Some Thoughts on the Applicability of Psycholinguistic Theory to Classroom Practice

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The EFL/ESL teacher is confronted with a real dilemma in any attempt to reconcile psycholinguistic research with EFL methodology. Despite Chomsky's skepticism "about the significance, for the teaching of languages, of such insights and understanding as have been attained in linguistics and psychology," (Chomsky, 1973.29) many pedagogical theorists have insisted that theoretical concerns should underlie practice. The tradition of relating EFL pedagogy to linguistic and psychological theory goes back to Fries' admonition to found EFL pedagogy on modern scientific studies. For audiolingual methodology which flourished after World War II in America, the modern scientific studies at that time were structuralism and behaviorism. A dilemma for EFL teachers now centers around the fact that some aspects of audiolingualism have been proven in the classroom, yet the theoretical foundations have been drastically undermined by the transformational-generative revolution in linguistics and by the new ideas and insights of cognitive psychology. In addition, new methods of language teaching and learning have arisen which draw in varying ways from psycholinguistic ideas and research. Thus the question of applying theory to classroom practice is always with us, troubling many teachers who find effective ways of teaching which they may not always be able to reconcile with findings in psychology and linguistics.

First this paper considers the debate that dominated the EFL field in America, especially in the 1960's and 1970's, between theorists arguing for and against audiolingual methodology. Happily, the debate is somewhat passé in the 1980's, yet the underlying question of how teachers base their classroom practices on theory still concerns us. Therefore, the second part of this paper proposes a pedagogical model which can be used to reconcile what is valuable in any methodology, whether it is audiolingual, cognitive, massive listening, translation, or whatever, with current theoretical work using Edward M. Anthony's classic three-part distinction between approach, method, and technique in second language teaching. (Anthony, 1963) This reconciliation argues strongly for the value of theoretical linguistics and psychology to the EFL teacher. And finally, this paper discusses a specific area of psycholinguistic research and theory which offers important insights to the teacher, that is, the work with affective variables which influence foreign language learner success or failure.

Although Europeans have not been so concerned as Americans with justifying classroom practice with theory, Chomsky's attack on behaviorist learning theory was

felt around the world. As transformational linguistics replaced structural linguistics, theorists began to question traditional methodologies even though EFL teachers continued to be trained to use audiolingual methods. The 1970's were confusing for many EFL teachers because methods and techniques they saw working in the classroom were often disputed by theorists. Moreover, theorists seemed unable to give many concrete suggestions to teachers about what exactly they should do in their classrooms.

Still by 1970 it was difficult to ignore the inadequacies of behaviorist learning theory as demonstrated by Chomsky and subsequent theorists. In the acquisition of phonology, the behaviorist approach is a movement from surface to base. Phonology is viewed as a process of shaping sounds through reinforcement of successive approximations where the "burden of language acquisition is placed on the environment." (Jakobovits, 1968.90) This model of learning describes the knowledge to be acquired (i.e. language) in relatively simplistic terms, that is, merely word orderings which are learned and then "generalized" to produce new combinations. Furthermore, the behaviorists do not adequately explain the acquisition of meaning by merely observing that words tag things in the physical environment. And finally, behaviorist theory is criticized for its inability to account for the acquisition of syntax because of "a failure to recognize the complexity of the syntax of language." (Jakobovits, 1968.94) The various examples which transformationalists cite to illustrate the complexities of of syntax are now well known ("colorless green ideas," etc.).

Post-Chomsky psycholinguistic research in language acquisition begins anew, operating from base to surface. In this research, a developmental pattern emerges which leads to the assumption of innate language universals. Once we recognize this, the focus of linguistic and psycholinguistic research moves in the direction of describing the innately endowed "language acquisition device."

These breakthroughs in theory are all very exciting, but where do they leave the language teacher? Leon Jakobovits points out four implications of psycholinguistic research for the second language teacher. First, the usefulness of efforts to teach "constituent elements" rather than "patterns of relations" is in doubt. Secondly, good language teaching should include the teaching of "explicit verbalization of implicitly known rules and relations" to facilitate foreign language acquisition. Thirdly, grammatical competence should be facilitated by transformational exercises, not pattern drills. The distinction between these two exercises is that a transformational exercise deals with the competence involved in deep structure while pattern drills focus on surface structures. And last, second language teaching should account for two propositions: "First, to recognize and allow the production of semi-sentences on the part of the learner; and second, to expose the learner to utterances which are grammatically progressive at each stage." (Jakobovits, 1968.108)

So the implications of recent psycholinguistic research suggest a rejection of many of the previously unchallenged tenets of audiolingualism and argue for teaching methods which sound suspiciously like the earlier grammar-translation methods. De-

ductive, rule-oriented explanations of grammar are applauded, ungrammatical utterances (which are products of the acquisition process) are accepted, and habit-forming pattern practice drills are rejected.

