criteria) factors that have always allowed the field to be known by the broader label of psychology of language. As part of a description of the 'initial state' of the learner, this category (McDonough, 1977: 69, 73 ff.) includes investigation of attitude (cf. Schumann, 1978; Wesche, 1979; Bialystok & Fröhlich, s.d.), motivation (cf. e.g., Clement, Gardner & Smythe, 1977), learning styles and other social psychological variables.

A third component of psychological investigation is related to the pedagogical environment and the learner's efforts in this environment, i.e. the 'conditions that foster the acquisition of competence'. One may think here of the investigation of the effects of pedagogical technique, and the claims regarding groupwork (cf., e.g., Turner, 1977), classroom language analysis (e.g. Allwright, 1980), the work on optimal language learning environments (Burt & Dulay, 1981), or the highly individualized enquiries of Hosenfeld (1976) which emphasize that 'general' laws of learning must be distinguished from idiosyncratic ways in which individual learners operate. A fourth category of research comprises the assessment of the process and product of language instruction: cf. the debate on integrative versus discrete-point testing (Oller, 1973; Farhady, 1979), and measures of success, also of teaching.

This apparently uncomplicated ordering and categorization of research interests in the field runs into problems, however, when we go beyond a consideration of *what* it is that is being accounted for to ask what might be *expected of the results* of such research. If the purpose is one of utility, i.e. to supply information for teaching purposes (McDonough, 1981: 1), this still leaves the question of what *kind* of utility and what *kind* of information we might expect. Is the utility a prescriptive one, or does it assume the form of a post-hoc justification of established practice? That it is not always easy to tell which kind it is, is clear from a number of facts. For instance, there is almost inevitably a lag between linguistic theory, on which, amongst other things, the analysis of the development of competent performance crucially depends, and language learning research. In this way many 'facts' of language acquisition and perception that were explained by psychological experimentation in terms of earlier versions of transformational grammar, now no longer need explanation,

d. Cole (1970)
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if newer versions (e.g. the revised extended standard theory) are accepted. Closer to home, perhaps, is the time difference between language learning research and teaching methods such as the communicative approach, which is only now beginning to find some justification in research on conversational analysis (cf. Hatch, 1978; Cook, 1981a, 1982), while the development of testing techniques for this approach is also by no means over. Can one possibly argue, somewhat presumptuously I think, that proposals for communicative teaching must have been held back until such time as the psychology of language learning and teaching had predicted or prescribed that this was indeed the course to take, or should we rather conclude that the utility of the psychology of language is not that it is prescriptive, but rather for the subsequent justification (or not) of established practice?

The fact of the matter is that applied linguistic reflection, of which psychology of language forms a part, does not precede, but *follows* professional teaching practice (Crystal, 1981: 7). Moreover, the assumed dependence of teaching on psychological theory is slightly more complicated than is supposed in general statements on how, e.g., the audio-lingual method was based on behaviourist theory: indeed the link between the two is more tenuous and vague than is assumed (cf. Ingram, 1975; McDonough, 1981: 9 f.). Ironical, too, for those who would argue for a prescriptivist view, is that the autonomy of second language learning research has been necessary for the definition of its field of operation, even though this has had the attendant danger of isolating it from possibilities of application (cf. Cook, 1981a). It is significant, for example, that in the work of Selinker (1972: 224 f.) the autonomy of the psychology of second language learning is such that no necessary connection is claimed to exist between its theoretically relevant units and the units of linguistic theory, and at the same time there is the rather strict opposition of a psychology of second language learning and one of second language teaching, the latter being defined as a psychology of language learning exclusively in terms of success. But it is this last kind of theory that could have prescriptive utility for language teaching, and so obtaining autonomy for the field has its price.

There can be no doubt that Glaser's expectations are of a prescriptive kind (cf. Glaser, 1976: 7 for quite explicit claims in this regard). The problem that there are *competing* theories in each of the components that are described is taken care of by experimentation and re-experimentation (Glaser, 1976: 8, 18), even though the prescriptive result might obscure crucial differences: this is the price that has to be paid for progress.

In the work of practising (applied) psychologists, however, expectations tend to be much more sober: psychology can offer no recipe for, and should exert no undue influence on language teaching (McDonough, 1981: 2; cf. also the conclusion of Mackey, 1973: 255 in this regard), but may provide pointers and suggestions as to more reasonable and perhaps also more preferable ways (cf. the sample of such suggestions offered by Dulay, Burt & Krashen, 1982: 261 ff.). This position seems to be more in

accord with the factual state of the science, discussed above. It may still present a problem, however, if the experimental method is upheld as the only way of getting at the correct psychological information (cf. Glaser, 1976: 8), with an appeal to the supposedly accurate, explicit and controlled research methodologies of the (natural) sciences. Then we have no guarantee against 'undue' influence being exerted upon teaching practice, for underlying this preference there is the expectation that, given strict control, replicability and so forth, we may yet get at the truth. We cannot ignore, however, that the intensifying debate of the last two decades on the foundations of theoretical reflection originated in physics, one of the most 'natural' of natural and purportedly exact sciences. It is a fallacy, Robins (1967: 3) remarks, to think that the facts and the truth are laid down in advance, awaiting discovery.

