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ERROR ANALYSIS AND THE NATURAL APPROACH TO TEACHING FOREIGN LANGUAGES

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1. INTRODUCTION

The notion that adult second language learners will acquire certain sounds present in the target language with a greater degree of difficulty than other sounds in this same phonological system has strong intuitive appeal and has long been accepted. Proponents of the contrastive analysis hypothesis, at least in its strong version, (e.g. Lado, 1957; Banathy, Trager and Waddle, 1966; Whitman, 1970; Stockwell and Bowen, 1965) claimed that contrastive analysis will, by means of comparing the sound systems of the native and target languages, *predict* which specific sounds present in the target language will be most difficult for second language learners to acquire. While published works offering contrastive analyses of the sound systems of Spanish and English are available, such contrastive analyses offer only untested predictions of probable areas of phonetic interference, without providing any natural language data to test such claims. The best-known contrastive analysis of English and Spanish phonology, Stockwell and Bowen (1965), for example, predicts that English speakers learning Spanish will have a great deal of difficulty mastering the Spanish voiced bilabial spirant [ƀ], but they present no data to demonstrate that their contention is correct. Other researchers, however, have tested the predictive ability of contrastive analysis, e.g. Whitman and Jackson (1972), and have demonstrated that contrastive analysis has no consistent significant predictive power. The present study was undertaken, therefore, not in an effort to predict which pronunciation errors would be made by the language learners utilized herein, but rather to provide an error analysis showing which pronunciation errors these learners still actually make. An apparent dearth of data analyses showing which sounds of English are, in fact, the most difficult ones which must be acquired by Spanish speakers learning English served as an impetus for the present study. The purpose of this study, then, will be to provide an error analysis of the segmental phonetic interference still present in the pronunciation of advanced students of English as a second language. This analysis is based on two distinct sets of data: spontaneous speech and oral reading. A detailed analysis of the pronunciation errors observed in the two bodies of data will first be presented. Then the errors present in these two language samples will be compared. Finally, some tentative conclusions concerning the source or cause of these observed misarticulations and the application of this research to current second language acquisition theories in general and specifically to the second language teaching methodology known as the natural approach (Krashen and Terrel 1983) will be offered.

2. METHODOLOGY

The data utilized in the present study were taken from an analysis of the spontaneous English speech and oral reading of six adult subjects, all of whom are native speakers of Cuban Spanish and who are now permanent residents of the Miami, Florida area. There were three male and three female subjects whose ages ranged from 31 to 54 years, their median age being 38.4 years. All six subjects have completed at least the equivalent of two years of university level education, and all have completed advanced courses in English as a second language in the United States as well as one additional Spanish-English contrastive phonetics/phonology course designed to improve their English pronunciation. It should be pointed out that all six subjects reside in the Spanish-speaking area of Miami (known as Little Havana), and each still maintains Spanish as his/her predominate language. Also, all six subjects have at least 15 years of experience studying and using English. The three male and female subjects were randomly selected from an initial population of 50 subjects. The initial group of 50 subjects was asked to record the following: 1. a page of printed material that had originally appeared in a Spanish language newspaper; 2. a page of printed material taken from an English language newspaper; 3. approximately ten minutes of their own spontaneous speech during which they could talk about any topic of their choosing. It is reasonable to assume that all subjects were on their best linguistic behavior, as they were aware that the results of the analysis of their recordings would effect their final course grade. All subjects made their recordings on cassette tape recorders through fixed head-set microphones in a foreign language laboratory. The record level of each recorder was set before the actual recording process took place so that recordings for each speaker were of approximate equal intensity. Speakers paced themselves, and they were permitted to repeat any portion of their assigned task with which they were unsatisfied. Through an informal analysis of the recordings of the Spanish language newspaper article made by each subject, it was determined that all 50 could orally read in their native language with no apparent difficulty. From the original recordings of the six randomly chosen subjects, approximately five minutes from both the oral reading and spontaneous speech samples were analyzed, making a total corpus of 60 minutes. The errors present in this sixty-minute corpus were then transcribed and tabulated.

3. ORAL READING DATA

An analysis of the 1458 total oral reading pronunciation errors made by the six subjects (Table I) shows that the percentage of error for each subject ranged from 11.5 to 23.5. The median percentage of error was 15.4, and four of the six subjects produced fewer than the 16.7 mean percentage. (In all tables which list subjects, numbers I, III and V are female). A breakdown of the 1458 oral reading pronunciation errors, also shown in Table I, shows that 43.8% consisted of vowel segments and 56.2% of consonant phonemes. Five of the six subjects committed more errors when producing consonant sounds, while only one subject (number VI) articulated more vowel (54.1%) than consonant pronunciation errors.

