    Evidence suggests that the speech behavior of language learners may be structurally organized and that the contact situation should therefore be described not only by reference to the source (SL) and target (TL) languages of the learner, but also by reference to a learner system (AL). Investigation of such learner systems is crucial to the development of contrastive analysis theory and to its application to language teaching. However, these systems also merit investigation in their own right through their implications for general linguistic theory. Experimental and informal observation of the contrastive approach in its present form reveal serious limitations, in part because learner behavior cannot be exhaustively described without reference to the AL. Theoretical and practical considerations therefore converge to suggest the direct and systematic examination of such learner speech, viewed within the general framework of the current theory. Such investigation would (1) provide attested information, of immediate utility in teaching and course development, on patterns of learning behavior for the principal structures of the target languages; (2) permit further assessment of the current suppositions of contrastive analysis; and (3) make possible a preliminary description of AL, thus progressing toward a reformulated contrastive approach. (Author/DO)

APPROXIMATIVE SYSTEMS OF FOREIGN LANGUAGE LEARNERS

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I. <u>Approximative systems in foreign language learning</u>

The language systems represented in a contact situation can be classified

in accordance with their functions as follows:

1. The <u>target</u> language is that in which communication is being attempted;

in the case of a learner it is the languag he is learning, when he uses it.

2. The <u>source</u> language is that acting as a source of interference

(deviations from the norm of the target language[1]); it is normally the learner's

native language.

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1. Uriel Weinreich, <u>Languages in Contact</u>, New York, 1953, p. 1.

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3. An <u>approximative</u> system is the deviant linguistic system actually employed by the learner attempting to utilize the target language. Such approximative systems vary in character in accordance with proficiency level; variation is also introduced by learning experience (including exposure to a target language script system), communication function, personal learning characteristics, etc.

For the sake of brevity, the following symbols will be employed throughout this paper:

L_T: Target Language

L_S: Source Language

L_a: An approximative system

$L_{a_{1...n}}$: Indices referring to systems at successive stages of proficiency

In identifying a specific type of L_a, the name of the L_S precedes that of the L_T: thus "German-English" refers to an L_a typical of native speakers of German communicating imperfectly in English.

Our assumption is threefold:

1. Learner speech at a given time is the patterned product of a linguistic system, L_a, distinct from L_S and L_T and internally structured.

2. L_a's at successive stages of learning form an evolving series, $L_{a_{1...n}}$, the earliest occurring when a learner first attempts to use L_T, the most advanced at the closest approach of L_a to L_T (merger, the achievement of perfect proficiency, is rare for adult learners).

3. In a given contact situation, the L_a's of learners at the same stage of proficiency roughly coincide, with major variations ascribable to differences in learning experience.

The speech of a learner, according to the assumption, is structurally organized, manifesting the order and cohesiveness of a system, although one frequently changing with atypical rapidity and subject to radical reorganization through the massive intrusion of new elements as 1 rning proceeds. As such, learner speech should be studied not only by reference to L_S and L_T but in its own terms as well. From the point of view of the history of L_T, Weinreich was undoubtedly correct in assigning interference in the speech of bilinguals, which he likens to "sand carried by a stream", to the _parole_ of L_T along with other accidental and transient phenomena unincorporated by the community of L_T speakers within their communal language system.[1] However, from the point of view of the contact situation proper, to regard these same features, as the te. 1 interference implies, exclusively as intrusive L_S elements interrupting the normal flow of L_T - a kind of hiccough view of language contact - is less rewarding, following the hypothesis, than viewing them first in terms of the learner system to which they pertain.

II. Evidence for the systematic nature of the stages of foreign language acquisition

In presenting evidence for the reality and structural autonomy of these L_a's or approximative systems, it should be pointed out that language students, while of special interest here, represent a minority among L_a users. Moreover _learner systems_ are by definition transient, while effective language teaching implies preventing, or postponing as long as possible, the formation of permanent intermediate systems and subsystems (deviant phonological and grammatical structures). Nevertheless, it is clear that evidence for L_a is abundantly present in the patterning of

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1. Weinreich, op.cit., p. 11.

errors in the perception and production of a given target language by learners

sharing the same native language. This regularity, in fact, forms a principal

basis for the belief that a comparison of L_S and L_T provides information essential

to pedagogic strategy. Such characteristics constitute the "foreign accent"

typical of learners as well as of other bilinguals sharing the same mother tongue,

i.e. speakers of the same L_S attempting to communicate in a given L_T.

