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THE TWO FACES OF LANGUAGE EGO

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A fair amount of attention has been paid over the years to a unique domain in second language behavior, namely pronunciation. Pronunciation seems to be different from other domains such as vocabulary, grammar, syntax and idiom. The difference lies in its intractability beyond a certain age. Most people, most of the time, in most circumstances will fail to acquire native pronunciation in a foreign language. Guiora has offered a psychological theory, a theory of inhibition, to account for this phenomenon (Guiora, 1991, 1992). This theory is based on the constructs of language ego and permeability of language ego boundaries. It can account, alone of the contending hypotheses, for both the extreme rigidity and relative flexibility of the pronunciation barrier. The need arises now to develop a general theory that could also explain the reasons why other language domains, such as vocabulary, syntax, grammar and idiom seem to be governed by rules different from those governing pronunciation. In this paper an attempt is made to formulate such a theory, going beyond the psychological theory of pronunciation and extending it to all language behavior. And perhaps suggesting a theoretical relevance that may go beyond language behavior itself."

I.

The puzzling phenomenon of pronunciation behavior in a foreign language has aroused relatively little interest, over the years, among linguists and language teachers. It seems as if it were treated as a lusus

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naturae beyond obvious explanation, or even the need of seeking such. Occasional remedial efforts were the concern of teachers; theoreticians and phonologists offered, from time to time, explanatory suggestions. Pronunciation is of very great potential interest though from the psychological point of view, providing a clearly delineated, well-defined, recordable and reproducible realm of behavior. Moreover, this behavior seems to have both general lawfulness and individual variations, lending itself to systematic, rigorous empirical investigation. Pronunciation seems to be different, in the way it behaves, from other language domains such as vocabulary, grammar, syntax and idiom. The specific difference is in the fact of its intractability beyond a certain age. To restate the well-known: After a certain age most people, most of the time, in most circumstances while perfectly capable of showing an impressive command of the vocabulary, syntax, grammar and idiom-system of another language, (the so-called Conrad phenomenon) will fail to acquire, no matter how hard they try, native pronunciation in that language.

There have been attempts, as noted, perhaps not always systematic, to account for the persistent failure of most people to break into the magic circle of native-like pronunciation in a foreign language. The question has two complementary aspects, and any attempt to account for the observed behavior has to take them both into account: (a) Why will children, below the age of 9-12, unlike adults, if immersed in a foreign language in its native environment acquire that language with perfect, native-like pronunciation, but fail to do so if immersed in that language in their original home environment; and (b) What accounts for the marked individual variations found in the pronunciation performance of people beyond the so-called critical age. The test of any theory claiming to provide valid answers to these questions will be its ability not only to account for the adult-child differences, but also to account for both the relative flexibility and the extreme rigidity of the adult pronunciation barrier. Several theories have been proposed to explain these phenomena but upon close scrutiny they all fail to meet this critical test (Guiora, 1992).

A close examination of pronunciation shows it to be a marker, or a measure of several of the psychological templates that language, native and foreign, embodies, reflects and represents. As such pronunciation in a foreign language may be thought of as a gateway to the study of basic cognitive and affective parameters.

Thus I have argued, over the years, for the centrality of pronunciation in second language behavior. I suggested that pronunciation is „a powerful marker, separating natives from non-natives, identifying members of the linguistic community by an instant, readily available and unavoidable test. Native pronunciation is a near-perfect litmus test of membership in this vital ring of identity. Native pronunciation becomes the hallmark or the marker of group language identity" (Guiora, 1992).