Even as Chomsky-camp theorists propose some unsettling questions for teachers schooled in traditional audiolingual methodology, the behaviorists and structuralists have not completely died out. In an address to language teachers in Tokyo, Japan, Wilga Rivers reminded us that B.F. Skinner is alive and well and living somewhere in Cambridge, Massachusetts. (1981) Several more behaviorally inclined linguists have pointed out the contradiction between the transformational/cognitive theoretical approach and the continued acceptance of aspects of audiolingual pedagogy. Indeed, linguists like Leon Jakobovits, who reject the theoretical foundations of certain language teaching methodologies, still applaud the important knowledge about the surface facts of language illuminated by the structuralists, "the highly efficient methods of contrastive analysis" and the "ability of breaking up the known facts into small units for their ordered and preprogrammed sequencing." (Jakobovits, 1970.82) Jakobovits notes the "curious paradox" of the existence, on the one hand, of effective methods based on simplistic and inadequate theories, and on the other hand, sophisticated and powerful theories which do not yield any effective practical teaching methods. (1970.34)

In the midst of this confusion, an understandable response for many teachers has been to ignore theory. To a certain extent, this position can be supported by the historical perspective of Dwight Bolinger. In "The Theorist and the Language Teacher," Bolinger states, "I am not sure that language teaching needs a theory. ... The continual tinkering with methods may be missing the main point. Intensity of teaching has little to do with theory." (1968.41) In tracing the history of foreign language teaching in America, Bolinger points out that the association of structuralism and behaviorism with the audiolingual method was in many ways fortuitous. As early as 1921, Harold Palmer defined language as a habit-forming process and urged repetitive drill and rote learning. Linguists like Leonard Bloomfield borrowed from behaviorist psychology and structural linguistics to support a style of teaching already outlined by writers on language pedagogy. After the war, the scientific authority of linguists and psychologists was harnessed "for an educational cause, much like the list of respectable sponsors on the letterhead of a radical reform movement." (Bolinger, 1968.33)

Other linguists, however, insist that theory is essential for the teacher. Ronald Wardhaugh argues that: "Every classroom practice that we have derives from an underlying theory of some kind; every good practice derives from an adequate or good knowledge of language, psychology, and pedagogical philosophy; every bad practice gives evidence of some or other weakness in our understanding of language, or of psychology, or of pedagogy." (1969.105)

Since linguistic theory itself is in a state of flux, the teacher will find few clear, immutable answers. We do know that stimulus-response theory is inadequate and that we cannot rely exclusively on the methods of audiolingualism (minicry, pattern

practice drills, repetition). Of course, most teachers do not need theory to tell them this fact. However, few teachers are ready to throw out completely mimicry, expansion, substitution and transformational exercises which "seem necessary in any kind of systematic second language teaching." (Wardhaugh, 1969.107)

Thus theorists and teachers alike have realized that the only answer is eclectism and the middle road. "Our classroom practices should follow some kind of middle road, some kind of strategy in which we use the natural contexts of language to prompt language use, together with an awareness of the language structures which must be mastered." (Wardhaugh, 1969.109)

What then is the place for linguistic theory in the EFL teacher's pedagogy and to what extent can theories tell us how and what to teach? In 1963, E.M. Anthony made an important distinction between three aspects of foreign language teaching—approach, method, and technique. Anthony defined approach as the assumptions, beliefs, and theories teachers have about language and learning. In this schema, everything the teacher does in a classroom is based on his/her approach. Method is the strategy, plan, or tactic derived from an approach for teaching a language in a given situation (ghetto school, university, adult program, children's program, etc.). And finally techniques are the specific practices, gimmicks, or educational hardware which the teacher employs to carry out his/her strategy or method. Anthony argues for the supremacy of approach over method and the priority of both over technique.

An alternative way of using this distinction is to consider the three aspects autonomously. Perhaps in this way, a "healthy functional attitude" (Jakobovits, 1968.35) toward theory can be fostered. At this point, it seems evident that audiolingualism is primarily a method or strategy which can achieve success with certain students in certain types of classes. Audiolingualism is no longer much of an approach since its theoretical foundations (language learning as habit formation, etc.) have been persuasively challenged by post-Chomsky psycholinguistic research. On the other hand, cognitive-code is only marginally a methodology (cognitive methods have yet to be clearly outlined despite Kenneth Chastain's valiant efforts to dichotomize the opposing sides in *Developing Second Language Skills,* 1976) and is almost completely an approach which encompasses our new assumptions and theories about language and learning.