Table II presents an analysis of the pronunciation errors for the ten most frequently mispronounced vocalic segments in the data as follows: 1) the percentage of error among the total of 639 incorrectly articulated vowel phonemes; 2) the

Table I
FREQUENCY OF ERRORS - ALL SUBJECTS
ORAL READING

Subject	# Errors	% Error among All Subjects	Vowel #	Errors %	Cons. #	Errors %
I	168	11.5	70	41.7	98	58.3
II	193	13.3	81	42.0	112	58.0
III	235	16.1	88	37.4	147	62.6
IV	214	14.7	88	47.1	126	58.9
V	343	23.5	147	42.9	196	57.1
VI	305	20.9	165	54.1	140	45.9
Totals	1458	100.0	639	43.8	819	56.2

percentage of error among the total of 1458 erroneously pronounced sounds present in the overall analysis of the oral reading data. Among the ten most frequently mispronounced vowels (as well as among all vowels and consonants), the American English schwa [ə], a reduced lax vowel produced in the mid-central to high-central region of the oral cavity, was by far the most common vowel pronunciation error among these six subjects. Not surprisingly, the vowels produced by these subjects instead of schwa were most often the Spanish vowel sounds corresponding to the grapheme in question, e.g. [apláy] for the lexeme *apply*. The significance of the difficulty these speakers experienced in correctly producing a schwa in unstressed syllable cannot be overemphasized. The failure to produce this reduced vowel [ə] accounted for 62.8% of all incorrectly articulated vowels in the data under analysis; the next nine most repeatedly incorrectly produced vowels *in total* account for only 35.3% of the total vowel pronunciation errors in the corpus. It should also be stressed here that the difficulty that these six subjects had with [ə] is extremely typical of Spanish speakers learning English. Of the non-reduced vowels, the phoneme /ɪ/, a lax high-front vowel, accounted for 16.3% of all vowel pronunciation errors. This vowel was most commonly replaced by a tense (sometimes diphthongized) high-front vowel [i(y)]. /ɪ/ was only intermittently replaced by [ey] or [ay] (less than 3.0%). The English low-front vowel phoneme /æ] was most regularly replaced by the Spanish low-central vowel [a], sometimes by the more velar American English low-central vowel [ä], and only sporadically (3.0%) by [e(y)]. The phoneme /e/, a lax mid-front vowel, accounting for only 3.1% of the misarticulated vowels, was almost always replaced by the Spanish vowel [e], and only sporadically (5.0%) by [i], e.g. *been* [bín]. Vowel epenthesis accounted for a total of 5.5% of vowel pronunciation errors as follows: 1) an epenthetic vowel was produced in the English *-ed* past tense morpheme (breaking up a word-final consonant cluster) accounting for 2.1% of the total vowel errors; 2) [e] was inserted before English words beginning with #sC__ consonant clusters as 1.3% of vowel mispronunciations; 3) other types of vowel epenthesis accounted for as 2.1% of all vowel pronunciation errors, e.g. *pigeon* [píyǰeon]. The low-central English vowel /ä/ was most frequently replaced by [æ], and only occasionally (one occurrence each) by [ʌ] or [ow]. The vowel /ow/, a tense, diphthongized, mid-back vowel, was replaced most often by Spanish [o], and sporadically (one occurrence each) by [a] or [ɔ], and the tense mid-central vowel phoneme /ʌ/ was replaced by [o(w)], [u(w)], or [a]. The remaining 12 miscellaneous vowel pronunciation errors present in the corpus account for only 1.9% of the total vowel production errors.