An observation reported by Traute Taeschner about the behavior of a 1:8 year old Italian-English bilingual may serve as an illustration of this proposition. Giulia had a favorite book, which she was often shown in both languages. When she was shown the book and addressed in English, the words which she imitated and spontaneously reproduced were almost exclusively English. Later, when she went through the same book and was addressed in Italian, she imitated and spontaneously produced only Italian words. When confronted, however, with contradictory information about the identity of her interlocutor, Giulia's behavior departed from this pattern. When the adult „said Italian words pronounced with an English accent and intonation, the child imitated the Italian words, but made spontaneous comments...in English. For instance, when she wanted the adult to take another book, she said 'Book?'; she put the bread she was eating on the table, saying 'Up, up'; she repeated 'Thank you' several times, etc". (Taeschner, 1983 pp. 231-232). In assigning an identity to her interlocutor, Taeschner concludes, the child gave greatest weight to what she calls the phonological channel. Pronunciation, as a marker of identity, as an identifier, I might add, seem to have greater saliency than other aspects of speech.

My original concern with pronunciation in a foreign language grew out of the notion that two quite different phenomena, empathy (a presumed internal process, a psychological construct) and pronunciation in a foreign language (an independently observable, recordable, measurable and reproducible behavior) were in some way related. I have argued that both pronunciation ability and empathy were profoundly influenced by the same underlying process, namely what came to be called „permeability of ego boundaries". To sharpen the conceptual focus a mediating construct was then introduced that subsequently gained wide currency. I am speaking of the construct „language ego". Language ego, like the construct body ego, was conceived of as a maturational concept and as an integral part of self-representation.

In this scheme pronunciation is viewed as the core of the language ego, and as the most critical contribution of the language ego to self-representation. The early, and well-documented flexibility of ego boundaries is reflected in the ease of assimilating native-like pronunciation by young children under certain conditions and the later reduced flexibility is reflected in the reduction of this ability in adults under any conditions.

As presented in this thesis then, both empathic capacity and pronunciation ability in a foreign language require, to different degrees and perhaps in different forms, a temporary and reversible relaxation of ego boundaries and thus a temporary and reversible modification of self-representation.

The converging results of the several studies associated with The University of Michigan research group led to the formulation of a psychological theory, a theory of inhibition. This theory is based on the constructs of language ego and permeability of language ego boundaries and it can account for a significant portion of the variance of the phenomena in question. This theory, alone of the several contending hypotheses, meets the test of accounting for a, the differences between naturalistic and not naturalistic settings, b, child-adult differences, and c, both the extreme rigidity and the relative flexibility of the pronunciation barrier. Moreover, this theory can predict and explain the results of the experimental manipulation of pronunciation behavior, thus accounting for its reversibility.

The basic proposition of this theory, to recapitulate it, is that the reported reduction in the flexibility of adult pronunciation behavior derives from the operation of psychologically significant inhibiting factors, rather than from some genetically pre-determined atrophy in the sound-producing apparatus. Pronunciation delimits the boundaries of the language ego and since most people cannot tolerate, most of the time, a split or double identity, they cannot have a split or double language ego once their identities have matured and become firmly anchored, embodied in, and expressed through, native language. Perhaps it is not too far-fetched to think of our inability to assimilate native-like pronunciation in a foreign language in terms of a linguistic immune system producing „linguistic antibodies" whose task it is to protect our psychological integrity by rejecting other language „tissues" (Guiora, 1992 passim). The pronunciation barrier is erected and maintained in the service of psychological integrity!

I can sum this up by saying that by focusing on pronunciation, isolating it out of the total web of language behavior, and submitting it to systematic empirical inquiry, it became possible to formulate a theory, embedded in larger psychological concerns, that explains and predicts individual variations in this behavior.

It would seem, however, that the very success (or apparent success) of these efforts renders them incomplete. Once the unique character of one domain of language behavior (i.e., pronunciation) is explored, and perhaps explained, the need arises to go beyond accounting for the properties of this one domain. The epistemological imperative (if I may coin a term) compels us to shift the emphasis and seek a refinement of, or extension to, the theory that will not only isolate pronunciation behavior and account for its variations, but one that would also explain the reason why the other domains, such as vocabulary, syntax, grammar, idioms are governed by rules different from those governing pronunciation. Thus the need to extend the theory of pronunciation into a general theory, accounting for all second language behavior. This general, or comprehensive theory, will have to remain a theory of behavior, a psychological theory, that is embedded, as I have suggested a moment ago, in larger psychological concerns and whose relevance may go beyond the confines of language behavior per se.