Stable varieties of L_a are found in immigrant speech, that is, the speech

of long-time users of L_T who, often having attained considerable fluency in this

language, have yet obviously reached a plateau in their learning.[1] Attested examples

of such speech include the regular rendition by many veteran German-English speakers

of the English initial /sw/ cluster as [šv], and of the velarized variant of

English /l/ in post-vocalic position as a non-velarized phone (English [swɨł] 'swell' >

German-English [švɛl]). Similarly many speakers of Hungarian-English regularly

omit the plural marker in enumerative phrases (three boy) but overtly indicate

contingency in both the apodosis and the protasis of conditional sentences (If I

would have gone I would have seen him).

Moreover the speech of members of the same immigrant groups communicating

in their own native language (here German or Hungarian) often reveals the

systematic and widespread intrusion of elements of the dominant language of

the area (here English), with the interchange of the roles of L_S and L_T and

the creation of new L_a systems (English-German, English-Hungarian).[2]

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1. Such systems have not been extensively studied. For some comments on Swedish-
   English, Yiddish-English and several others, see H. L. Mencken, The American
   Language, Fourth Edition, New York, 1949, pp. 212-222.

2. See Einar Haugen's monumental study, The Norwegian Language in America, 2 vols.,
   Philadelphia, 1953; see also, for example, James Macris, An Analysis of English
   Loanwords in New York City Greek, Ph.D. dissertation, Columbia University, 1955,
   and Leo Pap, Portuguese-American Speech, New York, 1949. Mencken, op. cit.,
   pp. 616-697, briefly exemplifies English interference in some twenty-eight
   languages as used by native speakers resident in the United States.

Another subgroup of stable L_a ideolects is formed by utility systems, such specialized "little" languages of limited semantic function, and requiring limited grammars and lexicons, as the systems often used by taxi-drivers, hotel-reservation clerks, bartenders and other groups with frequent but circumscribed requirements to communicate with foreigners.[1]

The term learner pidgin can be applied to systems of a related type often employed by language students who have attained fluency in the target language without mastery of its fundamentals, but have arrived at a stage in instruction where attention has largely shifted from form to content. Not only do teachers often concur in the use of this system, but even participate as users (the following exchanges were observed in a language classroom: Arabic-English speaker: Same? [i.e. Are the two words pronounced in the same way?], Teacher: Same.; Teacher: Short answer. [i.e. Use the short answer form.]. In conversation very good.). This variety of L_a is also frequently used by other L_T speakers when communicating with non-natives and, apparently, even sometimes with other native speakers:

> "Another brandy," he said, pointing to his glass.
> The waiter who was in a hurry came over. "Finished,"
> he said, speaking with that omission of syntax stupid
> people employ when talking to drunken people or foreigners.
> "No more tonight. Close now."[2]

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1. Little information has been collected on these systems. However, for two apparently successful attempts to construct such L_a systems (English-Russian; English-Mandarin) for specific, circumscribed communication requirements, see Eugene H. Rocklyn, Self-Instructional Tactical Language Course in Russian, Washington, D.C., George Washington University, Human Resources Research Office, 1965; and Catherine Garvey and Eugene H. Rocklyn, Development and Evaluation of a Tactical Mandarin Chinese Language Course, Washington, D.C., George Washington University, Human Resources Research Office, 1965.

2. "A Clean Well-Lighted Place," The Short Stories of Ernest Hemingway, New York, 1953, p. 381.

Moreover these learner pidgins are apparently preserved in the language-types customarily designated as pidgins and creoles, historically L_a systems usually incorporating L_S grammatical elements and L_T lexical elements.

An argument for the structural independence of an L_a from the source and target systems is the frequent and systematic occurrence in non-native speech of elements not directly attributable to either L_S or L_T. In the phonology, intermediate phones are common (Hungarian subjects in an experimental study often rendered English /θ/, for example, as [fθ̂] or [sθ̂¹]). Similarly, "internal" interference resulting from the extension of the productive processes of L_T (such formations as go-ed are common in learner speech, as they are in child language), and pattern confusion (observed in a language classroom: Serbo-Croatian--English What does Pat doing now?) occurs frequently in the grammar.

More theoretically it can be argued that the demands of communication force the establishment of phonological, grammatical and lexical categories, and that the demands of economy force the imposition of the balance and order of a language system.

Finally, there has been at least one attempt to study an L_a variety directly.[2] Customary descriptive procedures were employed to characterize, in sui generis terms, the phonology of a native speaker of Hungarian, at an early stage in her learning of English, attempting to communicate in the latter language. Some fluctuation between categories attested to the transient nature of the organization

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1. William J. Nemser, Hungarian Phonetic Experiments, American Council of Learned Societies Research and Studies in Uralic and Altaic Languages, Project No. 32, 1961, pp. 56-84.