Table II
FREQUENCY OF ERRORS-VOWELS
ALL SUBJECTS – ORAL READING

Vowel	Nº of Occurrences	% of Occur. All Vowel Errors	% of Occur. All Errors
[ə]	401	62.8	27.5
/ɪ/	104	16.3	7.1
/æ/	40	6.3	2.7
/e/	20	3.1	1.3
ø → V	14	2.1	1.0
ø → ɨ/past	14	2.1	1.0
/ä/	9	1.4	.6
/ow/	9	1.4	.6
ø → e/# __	8	1.3	.6
/ʌ/	8	1.3	.6
Others	12	1.9	.8
Totals	639	100.0	43.8

The frequency of error of the ten most often incorrectly articulated consonant phonemes in the oral reading data is displayed in Table III. However, because of Spanish syllable-structure constraints, the data shown in Table III are somewhat deceiving. Only when both the type of mispronunciation which occurred for each of these consonants, together with the phonetic environment involved, are considered, can a more meaningful picture of the nature of the interlanguage consonantal

Table III
FREQUENCY OF ERRORS - CONSONANTS
ALL SUBJECTS - ORAL READING

Consonant	Nº of Occurrences	% of Occur. All Cons. Errors	% of Occur. All Errors
/d/	135	16.5	9.3
/ð/	124	15.2	8.5
/ɹ/	121	14.8	8.3
/n/	95	11.6	6.5
/s/	72	8.8	5.0
/č/	67	8.2	4.6
/t/	51	6.2	3.5
/k/	28	3.4	1.9
/ǰ/	28	3.4	1.9
/θ/	16	1.9	1.1
Others	82	10.0	5.6
Totals	819	100.0	56.2

pronunciation errors made by these six subjects be seen. Table IV shows the phonetic environments where pronunciation errors occurred for the consonants displayed in Table III.

Table IV
PHONETIC ENVIRONMENTS WHERE TEN MOST FREQUENT PRONUNCIATION ERRORS OCCURRED FOR CONSONANTS
ALL SUBJECTS - ORAL READING

Cons.	V__#	V__C#	VC__#	V__CC#	VC__C#	VCC__#	V__V	#__V	#C__V	Word Medial
/d/			100			19	13			3
/ð/								124		
/ɹ/	13		6	7			14	10	38	33
/n/	13	59	20							3
/s/	10		37			25				
/č/	26		21							20
/t/			35		11		3			2
/k/			11	2						15
/ǰ/	9	18						1		
/θ/	16									

Spanish basically has a CV syllable structure, allowing a very limited set of word-initial consonant clusters consisting only of the obstruents /ptkbdgf/ followed by /r/ or /ptkbgf/ followed by /1/, and *no* consonant clusters are permitted in word-final environments. Also, unaffected Cuban Spanish permits a very limited inventory of single consonants word-finally: /n,d,r,l,s/ (most of which can optionally be deleted at the surface level). Upon examination of the nature of the pronunciation errors given in Tables III and IV, it is clear, as is to be expected because of Cuban Spanish phonotactics, that a great many of these errors occurred as deletions in final consonant-cluster environments.

Of the 135 incorrect pronunciations of the English phoneme /d/, 109 (80.7%) consisted of deletions in word-final consonant clusters. In 23 cases, the Spanish spirantized [đ̞] was substituted for the English stop /d/, and in three instances a word-final /d/ as part of a consonant cluster was devoiced. The phoneme /ð/ was mispronounced 124 times in these data, accounting for 15.2% of the total pronunciation errors. All misarticulation of this particular phoneme consisted of the substitution of the stop [d] in word-initial environments, usually involving determiners. The American English /ɹ/accounted for 14.8% of all mispronounced consonants. In all cases, this erroneous pronunciation consisted of the substitution of the Spanish alveolar flap [r]. The English nasal phoneme /n/ was incorrectly produced 95 times in the data under analysis, accounting for 11.6% of the total consonant misarticulations. In 83.2% of these erroneous phonetic realizations, the velar nasal [ŋ] was substituted for /n/; in the remaining 16 mispronunciations of /n/, the segment was deleted in word-final position when /n/ was either a word-final single consonant or the second member of a word-final consonant cluster. The 72 errors involving the phoneme /s/ consisted largely of deletion of this segment when /s/ was part of a word-final consonant cluster (81.9%), or when it was a word-final single consonant. In the remaining instances, [š] or [z] was substituted for /s/ word-finally. The great majority of mispronunciations of the phoneme /č/ consisted of the substitution of this phoneme by [š]. Again such a substitution is not unexpected, since the sound [š] is a surface variant of the systematic phoneme /č/ in Cuban Spanish. The remaining misarticulations of /č/ consisted of the use of [t] for /č/, when subjects failed to apply an English palatalization rule, as in the lexical item *century*. In the case of the phoneme /t/, 90.2% of its erroneous surface manifestations involved deletion in word-final environments; the other errors consisted of the substitution of the non-aspirate dental Spanish [t̪] in word-initial position or deletion of /t/ word-medially before another consonant. The 28 pronunciation errors of the phoneme /k/ involved deletion in 27 cases and voicing of this segment in a word-medial environment in the remaining case. In 27 of the mispronunciations of /ǰ/ which occurred in these data, the sound [ž] was substituted. These substitutions all took place in word-final environments. The remaining error involved the pronunciation of [y] for /ǰ/ in the lexeme *January*. All erroneous pronunciations of the phoneme /θ/ occurred in word-final position. In 75.0% of the cases the sound [t] was substituted, and in the remaining 25.0% of the cases /θ/ was simply deleted.