In the remainder of this paper I propose to review the conceptual underpinnings of the present theory and then offer an extension of it, an extension that may enable us to recast it as a general, or comprehensive theory.

II.

The basic premise, the central thesis is that language, native language, is both the carrier and the shaper, the embodiment if you will, of personal and group identities. It is developmentally relatively late, both phylogenetically and ontogenetically, hence quite fragile and vulnerable. Yet, language is a central and critical element among, and for, what might be called identity formants and determinants. Language and speech signal and reflect the achievement of a major developmental milestone: The integration of internal and external self-representation.

To anchor the psychological processes involved in this developmental position, as mentioned before, the constructs of „language ego", „language ego boundaries" and „permeability of language ego boundaries" were introduced. The basic term „ego" is of course borrowed from psychoanalysis; language ego parallels the concept of body ego as formulated by Heinz Hartmann. Hartmann, expanding on the original Freudian notion, emphasized „the influence of body image, particularly on the differentiation of the self from the object world" (Hartmann, 1964). Language ego represents another and higher form of differentiation and identity. While body ego expresses the physical dimensions of self-representation, language ego represents the totality of identity formants and determinants, cultural and individual, shaped and carried by language.

The constructs „language ego boundaries" and „permeability of language ego boundaries" are an extension of the rather vulnerable developmental template that language ego is, and refer to its rigidity-flexibility axis with its individual variations. I called pronunciation the „core of the language ego" to draw attention to its uniquely resistant, psychologically the most defended, character; to its crucial role in defining identity, in distinguishing between members and non-members of a group. Hence the notion of the „pronunciation barrier in the service of psychological integrity".

All along, the argument is being made that the way we sound marks us, defines us, in a singular fashion, not unlike our face and our fingerprints. No two people sound alike, no two people have the same fingerprints, and no two people, with the exception of identical twins, look alike. The way we sound marks us as distinct individuals within the community of our native tongue, and as members of our original community, and of that community only, in other languages. The way we sound represents us, on an immediate level as individuals, and on a secondary level as members of a specific, well defined, group, and of no other. Our speech in our native language, and our pronunciation in a foreign language serve as our external representation, in a fashion similar perhaps to certain dimensions of our body. This, incidentally may be one more argument for drawing a parallel between body ego and language ego.

Now all the evidence on pronunciation points to the fact that most people, most of the time, within individual variations, will cleave to the linguistic marker of identity, i.e. the phonological pattern of their native tongue.

Perhaps I can illustrate this point by citing a recent piece of research performed at the Hebrew University of Jerusalem. The subjects of this study were Argentinians, native speakers of Spanish, who had immigrated as adults to Israel and had spent considerable time in the country at the time of the study. The interviewer asked them „if you could take a magic potion which would make you speak Hebrew without an accent, would you take it?". Some respondents wanted to know if this would impair their ability in Spanish. „No", said the experimenter. Others wanted to know if the process was reversible, if they changed their minds. „Yes" she said. In short, she removed whatever reservations they raised, but in spite of all her assurances there were no takers for the magic potion. They wanted to sound like Argentinians, even when they spoke Hebrew. She inferred from the subjects' refusal to accept her offer that sounding like an Israeli, even when speaking Hebrew, was an unacceptable threat to their identity (Spector, 1985).

Moreover as we have shown it recently, this „one man one accent" rule applies, most tellingly perhaps, not just to immigrants but to natural bilinguals as well. They too, will have native accent in one language only, in the language that represents for them the dominant identity (Guiora & Schonberger, 1990).

