

AN ABSTRACT OF THE THESIS OF

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Title: Contrastive Analysis in Second-Language Teaching:
Spanish Suprasegmentals

Abstract approved:

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Purpose of the Study

The purpose of this exploratory study is to find an accepted methodology for teaching second-language suprasegmentals by investigating the question of whether or not the use of contrastive analysis is superior to another method that does not use contrastive analysis. Specifically, the comparison of methods is made by teaching and then evaluating English-speaking students' performance in the use of Spanish suprasegmentals: rhythm, stress, patterns and terminal juncture.

Procedures

A pre/post-test based on perceptual analysis was designed and administered to two groups of subjects, all second-year Spanish students at the university level. Between the pre- and post-tests, the students received four twenty-minute periods of instruction in the use of Spanish suprasegmentals. Both groups were taught similarly but one group was taught with a contrastive analysis approach while the other was not. Tapes of student performance were evaluated by a

perceptual analysis on the part of the instructor-researcher.

Results of the pre/post-tests in the two groups were analyzed for significant differences in performance by means of analysis of covariance. The F-value decision as to significance was made at the .05 level.

Findings of the Study

No significant differences in suprasegmental performance were found between the two groups.

Implication

These findings, as revealed by the test designed for this study, suggest that the use of a contrastive analysis methodology in suprasegmental teaching was not superior to a methodology that did not use contrastive analysis.

Recommendations

Further research could be done in the areas of the value of contrastive analysis between English and an Indo-European language other than Spanish, of the value of such analysis compared to another methodology and the reasons for the variations between the scores of rhythm and terminal juncture. The study could be replicated in classes where the instructor was the principal teacher. This would allow less condensed instruction in a more natural setting, more application to the context of the lessons and less emphasis on perfect attendance. Consideration should be given to the possibility of more than one test evaluator.

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Teaching: Spanish Suprasegmentals

by

Dianne Walta Hart

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CONTRASTIVE ANALYSIS IN SECOND-LANGUAGE TEACHING: SPANISH SUPRASEGMENTALS

I INTRODUCTION

Statement of the Problem

Simply stated, "the best pronunciation is one that attracts least attention to itself." Simply stated it may well be, but achieving good pronunciation is not easily accomplished by adult learners of a second language. For that reason, careful attention must be directed toward pronunciation teaching.

Two elements must be considered in the teaching of pronunciation: segmentals (vowels and consonants) and suprasegmentals (rhythm, stress, pitch pattern and juncture). Many linguists give top priority to the teaching of suprasegmentals and thereby place it ahead of segmentals. In spite of this suggested pedagogical sequence, classroom teachers often have not been willing to attempt such teaching. This is probably due to the absence of suprasegmental information in most classroom textbooks, to insufficient phonological and linguistic knowledge on the teachers' part and to the lack of assurance of long-term improvement in student performance.

However, those teachers with a linguistic background who have taught suprasegmentals have relied on a contrastive analysis methodology in which the native and second languages have been compared and

¹Robert P. Stockwell and J. Donald Bowen, The Sounds of English and Spanish (Chicago: University of Chicago Press, 1965), p.121.

contrasted. The use of contrastive analysis to predict errors is currently not in favor but its use to explain errors already committed still has advocates, particularly in the areas of phonology. Such analysis appeals to one's common sense. It is thought that when students realize how their native-language use of suprasegmentals is similar to or different from the second language, they will understand where and how to correct their errors and thereby improve their pronunciation.

As popular as this approach appears to be among some linguists and many linguistically-trained classroom teachers, no research has been found as a basis for this acceptance.

Purpose of the Study

The purpose of this exploratory study is to investigate the question of whether or not the use of contrastive analysis in second-language suprasegmental teaching is superior to another method that does not use contrastive analysis. Specifically, the comparison of methods is made by teaching and then evaluating English-speaking students' performance in the use of Spanish suprasegmentals: rhythm, stress, pitch pattern and terminal juncture.

Definition of Terms

In order to clarify terms used in this study, the following definitions are provided. The author takes responsibility for each unless otherwise noted.

Contrastive analysis: The method by which the differences between two languages are described.

Interference: "Added difficulty in learning a sound, word, or construction in a second language as a result of differences with the habits of the native language."²

Intonation: The sequence of pitch levels; often called pitch/intonation patterns or contours. See "Suprasegmentals".

Intonation pattern: "Consists of the pitch contour of the phrase and the concluding terminal juncture."³

Juncture: "Transition between sounds or between sound and silence in speech."⁴

Linguistics: The science that describes and classifies language.

Native language: The first language or mother tongue of the learner.

Pitch: "Highness of lowness of tone."⁵

Pitch Patterns: The pattern of rising or falling pitches used in the pronunciation of an utterance;⁶ in some contexts, called intonation or intonation pattern/contour.

²Robert Lado, Language Teaching (New York: McGraw-Hill, Inc., 1964), p.217.

³Stockwell and Bowen, The Sounds of English and Spanish, p.27.

⁴Lado, Language Teaching, p.221.

⁵Stockwell and Bowen, The Sounds of English and Spanish, p.19.

⁶Ronald Wardhaugh, Introduction to Linguistics (New York: McGraw-Hill Book Co., 1977), p.244.

Rhythm: The regular repetition of units of stress in time.

Second language: The language being taught or learned; in some contexts, called a foreign language or target language.

Segmentals: Vowel and consonant sounds; referred to as simply "sounds" in some quoted passages.

Suprasegmentals: Phonetic elements such as rhythm, stress, pitch patterns and junctures. "Suprasegmentals are so called because they can extend over a whole series of segmentals."⁷ Sometimes referred to as simply "intonation" in literature although intonation, or pitch pattern, is merely one part of suprasegmental features.