This is *not* to say that there is no place for experimentation or controlled observation in the psychology of language and language learning – quite the contrary is true, for it has a crucial role – but simply that it may be a fallacy to believe that experiments lead to *discoveries*. To say that the "processes that ... speakers go through ... can *only* be discovered through experimental research" (McDonough, 1981: 4; emphasis added) ignores the possibility that discoveries may come as a result of new hypotheses or shifts in psychological paradigms, which are *subsequently* tested by experiment. Experiments are therefore set up to attempt to verify theoretical and psychological conceptualization*, but one should not expect them to do more than this.

There is always the problem, however cautious the researcher may be, that the experiment will prove what it set out to prove; and where experiments go wrong or do not work, explanations under a competing hypothesis may be offered. This, too, may in turn prompt us to be cautious about entertaining inflated expectations about what the experimental method or theoretical knowledge can yield. Even though it may be harder to develop experimental techniques for more complex 'alternative' or synthetic approaches, such as interactionist psychology (cf. McLaughlin, 1980: 346 f.), that can allow us to re-interpret older theories from a new perspective (cf. Cook, 1981b), these might yet make a significant contribution to our theoretical understanding by virtue of this fact.

What is needed, though, is a way of characterizing the *kind of reflection* that accompanies and directs applied linguistic and psychological concept-formation, on the one hand, and that which, on the other,

* A good example of this is the presentation of the hypothesis and the suggestions and guidelines for the collection of data and eventual experimental validation of the inter-language hypothesis in Selinker (1972): cf., e.g., the statement (p.222) that the major justification ... for writing about the construct 'fossilization' *at this stage* is that the knowledge about ILs which turns out to suggest predictions verifiable in meaningful performance situations, *leads the way* to a systematic collection of the relevant data (emphases added).

underlies the practical ideas that direct professional activities, such as teaching. There is a hint as to the difference in McDonough (1981: 4 f.): experimentation in the psychology of language is 'deliberately uncomplicated' and abstract, whereas the teacher's job is done not in terms of theoretically isolated factors but in the midst of the concrete and complicated reality of the language classroom, with all its conflicting influences. Supposing, in other words, that our experience is structured in such a way that when we practise theory, theoretical abstraction leads the way, but when we are engaged in an activity such as teaching, an other than theoretical mode of experience, which we may presume to be the pedagogical or formative mode of exercising control, guides our endeavours, then we have criteria for distinguishing the two. The structure of our experience itself blocks the possibility of a prescriptivist use of science in non-scientific activity. This difference between theoretical psychological reflection and practical pedagogical tasks is evident in the sensitivity that psychologists display regarding the implementation of their analyses: a psychological analysis may reveal, for example, that certain strategies and processes exist in language learning, but pedagogical considerations may dictate that these not be taught (McDonough, 1977: 71; Glaser, 1976: 12) or that, even in principle, they might not be amenable to control in the teaching process. A possible example of the former eventuality may be simple perceptual strategies like 'pay attention to the ends of words' (cf. Tarone, 1981, 291), that might perhaps more profitably be inculcated by 'guided' instruction (if at all) than by explicit teaching. Similarly, "optimal language learning strategies will not always be some simple breakdown into teachable subcomponents and the principle of grading" (McDonough, 1977: 73).

Psychology of language is most useful, then, if the kind of information it yields makes the teacher less prone to become a victim of theory. This is especially true in the case of minority groups, such as the Dutch immigrant community in Canada with their Christian school movement, who are seeking to place their own characteristic stamp on teaching in the face of a monolithically organized national teaching administration. Thus the psychology of language in applied linguistics will be most informative when it probes the theoretical roots that underlie, say, competing empiricist and rationalist theories in the field. It will be least informative when, after a series of experiments, it simply prescribes the path of educational reform, as Glaser (1976: 7 f.) envisages. It is one thing, therefore, to say that applied linguistic reflection can make a contribution to an understanding of teaching, albeit a (theoretically) limited one, but quite another to claim that it should effect changes in teaching: the ultimate decision must be the teacher's (Wilkins, 1975: 216).

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