4. Spontaneous speech data

In the five-minute spontaneous speech samples of each subject analyzed herein, a total of 1333 pronunciation errors occurred, as shown in Table V. Among the six subjects, the misarticulations committed by each ranged from 11.5% to 22.8% of the total of 1333 errors, and the median frequency of error was 15.2%. As was the case with the oral reading data, four of the six subjects produced fewer than the mean percentage of pronunciation errors (16.7). A breakdown of the 1333 mispronunciations shows that only 34.4% of these misarticulations were of vowel phonemes, while 65.6% involved consonant phonemes. All six subjects produced a lower percentage of vowel pronunciation errors than they did for consonants.

Table V
FREQUENCY OF ERRORS-ALL SUBJECTS
SPONTANEOUS SPEECH

Subject	# Errors	% Error among All Subjects	Vowel #	Errors %	Cons #	Errors %
I	196	14.7	70	35.7	126	64.3
II	182	13.7	74	40.7	108	59.3
III	210	15.8	81	38.6	129	61.4
IV	154	11.5	66	42.9	88	57.1
V	304	22.8	98	32.2	206	67.8
VI	287	21.5	70	24.4	217	75.6
Totals	1333	100.0	459	34.4	874	65.6

Table VI presents an analysis of the percentage of pronunciation error for the ten most frequently misarticulated vowels in the spontaneous speech data both in terms of percentage of error among the total 459 incorrectly articulated vowels and also among the 1333 incorrect articulations observed in the total corpus. As was the case with the data from these subjects oral reading, the overwhelmingly most commonly mispronounced vowel was the schwa, accounting for 59.9% of all mispronunciations. Erroneous pronunciations of the vowel phoneme /æ/ accounted for 19.7% of vowel pronunciation errors. In all 90 cases, the Spanish vowel [a] was produced for this vowel phoneme. The schwa and the vowel /æ/ account for almost 80% of all incorrect vowel articulations present in these data. The third most often mispronounced vowel phoneme /ɪ/ accounted for only 6.6% of the vowel pronunciation errors. In all 30 cases, the Spanish tense high-front vowel [i] was substituted for [ɪ]. The vowel /ʌ/ was erroneously articulated most frequently as [a], and sporadically (one occurrence each) as [e] and [o]. The phoneme /ɔ/, with only ten misarticulations, was erroneously produced seven times as [o] and on three occasions as [a]. The English vowel phoneme /ä/ was mispronounced as [o] nine times, and /ʊ/ as [u] eight times. Vowel epenthesis occurred 14 times in the data, while the English vowel /uw/ was misarticulated as Spanish [u] twice.

Table VI
FREQUENCY OF ERRORS - VOWELS
ALL SUBJECTS - SPONTANEOUS SPEECH

Vowel	N° of Occurrences	% of Occur. All Vowel Errors	% of Occur. All Errors
[ə]	275	59.9	20.6
/æ/	90	19.7	6.8
/ɪ/	30	6.6	2.3
/ʌ/	21	4.6	1.6
/ɔ/	10	2.2	.8
/ä/	9	2.0	.6
/ʊ/	8	1.7	.6
$\emptyset \rightarrow$ e/#__	8	1.7	.6
$\emptyset \rightarrow$ ɨ/past	3	.6	.2
$\emptyset \rightarrow$ V	3	.6	.2
/uw/	2	.4	.1
Totals	459	100.0	34.4

The frequency of error of the incorrectly pronounced consonant phonemes in the spontaneous speech data is displayed in Table VII. The 746 occurrences of misarticulations for the ten most commonly mispronounced consonants are broken down according to phonological environment in Table VIII.