To view approach, method, and technique as autonomous entities should not imply a diminution of the importance of approach and the contributions of psycholinguistic theories and research to the language teacher. The most important implication of recent psycholinguistic theory is a change of focus away from the teacher and onto the learner. A focus on the learner, his needs, learning patterns, inclinations, and motivations for learning, demands "that in our methods is will be necessary to be eclectic rather than single-minded and monolithic." (Wardhaugh, 1969. 111)

Some researchers into second language learning have called for a shift of focus to affective variables to account for the differences between first and second language acquisition. (Taylor, 1974) In this paper, I am suggesting this same shift of focus for pedagogy, specifically in any attempt to apply psycholinguistic theory and research

to classroom practice. Any information which the teacher can incorporate into his/her approach about the psychological state of the learner can facilitate the language learning experience for both the student and the teacher.

What do we know about the things that go on inside the student in the process of learning a second language? In "Affective Variables in Second Language Acquisition," H. Douglas Brown (1973) summarizes the current research in affective variables into three areas—egocentric factors, social factors, and cognitive styles. At this point, the findings are far from complete, but researchers have made a start in understanding the learning process from the point of view of the learner. Furthermore, increasingly more pedagogists are exploring the application of these insights into the affective side of learning to classroom practice.

With regard to egocentric factors in foreign language learning, researchers have investigated several factors operating within the learner, specifically, imitative behavior, ego, and attitudes and motivation. Brown points out that although first language acquisition work has considered the role of imitation, very little consideration has been given in second language acquisition studies. (1973.233) Individual learners have varying abilities in reproducing language, action, or attitude models. Whereas behaviorist theory assumes that languages can be learned primarily by imitation, this approach falls short of exploring the affective side of imitative behavior. We still do not know why one person may be a talented mimic and another person may be completely unable to imitate someone else's behavior. As researchers consider the factors of identification, modeling, dependence, and inhibition as they relate to language development, perhaps a clearer distinction will emerge between imitative and mechanical repetition which is relevant to the second language learning process.

Earl Stevick, a pedagogical theorist, makes a distinction between two types of language performance—productive and reflective. (1976.107–109) In reflective performance the learner simply gives back what the teacher throws out while productive performance comes from a deeper level where the students begins with something he/she wants to communicate to another person. In learning about and understanding imitative behavior, this distinction will continue to be an important one for teachers and material developers.

Another important factor in learning success is ego. True communication in a foreign language inevitably involves some identity conflict. Our image of ourselves must change to some degree as we become active speakers of a new language. This conflict can be observed in some Americans learning Japanese. Real fluency in Japanese requires an attention to form, politeness, and indirectness that is sometimes in conflict with certain aspects of an American identity.

Guiora (1975) uses a psychological concept of "language ego" (which is parallel to Freudian body ego) to describe the development of language boundaries. In general ego development, language becomes one aspect of the individual's separation from the object world. In the early stages of ego development, language boundaries fluctuate, but as ego development is completed, permeability of ego boundaries (and lan-

guage boundaries) is restricted. Guiora has conducted experiments with alcohol to lower inhibitions and thereby induce ego-permeability. He found that consumption of small amounts of alcohol improved his subjects' pronunciation of the second language and he relates a person's ability to temporarily give up separateness of identity to successful second language pronunciation.

Community Language Learning based on the theoretical work of Charles Curran of Loyola University is an approach to language learning that seriously considers the affective egocentric factors in language learning. One of the most important insights offered by this approach is the distinction between defensive and receptive learning. In simplest terms, in defensive learning the student *has to* learn while in receptive learning he/she wants to learn. When the student is defensive he/she sees the language as material to be mastered in order to meet school requirements, avoid teacher disapproval, or survive in a foreign country. The learning is a defense against painful failures; it is a burden to be discarded at the earliest possible time. In receptive learning, on the other hand, the student does not develop ego defenses and the learning occurs at a deeper, more significant level for the student. Instead of threatening the ego, the language learning experience strengthens the learner's ego and self-image. The learner retains the language because it becomes a valued part of his/her identity.