The weight of cumulative evidence seems to point to a principle, and it is this: One cannot maintain, simultaneously, two systems of external representation. One is limited to one, to the one that is carried by the dominant language, representing the dominant identity in its most obvious and public form: in the way we sound, in the way we represent ourselves to the world.

III.

Language is a many-splendored thing. Its importance in the complex equation that makes us different from other beings, contrary to what Ecclesiastes (*Eccl.* 3:19) and latter-day chimp champions would have us believe, is paramount. Its role in cognitive development, and in the intricate process of cognition itself, is thought to be critical. This is not the place to review the vast amount of research and speculation devoted to the interconnection between language and thought. It is important, however, to note that intelligent existence, as the term is to be understood in this context, could not have evolved without language, in spite of its relatively late appearance on the phylogenetic scale. „Intelligent existence", both phylogenetically and ontogenetically, means the capacity for symbolic representation; the capacity for internal representation in the absence of the represented object; the capacity for an internal representation of the speech process and of the thought process itself, the possession of a metalanguage.

Truly remarkable as this achievement is, and it is remarkable not only as a figure of speech, truly unique as each and every language community may be, all languages are, to some degree, isometric, that is to say interchangeable. There are essential elements of every language that are a matter of convention and as such, subject to change and interchangeability. These elements can be said to represent the cognitive dimension of language: Vocabulary, grammar and syntax. They can be conceptualized as a system of internal representation, a schema. Vocabulary is a matter of convention, and is notoriously unstable. Grammar and syntax are isometric in important aspects. The behavioral common denominator of all these elements, that I have just called the cognitive dimension of language, is that they are perfectly assimilable, learnable. There is no built-in inhibition for a sufficiently motivated and reasonably competent learner to master the entire vocabulary of a foreign language, or to become an expert grammarian and syntactician in that language. This impressive command of the language, however, will present no challenge to the speaker's original identity, nor will it prevent native speakers from identifying him as a foreigner. It is a psychologically safe domain for both speaker and listener! It is different, as we know, with pronunciation, which is both identity-anchored and identity revealing.

It has been argued here that pronunciation, as a marker of identity and as an identifier, should be thought of as the external self-representation expressed through language. And it is further argued, based on a preponderance of evidence, that one cannot maintain, simultaneously, two schemata, two systems of external representation, i.e. two native phonological systems. But, and this becomes a crucial distinction, it is also argued that the evidence points to the fact that one can maintain, simultaneously, two systems of internal representation, two (or more) corpora of vocabulary, grammar and syntax, exactly because they are different, in essential ways, from pronunciation. Vocabulary, grammar and syntax, crucial elements of language as they may be, are not identity-anchored, nor are they identity revealing. They are, in a way, impersonal.

I have been focusing on behavioral observations, and presenting arguments on the psychological level to account for them. Corresponding to the behavioral and psychological there seems to be some evidence, admittedly not conclusive, on the neuroanatomical level as well. Research on hemispheric preference seems to suggest that language functions like vocabulary, grammar and syntax, are controlled by the left, the „cognitive", side of the brain, while prosodic features and maybe pronunciation by the right, the „affective" side of the brain.

If language ego is a useful paradigm to „represent the totality of identity formants and determinants, cultural and individual, shaped and carried by language", then we could perhaps refine it and extend it by introducing an important differentiation, and speak of two faces of the language ego: We should differentiate, in light of the evidence, between „cognitive language ego" and „affective language ego". The proposition is that the cognitive language ego will correspond to the internal representation side of language, while the affective language ego will correspond to external representation. The affective language ego appears to be more critical for the delineation of identity, for one's sense of self, for one's grip on his psychological integrity, while the cognitive language ego is critical for one's mastery of the world, for the achievement of a „naming control" of the environment (cf. *Genesis* 2:19-20), needed to classify experience and conceptualize it, to create a taxonomy of observations and to hypothesize about their recurrence.