In all 176 cases of mispronunciation of American English /ɹ/, the Spanish flap /r/ was again substituted in all environments. Pronunciation errors of /t/ in all final environments (82.9%) in these data involved total deletion of this segment. In word-initial and intervocalic environments, the Spanish non-aspirate [t̪] was substituted

Table VII
FREQUENCY OF ERRORS - CONSONANTS
ALL SUBJECTS - SPONTANEOUS SPEECH

Consonant	N° of Occurrences	% of Occur. All Cons. Errors	% of Occur. All Errors
/ɹ/	176	20.1	13.2
/t/	120	13.7	9.0
/ð/	102	11.7	7.7
/d/	93	10.6	7.0
/n/	81	9.3	6.1
/s/	52	6.0	3.9
/v/	37	4.2	2.8
/θ/	34	3.9	2.5
/ǰ/	28	3.2	2.1
/č/	23	2.6	1.7
Others	128	14.7	9.6
Totals	874	100.0	65.6

Table VIII
PHONETIC ENVIRONMENTS WHERE TEN MOST FREQUENT PRONUNCIATION ERRORS OCCURRED FOR CONSONANTS
ALL SUBJECTS - SPONTANEOUS SPEECH

Cons.	V_#	V_C#	VC_#	V_CC#	VC_C#	VCC_#	V_V	#_V	#C_V	Word Medial
/ɹ/	18	3	4					22	58	71
/t/	10		52		15	22	3	10		8
/ð/							102			
/d/	18		60		7	3	5			
/n/	18	49	8							6
/s/	6		24	6		13				3
/v/	7							22		8
/θ/	11		3					20		
/ǰ/	11						15	2		
/č/	13							6		4

for aspirated English [t^h]. Of the 102 incorrect articulations observed for the phoneme /ð/, 100 involved the substitution of [d] for /ð/, and the remaining two consisted of the use of [s] instead of /ð/. Also, all 102 misarticulations of /ð/ occurred in word-initial environments. The phoneme /d/ was deleted in 91 of its 93 mispronunciations, with 94.5% of these deletions occurring in word-final position. The remaining two errors in producing this segment involved the devoicing of /d/ in word-final environments. The fifth most commonly mispronouced consonant phoneme /n/ was incorrectly produced as the velar [ŋ] in all 81 errors. Of the misarticulations of the phoneme /s/, 90.4% occurred as deletions in word-final environments. On two other occasions, word-final /s/ was voiced to [z] in the expression *this way*; twice the /s/ of the lexical item *conversation* was erroneously voiced, and in one instance the /s/ of *answer* was produced as [š]. The segment /v/ was incorrectly produced as [b] in word-initial and word-medial environments, while it was devoiced in word-final position seven times. The phoneme /θ/ was erroneously pronounced as [s] in word-initial position 20 times and five times in word-final position. Also it was misarticulated six times word-finally as [d]. As part of a word-final consonant cluster, /θ/ was deleted three times in the corpus. Three different sound substitutions occurred for the phoneme /ǰ/ in the data: In word-final position it was misarticulated as [ž], intervocalically as [d] and word-initially as [y]. The consonant /č/ was incorrectly produced as [š] in all environments.

5. Data comparison - Oral reading versus spontaneous speech

Since no formal effort was made during the data-gathering process in the present study to make the oral reading passages and the spontaneous speech samples the exact same length, valid quantitative comparison of these two data bases are not possible. Without actually making the number and overall distribution of segments equal in these two language samples, only general qualitative observations are possible.

A comparison of the data in Tables I and V shows that subjects committed fewer vowel than consonant articulation errors in both oral reading and spontaneous speech, but there were relatively fewer mispronunciation of vowel phonemes in the spontaneous speech sample (34.4% versus 43.8%). This greater frequency of vowel misarticulation in the oral reading task is not surprising, as the grapheme/phoneme functional load of English is high, i.e. there are only six graphemes to represent 12 (or 13) American English vowel sounds.

In comparing the rank of the ten most often mispronounced vowels from the two data sources under analysis (shown in Tables II and VI), it can be seen that the reduced vowel [ə] ranks first in both language samples (59.9% and 62.8%). In both oral reading and spontaneous speech, the vowels [æ] and [ɪ] rank second and third, although their relative order differs. That these three vowels rank highest as to frequency of error is not unexpected, as neither [ə], [ɪ] or [æ] exists in any Spanish dialect. These three vowels account for more than 85% of the total vowel pronunciation errors observed in both data sources.