2. William J. Nemser and Francis S. Juhasz, A Contrastive Analysis of Hungarian and English Phonology, American Council of Learned Societies Research and Studies in Uralic and Altaic Languages, Project No. 70, 1964, pp. 163-216.

(for example, two high front vowels, [i] and [i:], were sporadically distinguished, on the basis of length). However such fluctuation is, of course, also typical of categories in the process of change in normal language systems, and the analysis revealed a system exhibiting true internal coherence, with distinctive components from both English and Hungarian recombining to form phonological structures differing from those of either language (a mid-central vowel, for example, was opposed to a low-front vowel, representing a merger of E/ɛ/ and /æ/, on the basis of rounding). Observation of the same speaker's Hungarian-English grammar disclosed an analogous tendency toward autonomous organization.

Moreover, there is some evidence that the various evolutionary stages of L_a differ not only in amount but in type of interference (using "interference" to cover both external and internal types). Earlier stages are apparently characterized by the extensive underdifferentiation (syncretism) of L_T phonological, grammatical and lexical categories, with the learner extending the distribution and (in the case of the grammar and lexicon) semantic domains of the limited number of formal elements he has acquired. Later stages are characterized by the addition, as interference types, of reinterpretation (Serbo-Croatian—English speakers allegedly often aspirate English tense stops in all positions, apparently phonemicizing a feature non-distinctive in English), hypercorrection (Spanish-English speakers often substitute [ŋ], which does not have phonemic status in Spanish, for /n/: English /sɔn/ 'sun' > Spanish-English [saŋ][1]) and analogy (go-ed).

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1. See Albert H. Marckwardt, "Phonemic Structure and Aural Perception," American Speech 21 (1946), 106-111.

In addition to the atypical rapidity with which they often undergo structural changes, L_a's differ from normal languages in that L_a speakers do not usually form speech communities. Adult members of such communities normally model their speech on that of other members of the same group; children, viewed as groups of speakers of child language at various stages of evolution, model their speech on both internal standards - the speech behavior of their peers - and external standards - the speech behavior of older children and adults (for such child learners of L_T of course, there is no L_S^1); L_a speakers, however, primarily select external standards, the speech of native speakers of L_T. Nevertheless, it is likely that L_a speakers frequently provide reinforcement for the speech behavior of each other (even resulting in the creation, in some instances, of such dialects or languages as the varieties of English used by numerous speakers in India[2]), and it is observable that they frequently communicate with each other more easily than with L_T speakers. Moreover, L_a features are sometimes disseminated among learners under special conditions (as was a trilled $\underline{r}$ substitute for the French uvular phoneme, reportedly, among one group of English-speaking learners at Middlebury College), are sometimes conventionalized in L_a (English /θ/ is regularly merged with /s/ in the instruction at certain schools in Germany), are sometimes transmitted between generations (the children of native speakers of Yiddish in New York, while native speakers of English, appear to frequently adopt certain interference patterns from their parents' speech), and even become conventionalized in L_T (during one era in Hungary, some native speakers of Hungarian snobbishly replaced the Hungarian trilled $\underline{r}$ with the uvular variety of French to suggest prior knowledge of that language and hence higher social status; c.f. also widely posited instances of substratum intrusion).

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1. Other than earlier phases of their systems: see below, pp. 10-11.

2. See, for example, Ashok R. Kelkar, " 'Marathi English': a Study in Foreign Accent," Word 13 (1957), 268-282.

III. Reasons for studying L_a

1. Direct and systematic examination of learner speech has been largely neglected. Classroom teachers, while aware of general patterns in learner behavior and often taking them into account in their teaching, have rarely attempted comprehensive studies of these regularities within a linguistic framework. Contrastive analysis specialists, on the other hand, often primarily concerned with techniques for establishing inter-systemic correspondences, have been content for the most part to derive empirical support for their formulations from impressionistic observation and intuition. Investigation of L_a data would, therefore, yield as its first result new concrete information on learner behavior of high utility to the classroom teacher in the planning of pedagogic strategy.