It would seem to me that the language ego paradigm, thus redefined and differentiated, can claim to be a comprehensive paradigm. It can explain the apparent contradictions in the natural history of the acquisition of different functions in a foreign language. It can explain not only the failure of learners in one domain -pronunciation- but also their success in others -vocabulary, grammar and syntax-. It provides a rationale for these seemingly disparate behaviors and can predict their recurrence. It remains a psychological theory, embedded, as I suggested earlier, in larger psychological concerns and whose relevance may go beyond the confines of language behavior per se.

IV.

This extended view of the language ego, this psychological theory about the differential role of the two faces of language ego, raises the larger question of whether one is justified in juxtaposing affect and cognition, in treating them as two separate modes of coping with distinct domains of competence. Or are we simply recasting, and thus reflecting, in the scientific terminology of the day, the popular metaphor about heart and mind.

This juxtaposition has of course been made before. The early Freudian distinction between id and ego was that, though with a value judgment attached to it. The id was supposed to represent our instinctual world, the raw, untramelled, unsublimated affect, while the ego of course represented the very result of the long sublimatory-civilizing, renunciatory process. The value judgment came in when Freud said „where id was ego shall be".

Nevertheless, the question cannot be avoided: Do affect and cognition represent two separate and different coping strategies; are they in conflict or are they complementary. Do different rules govern the behavior of these coping strategies; are they dominant, each in its pre-selected domain; which of the two strategies has greater survival value, or do they have specialized roles; are they co-operative or antagonistic. Questions of real significance for psychology, for sociobiology, for the study of man.

Psycholinguists frequently make the claim that the language sciences are enriched by bringing to the study of language psychological theories and psychological methodologies. I believe that this is true. But it may also be true that the psychological sciences will be enriched by bringing to the study of man insights gleaned from the pursuit of linguistic inquiry. I believe that our earlier cross-lingual studies, examining the effect gender loading in native language has on the development of gender identity, are one example of this principle. Even more poignantly perhaps, our later studies, inspired by the differential availability of obligatory past tense forms in different languages, may point to some searching questions about logical development in general, and about what has been recently called „the sequential modality" of intelligence (Guiora, 1984).

It would seem now that our current inquiry into the complex processes of second language acquisition has taught us something that is applicable to human conduct in general. We were able to isolate two distinct dimensions of second language behavior in terms of their overt manifestation, and account for their differential characteristics by invoking a general principle of coping strategies. In other words, based on this linguistic inquiry we identified two major coping strategies: the affective and the cognitive and claimed that they can best explain these disparate language behaviors.

The idea emanating from this inquiry thus represents a challenge. The larger psychological and sociobiological question of whether one is justified in juxtaposing affect and cognition will not be settled that readily. But if there is such a distinction to be made, even if only in the form of a working hypothesis, then the two faces of language ego are a very useful paradigm, and language behavior itself an important and eminently researchable domain to pursue a study of this distinction. And within that domain, I submit, the study of bilingual behavior may prove to be the most productive.

The language ego paradigm in its extended form is a useful paradigm because there is reason to believe that it may truly reflect the existence of this distinction and its apparent psychological significance. The extended paradigm can thus claim the status of a theory, explaining and predicting certain baffling divergences in second language behavior, going beyond the psychological theory of pronunciation I have proposed earlier and extending it to all language behavior. And perhaps suggesting a theoretical relevance that may go beyond language behavior itself.

On a more fundamental psychological level the argument put forth is that pronunciation, as a marker of identity and as an identifier, should be thought of as the external self-representation expressed through language.

It is further argued, based on a preponderance of evidence, that one cannot maintain, simultaneously two systems of external self-representation, i.e., two native phonological systems. However, and this becomes a crucial distinction, it is also argued that the evidence points to the fact that one can maintain simultaneously two systems of internal representation, two or more corpora of vocabulary, grammar and syntax, because these are not-identity anchored and not identity revealing (Guiora 1992).

The significance of all this is that it becomes possible to view pronunciation in a foreign language as a measure of different basic processes, cognitive and affective. Pronunciation in a foreign language is a readily available litmus test of basic psychological processes.