Before comparing consonant misarticulation in the two data sources, it is first necessary to ferret out all cases of word-final deletion, as a straight one-to-one comparison of these consonants is relatively meaningless. It is apparent from these data that two types of pronunciation errors occur with consonants: either the consonant is deleted, or another inappropriate sound is produced in place of the consonant in question. Tables III and VII, for example, show that [d] and [ð] are among the most commonly mispronounced consonants in these data, but an examination of Tables IV and VIII shows that these subjects did not have difficulty articulating /d/; what the six subjects had difficulty with was producing word-final consonant clusters. On the other hand, these subjects did have trouble pronouncing /ð/, and they frequently substituted the sound [d] for this voiced interdental spirant. In both the oral reading and spontaneous speech data, the consonant phonemes /d, s, t/ were most often deleted as part of consonant clusters, while the phonemes /ð, ɹ, n, č, ǰ, θ/ most commonly involved sound substitutions. Both sets of data shared the nine phonemes /d, ð, ɹ, n, s, č, t, ǰ, θ/ among the ten most often mispronounced consonant segments. In the oral reading data /k/ was included with the above nine segments, while the phoneme /v/ was the tenth member of the set in the spontaneous speech data.

6. Conclusions

From a standard contrastive analysis point of view, the tentative conclusions which could be drawn from the error analysis of the data presented herein are clear: 1) the subjects need a great deal of practice and training in the use of the American English schwa; 2) they need practice producing word-final consonant clusters in English; 3) they need training and practice producing the vowels /ɪ/ and /æ/; 4) they must improve their pronunciation of the consonants /ð/, /ɹ/ and /n/. Although there is a body of research in the area of language acquisition which suggests that the contrastive analysis approach does not work very well, it should be pointed out that those studies which negate the value of contrastive analysis do so only on syntactic and semantic grounds. Contrastive analysis, nevertheless, does seem to have its strongest motivation in the area of phonetics and phonology.

Current research also suggests that no litany of explanations, analyses, written exercises or oral drill and practice will significantly improve either the second language acquisition process in general or the specific pronunciation problems evidenced by the six subjects employed in the present study. The natural approach (Krashen and Terrell, 1983) infers, for example, that a natural order of acquisition operates in the language learning process. Other important research (Krashen, 1978 and 1981), suggests that little can be done to either circumvent or alter this order, i.e., schwa will not be learned until its proper time in the sequence of English phonological acquisition is reached. However, a direct appeal to the natural order hypothesis to account for the pronunciation errors still present in the English of these subjects is not possible, as all six have at least 15 years of experience speaking English. Furthermore, the "input hypothesis" (Krashen, 1980 and 1985) claims that the principal element of importance in the language learning process is comprehensible input, and that, once again, no amount of drill, explanation or exercises can replace this comprehensible input. The natural approach to teaching foreign languages likewise places primary importance on the use of comprehensible input. Could the lack of a sufficient *quantity* of comprehensible input account for the errors present in the speech of the six subjects? The answer to such a question is unknown, but one would hope that after 15 years, of which in the case of each of the six subjects at least seven years involve residence in the United States, a sufficient amount of comprehensible input would have been provided for a reasonable mastery of American English pronunciation. While it might be reasonable to assume that a sufficient quantity of comprehensible input has been available to these subjects over a period of 15 years, a lack of *quality* comprehensible input during the critical early English language learning period, when the natural order of phonological acquisition was in effect, most likely accounts for the genesis of the pronunciation errors present in the speech of the six subjects utilized in the present study. If there is one meaningful conclusion that can be gleaned from the error analysis presented herein, it is the following: extreme care must be taken to provide language learners with quality comprehensible native (or at least native-like) speech. In the specific case of the six subjects in this study, who are presumably representative of their speech community, these students should have been provided with quality comprehensible speech samples during the critical early period when they were first learning English. The failure to provide appropriate quality (native or native-like) comprehensible input may often result in the acquisition of deviant forms, through the process of fossilization (Vigil and Oller, 1976), in which these deviant forms become part of the language learner's interlanguage. Current research in language acquisition forces one to ask the following relevant question about second language errors: Do the errors committed by language learners such as those utilized in the present study suggest a lack of analysis or practice, or do they represent the acquisition of deviant structures? The answer appears to be that these six subjects, along with many other second language learners, have fossilized deviant structures in their interlanguage systems.

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