In order to facilitate receptive learning, the teacher must be aware of one other important egocentric factor influencing the learning process, that is, motivation. Stevick (1976.113–114) points out the parallel between defensive and receptive learning and Lambert and Gardner's (1963) instrumental and integrative motivations. The integratively oriented learner is interested in acquiring a second language in order to communicate with a valued member(s) of the target language as a potential member of the community. Instrumentally oriented learners have little interst in the people who speak the target language, but want to learn the language for more self-oriented and utilitarian reasons (occupation, esteem in own language group, grades, etc.). Gardner and Lambert first contended that the integratively oriented learner acquired a second language better than the instrumentally oriented learner. Further studies in the Philippines revealed that an instrumental motivation can be very powerful depending on the cultural setting. Although the instrumental/integrative distinction is very helpful, both Stevick and Lambert warn that in examining this dimension, "we have only made a start toward understanding the motivations of a person who is studying a foreign language." (Stevick, 1976.111)

In discussions of motivation, many theorists in humanistic education refer to the hierarchy of needs outlined by psychologist Abraham Maslow. (Maslow, 1959. 123–125) At the bottom of this hierarchy are absolute physical necessities. At progressively higher levels, Maslow notes the drive for security (stability, protection, freedom from fear), belonging (identity in a group), esteem (from self and others), and finally the highest level of motivation, self-actualization. Stevick points out that most discussions of second language learning motivation center on the top levels of this hierarchy. However, we cannot assume that students or teachers are comfortable at the lower levels

and therefore are not influenced by these motivational concerns also. Teachers can profit from a better understanding of all levels of motivation and should be able to separate problems arising from these motivational concerns from intellectual and linguistic problems.

In addition to these egocentric factors, there are complex social factors which influence the language learning experience. One recently discussed social variable is empathy. Guiora and his research team (1975) use a micro-momentary expression device which has been developed in psychological experiments as a measure of empathy. Subjects are asked to view interviews of psychiatric patients and push a button whenever they perceive a change in facial expression. Guiora's contention is that the ability to empathize facilitates more native-like second language pronunciation. It should be pointed out that the MME device is not conclusively established as a measure of empathy, that empathy is not proved to be positively related to authentic second language pronunciation, but Guiora's research is a necessary first step toward understanding pronunciation differences from an affective point of view.

A second social factor is introversion and extroversion. Certain teaching methodologies, for example audiolingualism, favor the extroverted learner and teachers work toward bringing out extroverted behavior. In addition, teachers often stereotype students as introverted or extroverted according to their cultural background. A common stereotype for EFL teachers is that Japanese students are introverted while Arab students are extroverted. This area needs to be more carefully researched and the insights can greatly add to the teacher's understanding of the individual student and the materials and method most appropriate for that student.

Aggression is another social factor that has been studied extensively in psychology and anthropology, but has not been widely explored in language learning. Teachers can view aggression from either a positive or negative perspective. From a positive point of view, we need to look at the relationship between the aggressiveness of the student and language learning success and the relationship between aggression and motivation.

Curran (1976.6–8) in Community Language Learning uses the acronym SARD to represent four elements which have emerged in his research on personal learning. Four elements, security, attention-aggression, retention-reflection, and discrimination, are all fundamental for "positive and consistent learning." (Curran, 1976.6) Curran considers aggression to be a natural part of learning. "Small children naturally engage in active 'Learner-Aggression.' Once they have learned something, they quickly take over and teach it back.... By having this self-assertion approved and encouraged by the adults around them, children then grow in the sense of their self-worth and esteem." (1976.7) The other side of self-assertion, however, is "the will to community" (Curran, 1976.7) which must be balanced with the drive for self-assertion. Community Language Learning is an approach which encourages the student to aggressively learn and assert his/her knowledge while receiving the support of the surrounding community (i.e. the fellow students).

LaForge considers the more negative side of aggression, hostility, in his *Research Profiles with Community Language Learning*. (1975) LaForge bases his experimental classes on the theoretical axiom of Curran: "Any discussion of the educative process has really to start with the relation of conflict, hostility, anger, and anxiety to learning." (LaForge, 1975.52) In Community Language Learning, a counseling dialogue is established to work through the hostility and subsequent conflicts. LaForge states that his research with CLL indicates "the success that each student has in resolving three conflicts (hostility, anxiety, and dependence) is related to the progress... in ability to speak English." (LaForge, 1975.71)

Finally, acculturation is a social factor that has great influence on language learners, especially those in foreign countries. The distinction between culture shock and culture stress has been made. When a person enters a new culture, his problem-solving and coping mechanisms often do not work. This can produce fear, anxiety, and depression. Extreme symptoms may pass quickly as a person learns to cope. Less extreme symptoms (stress) involve more subtle problems which may persist.