V.

The question naturally arises where does this all lead to. The fundamental distinction made between the „two faces" of the language ego, i.e., between cognitive language ego and affective language ego included the proposition that the cognitive language ego will correspond to internal representation, while the affective language ego will correspond to external representation. The affective language ego appears to be more critical for the delineation of identity, for one's sense of self, for one's grip on his psychological integrity (represented perhaps by older and more primitive parts of he brain), while the cognitive language ego (represented perhaps by the newer parts of the brain) is critical for the achievement of a naming control of the environment. The novelty and challenge of this position lie in the attempt to link two sets of psychological constructs of very different nature to a mediating behavior.

Language and speech signal and reflect the achievement of a major developmental milestone: The integration of internal and external self-representation. In light of the theory, age-related changes and individual differences in pronunciation behavior are explained on the basis of stages and differences in the natural history of language ego and its permeability. Now the attempt is made to use the bridge of observable, overt behavior, i.e., pronunciation, to forge a theoretical link with another set of psychological constructs of profound significance: Internal and external self-representation.

Pronunciation, as a marker of identity and as an identifier, should be thought of as external self-representation expressed through language. As suggested earlier, one cannot maintain, simultaneously, two schemata, two systems of external representation, i.e., two native phonological systems.

However, and this becomes a crucial distinction, the evidence points to the fact that one can maintain, simultaneously, two systems of internal representation, two or more corpora of vocabulary, grammar and syntax. These are not identity-anchored, nor are they identity revealing. The use of pronunciation as a marker in an experimental inquiry, carefully designed to probe these postulated interactions, can have heuristic value and may make a theoretical contribution to the more basic questions of the interaction between affect and cognition.

There are people who through life circumstances acquire an unusually complete command of a foreign language, to the point that the „new" language becomes their dominant vehicle of conceptualization and expression. Concomitantly, their „native" tongue tends to become fossilized, atrophied. Usually these are immigrants who came to their new country after the age of 10-12, and while their command of the new language may be absolute, or near absolute, it will be marked by traces of a foreign accent. Interestingly enough, their native tongue too will be marked by a „foreign" accent. The difference is though that their native accents tend to become restored after sufficient re-exposure to the native environment. The mastery of a new language by such people has been termed the „Conrad phenomenon", after the name of Joseph Conrad, the celebrated Polish-born English writer.

Many of these „Conrads" become deeply immersed in their new culture, even becoming shapers and representatives of it (just like the original Conrad was). Their identities are shaped by and expressed through the by now dominant medium. The fossilized „native" language will become the mark of an often discarded, disavowed and even rejected identity (most remarkable perhaps in this regard are Israelis of non-native origin). If they could help it most of them would like nothing better than to be rid of the tell-tale signs of their immigrant background (for the exception cf. Spector, 1985). Their actual language behavior does not seem to reflect their professed true identity.

Identity is a state of the mind and a „state of the brain". It is not only pronunciation that bears the marks of childhood in the language of the adult. There is that special quality of language, the evocative power of many words, that unique affective mooring that gives rise to powerful, at times almost sensuous, associations of the most physical kind: tactile, olfactory, gustatory; to a feeling tone of a special kind. This special experiential quality stays with the language of childhood, regardless of its having fallen into disuse. Moreover, this special quality of evocativeness may never become a part of the language armamentarium of even the most proficient

Conrad in his new and by now dominant language. This phenomenon is perhaps most readily observable in the reaction to, and use of, profane language.

I have suggested, as noted above, that different coping strategies, i.e., affective and cognitive respectively, are involved in pronunciation on the one hand and other language functions on the other. This argument can be further elaborated to suggest that these two coping strategies may represent different parts of the brain, Pronunciation, and perhaps also evocativeness, reflecting the affective, and thus the earlier and more primitive, mode of coping may be controlled by older parts of the right hemisphere (for right-handed people). Other language functions, reflecting the „newer," cognitive mode of coping, by newer parts of the left hemisphere. In this scheme then the entire brain is involved, in an interactive fashion, in the totality of speech production.