2. Such investigation is also a prerequisite for the validation of both the strong and weak claims of the contrastive approach:[1]

a. The strong claim states that learner behavior is predictable on the basis of a comparison of L_S and L_T. However problems immediately arising include: (i) different analyses yield different predictions, (ii) predictions are often ambiguous, and (iii) the various levels of linguistic structure are interdependent, with the result that predictions of phonic interference, for example, must take into account not only the phonologic systems of L_S and L_T but their morphophonemic, grammatical and lexical levels as well. Serious attempts to validate the theory have not been numerous, with investigations not infrequently presenting *ex post facto* reconstructions

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1. Representative studies are found in John H. Hammer and Frank A. Rice, eds., A Bibliography of Contrastive Linguistics, Center for Applied Linguistics, Washington, D.C., 1965.

as evidence of predictive power. The few serious validation studies raise doubts about the tenability of the strong claim.

b. The weak claim of contrastive analysis is that of _accounting for_ learner behavior. Even this limited claim proves difficult to support, however. For example, the frequent interpretation by Hungarian-English speakers of the final cluster of English _dogs_ as [ks] can be explained as resulting from one, some, or all of the following factors: a) the non-occurrence in Hungarian of /gz/ in final position, b) orthography and the Hungarian phonemic rule requiring clusters uniform in voicing, c) the total unvoicing by some English speakers of final /z/, usually described as distinctively _lax_ in English but voiced in Hungarian, and the uniform voicing rule, and d) Hungarian morphophonemic rules making the voicing of a final stem obstruent dependent on that of initial suffix obstruents other than /v/ (/hāz-bɔn/ /hās-tōl/)[1], with the Hungarian-English speakers, for one of the reasons mentioned above, having selected the English allomorph /s/ to represent the plural.

3. It can be shown that the direct examination of L_a is required as well by the suppositions of the contrastive approach itself. The approach is based on a general view of learning according to which prior learning affects subsequent learning, positively where the new skill coincides with one already mastered, negatively where they are opposed (positive and negative transfer). However, language structures, viewed as compendia of verbal skills, are not comparable in their entireties. Phonological elements sometimes have no counterpart in the

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1. See John Lotz, "Contrastive Study of the Morphophonemics of Obstruent Clusters in English and Hungarian," in _Miscellanea di studi dedicati a Emerico Várady_, Modena, 1966, pp. 3-7.

opposed system (the clicks of certain Bantu languages cannot be related to English phonemic categories), cultural differences clearly often make this true of lexical elements as well, and grammatical categories,too,are often incommensurate. More significantly, however, application of the theory for purposes of predicting and elucidating learner behavior often depends on what can be called the "blinding-flash" fallacy - the supposition that L_S and L_T come into total contact - so far as overlap permits - from the outset of learning, with L_S categories fusing with their L_T counterparts throughout the systems. Actually, of course, the learner's exposure to L_T is necessarily gradual. This fact entails a dilemma for contrastive analysis which can only be resolved by reference to L_a. At post-initial stages of language learning, the _prior_ learning which conditions _subsequent_ learning includes not only the learner's knowledge of L_S but his own recent experience in language acquisition - his knowledge of L_a - as well. He is no longer the pristine speaker

of L_S assumed by dialinguistic analysis, but als the user of a more recently acquired system. Thus the precepts of contrastive analysis itself force the inclusion of reference to L_a data in the prediction and elucidation of his subsequent learning behavior.[1]

4. Finally L_a 's merit examination in their own right, having interest for general linguistic theory comparable on the one hand to child language and on the other to the language of victims of certain types of speech disorder, as dependent systems forming evaluative gradations toward specific languages but falling outside the normal dialectical and stylistic scope of these languages.

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1. See J. A. Upshur, "Language Proficiency Testing and the Contrastive Analysis Dilemma," _Language Learning_ 12 (1962), pp. 123-127.

Summary and conclusion

Evidence suggests that the speech behavior of language learners may be structurally organized, and that the contact situation should therefore be described not only by reference to the native and target languages of the learner (L_S and L_T), but by reference to a learner system (L_a) as well.

Investigation of such learner systems is crucial to the development of contrastive analysis theory and to its applications to language teaching. However, these systems also merit investigation in their own right through their implications for general linguistic theory.

In its present form, the contrastive approach seeks (a) to predict and account for learner behavior by reference to similarities and differences between L_S and L_T and in terms of these systems, and by this means (b) to indicate a strategy for language pedagogy. However, experimental and informal observation reveal serious limitations in the approach, in part because learner behavior cannot be exhaustively described without reference to L_a.

Theoretical and practical considerations therefore converge to suggest the direct and systematic examination of such learner speech, viewed within the general framework of the current theory. Such investigation would (a) provide attested information, of immediate utility in teaching and course development, on patterns of learning behavior for the principal structures of the target languages, (b) permit further assessment of the current suppositions of contrastive analysis, and (c) make possible a preliminary description of L_a, thus progressing toward a reformulated contrastive approach of greater sophistication.

An ultimate goal might be the reformulation of L_S and L_T descriptions in terms permitting the accurate projection of L_a throughout its successive stages in each contact situation. This goal remains in the distant future, however, and no present alternative exists to empirical investigation.

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