The third affective variable that influences language learning performance is cognitive style. Teachers have known for a long time that students have different learning strategies, but some EFL practitioners insist that their methodology will work for all their students. In three separate articles, Kenneth Chastain has reported methodological studies comparing student successes in audiolingual versus cognitive classes. Aside from the fact that the characteristics of a cognitive class are difficult to ascertain (even more difficult is the task of establishing two classes which embody the often "unscientific" contrasts between audiolingual habit-theory and cognitive code learning theory), the most interesting suggestion which emerges from these studies is individual variability. Chastain concludes that individual students have different predispositions for one method or another and that "student ability factors which affect achievement in language learning are not the same under both methods of instruction." (1969.27)

My own experiences as a language learner bear out the existence of differences in cognitive styles. I have studied Spanish in Cuernavaca, Mexico and beginning Japanese in Osaka, Japan using the Silent Way, a method which embodies many aspects of a more cognitive approach. (Again what exactly is a cognitive method? Stevick calls the Silent Way a radical cognitive method, but according to one of Chastain's important aspects of a cognitive method—deductive explanation of grammar—the Silent Way is neither cognitive nor audiolingual.) While I found these language learning experiences extremely rewarding, other people have testified that they find the Silent Way to be an extremely inefficient, threatening, and ineffective way to learn a language.

The importance of listening in methodology is receiving attention recently especially in light of findings in neurolinguistic research. I also studied Japanese using the massive listening method of *The Learnables* developed by Harris Winitz and again the reactions of students in the class varied. Some people are strong in listening com-

prehension while others prefer opportunities for speaking the language from the very beginning.

Different cognitive styles may also be reflected in student attitudes toward testing. Some students have a strong preference for objective multiple-choice tests while others prefer more unstructured essay tests. In learning another language, some students enjoy the opportunity to "create" language and are unbothered by mistakes while others prefer more cautious approaches which allow little room for error.

Earl Stevick writes in his characteristically metaphoric way that he was born in the land of Audiolinguia where "the crucial factor in second language learning is the quantity of oral activity." Later he emigrated to the more fertile fields of Cognitia where "the crucial factor is the quality of mental understanding." And now he is exploring a completely new land, "Terra Incognita," where "the crucial factor in second language learning is the quality of personal activation." (1976.121–122)

Personal activation encompasses all those things that go on inside the student and the psychological complexities contributed by the teacher in interaction with the student. In understanding "personal activation," Stevick insists on a new role for psycholinguistic theory. "This is not to say that from a psychodynamic point of view research is to be scoffed at. But its worth now becomes heuristic rather than prescriptive: instead of expecting research findings to tell us how we ought to design and conduct our courses, we look to them for light which may or may not help us to perceive more readily what is going on in a total, particular human experience..." (1976.106)

The value of an awareness on the part of the teacher of the complex affective side of language learning cannot be underestimated. Although the awareness may not always be reflected in every method and technique used by the teacher, it can be reflected in his/her approach to the learner. The suggestion has been made that this approach is more akin to therapy than teaching. But why not? Certainly the experience of learning another language and culture is a growing one which involves a close examination of one's values, identity, and motivations in life.

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Summary

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Teachers of English as a foreign language trained in America are often concerned with the problem of reconciling theory and classroom practice. This tradition is an old one implying that we must look at research and theory in order to know how to teach. Fortunately, pedagogy in the 1980's has moved away from this preoccupation as teachers have realized that differences in students and teaching situations require an approach which is eclectic and flexible. Teachers have learned that there is no methodology which is a panacea for every classroom difficulty.

Psycholinguistics has proven particularly unsettling for the teacher. The behavioral view of language acquisition has been shown to be inadequate, yet post-Chomsky psycholinguistic research has provided few concrete suggestions about how and what we should teach. Still there is one very important principle which has emerged from psycholinguistic theoretical concerns, that is, an interest in and focus on the learner.

In changing our focus onto the learner, we see that psycholinguistic theory and research have great relevance for the teacher in his/her classroom practices. The area of psycholinguistic theory which now offers insights for the teacher in his/her attempt to understand the learner is the study of the complex affective variables which influence language learning success.

Researchers have considered egocentric factors, social factors, and cognitive styles in their attempts to understand the process of acquiring another language. Teachers need to be able to incorporate these insights and understandings into their overall approach in order to facilitate the learning process for both the learner and themselves.