It is possible that the same „face" of language ego will represent not only pronunciation but also the „evocativeness " of the other language. If this is so then it would follow that pronunciation and evocativeness should go hand in hand and one should predict to the other. The quality of the Conrads' pronunciation in their dominant language should match the degree of evocativeness they experience in speaking that language.

It has been the underlying premise in our research efforts that pronunciation is a true litmus test of identity, that it does not „lie". The suggestion has also been made that it may represent more „primitive", and thus less „controllable" modes of coping, corresponding to the more primitive (earlier) parts of the brain. As such, it might provide information on the way certain conflicts are resolved.

Focusing on true bilinguals, who on the face of it could have a choice, one might perhaps have a window on the way cognitive dissonance and conflicts in general are resolved. It would be interesting to compare the actual pronunciation performance of such bilinguals, in their two languages, with their professed perception of it. For unbeknownst to, and perhaps unacknowledged by, the speaker there might be a discrepancy between self-perception of speech and independent judgment of it.

In the case of the bilingual of „mixed" linguistic parentage (e.g., Dutch-French in the Belgian context) it is conceivable that such a person may need to „balance" loyalties (other factors being equal) and he or she will profess to speak both languages with equal proficiency; proficiency extending, of course to pronunciation as well. However, it is possible that on closer, independent, examination it will appear that such a person, like other bilinguals, will have native pronunciation in only one of his or her languages (cf., Guiora & Schonberger, 1990).

VI.

What drives most psychological research is the fascination with individual differences. It is the study of individual variations that imposes itself on the search for general lawfulness. One could not imagine any attempt to seek general rules of behavior that would not be predicated on accounting for individual variations within those rules. Hence the necessity to be satisfied with partial answers, to aim at an accounting for a portion of the variance. The same principle should apply to research in the language sciences. To be productive it should aim at discovering general lawfulness, and find a place, within that lawfulness, for individual variations. Psycholinguistic inquiry, itself a cross-disciplinary proposition, has to be cross-cultural and cross-lingual to plumb the depth of language behavior, individual and collective.

The key to discovery lies in the study of differences, and there is a price to be paid for venturing out of the descriptive, normative approach. Cross-cultural, cross-lingual research is fraught with methodological pitfalls. One is constantly navigating, at times more successfully, at times less successfully, between the Scylla of methodological impurity and the Charybdis of meaningless data. The one sure beacon is true impartiality: Let the data stand on their own, challengeable and challenged by alternative explanations in the true spirit of the null hypothesis. To paraphrase Freud „where argument was, verification shall be".

REFERENCES

Flege, J.E. (1987). A critical period for learning to pronounce foreign languages? *Applied Linguistics, 8*, 162-211.

Guiora, A.Z. (1984). Language and concept formation: A cross-lingual inquiry, *Behavior Science Research, 18*, 3.

Guiora, A.Z. (1992). Notes on the psychology of language (The Gent Lectures). *Scientia Paedagogica Experimentalis XXIX*, Supplement, viii - 62 pp.

Guiora, A.Z., & R. Schonberger (1990). Native pronunciation of bilinguals. In J. Leather & A. James (Eds.), *New Sounds 90*. Amsterdam: University of Amsterdam.

Hartmann, H. (1964). *Essays on ego-psychology - selected problems in psychoanalytic theory*. New York: International Universities Press.

Spector, G. (1985). *Don't cry for me Argentina: Accent and national identity among Argentinian immigrants in Israel.* Unpublished M.A. thesis, The Hebrew University of Jerusalem.
Taeschner, T. (1983). *The sun is feminine.* Berlin-Heidelberg-New York: Springer.
Scovel, T.S. (1969). Foreign accents, language acquisition and cerebral dominance. *Language Learning, 19*, 245-254.

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