Stress: The relative intensity or prominence of syllables.

Terminal Juncture: The manner in which a sentence ends, such as terminal falling juncture and terminal rising juncture.

Transfer: "The extension of a native language habit into the target language with or without the awareness of the learner."⁸

⁷ Clifford Prator, "Phonetics vs Phonemics in the ESL Classroom: When is Allophonic Accuracy Important?," TESOL Quarterly 5 (1971):67.

⁸ Lado, Language Teaching, p. 222.

Limitations of the Study

This exploratory study confined itself to the development of a suprasegmental methodology to be used in a normal classroom. In turn, this led to questioning the value of contrastive analysis in suprasegmental teaching. It is acknowledged that a longer treatment would be valuable as would a larger sample. Certain variables were not controlled, such as the performance of those students who did exceptionally well on the pre-test. They were not separately evaluated nor were those who scored above a pre-determined level on the pre-test eliminated; to do that, however, a much larger sample would have been needed. Nevertheless, such procedures would have solved a difficult problem; that is, even within a given level there were significant differences in the Spanish educational backgrounds of the students. Another uncontrolled variable was the lack of information on how best each student learned. At present, reliable information on that is difficult to obtain.

The validity of the test was limited because there was only one evaluator assessing the suprasegmental use in the pre/post-test language tapes.

II REVIEW OF RELATED LITERATURE

Need for Teaching Suprasegmentals

The necessity of teaching suprasegmentals receives nearly universal agreement among linguists. Robert Lado holds that the "first formal exercise in pronunciation should deal with intonation and rhythm."⁹ In their comprehensive work entitled The Sounds of English and Spanish, Robert Stockwell and Donald Bowen list basic suprasegmental features as number one in their preferred pedagogical sequence.¹⁰ Suprasegmentals, according to Clifford Prator, should be assigned the highest of all priorities¹¹ and accurate use of pitch pattern is placed above accurate use of sounds by D. A. Wilkins.¹² Daniel Cárdenas maintains that a language spoken with correct suprasegmental use, though the sounds are only approximations, is more understandable than a language spoken with exact pronunciation of sounds but with a foreign pitch pattern and rhythm.¹³

The only dissenting voice is that of Dwight Bolinger who asserts that the feature of pitch patterns is not as important as some other

⁹ Ibid., 79.

¹⁰ Stockwell and Bowen, The Sounds of English and Spanish, p.17.

¹¹ Prator, "Phonetics vs Phonemics in the ESL Classroom," p.68.

¹² D. A. Wilkins, Linguistics in Language Teaching (Cambridge: The M.I.T. Press, 1972), p.45.

¹³ Daniel Cárdenas, Introducción a una comparación fonológica del español y del inglés (Washington, D.C.: Center for Applied Linguistics, 1960), p.36.

traits of language. "If it were, we could not understand someone who speaks in a monotone..." He goes on to caution his readers to be wary of giving that feature "undue attention just because it is something new."¹⁴

Nonetheless, since many linguists place the teaching of suprasegmentals over that of segmentals, the reasons for such a pedagogical order must be explored. As early as 1945, Kenneth Pike stated that even when vowels and consonants were satisfactorily pronounced, "phrases with the incorrect melody sounded foreign." Conversely, "when brief phrases were given the proper pitch sequence, large errors in consonants and vowels seemed much less important."¹⁵ More recently, Prator claimed that "if the pattern is wrong, the sounds cannot be entirely correct. If the pattern is right, correct sounds are much easier to produce."¹⁶

Other linguists are much more concerned with the effect suprasegmentals have on the speaker's and hearer's attitudes. John Dalbor feels that one's attitude is conveyed through such features more effectively than through the choice of words. With the consistent use of incorrect suprasegmentals, "the meaning of what you are trying to

¹⁴Dwight Bolinger, "Around the Edge of Language," Harvard Educational Review 34 (1964):283.

¹⁵Kenneth Pike, The Intonation of American English (Ann Arbor: The University of Michigan Press, 1945), p.107.

¹⁶Clifford Prator, Manual of American English Pronunciation (New York: Holt, Rinehart and Winston, 1957), p.xvi.

say may not be misunderstood, but your intentions and attitudes most certainly will be."¹⁷

The most probable suprasegmental mistake, according to Wilkins, occurs when the hearer is unaware that there is an error in the speaker's utterance:

Most people probably think that all intonational [suprasegmental] features are universal. They are not on their guard for possible error and will not notice when one occurs. Instead they will put their usual interpretation on what they have heard and understand something quite different from what the speaker intended to convey.¹⁸

In spite of the importance that linguists give to suprasegmentals, such features, in the past, have been largely ignored in language teaching.¹⁹ Even in phonetic books, suprasegmentals receive less attention than segmentals.²⁰ In 1978, Rosemary Graham surveyed British and Irish universities; more than one-third of the Spanish departments considered the teaching of Spanish intonation unimportant.²¹ There is no documentation that the situation is significantly different in the United States.

Perhaps difficulties inherent in certain suprasegmental features have bearing on the lack of acceptance. Karen Kvavik holds that

¹⁷ John Dalbor, Spanish Pronunciation: Theory and Practice (New York: Holt, Rinehart and Winston, 1980), p.221.

¹⁸ Wilkins, Linguistics in Language Teaching, p.45.

¹⁹ Ibid.

²⁰ Karen Kvavik and Carroll Olsen, "Theories and Methods in Spanish Intonational Studies," Phonetica 30 (1974):67.

²¹ Rosemary Graham, "Intonation and Emphasis in Spanish and English," Hispania 61 (1978):95.

proper use of pitch patterns is just about the most difficult speech habit to change."²² Pierre Léon and Philippe Martin agree that it is the most difficult element to acquire and go so far as to say that a "faulty intonation pattern will never be corrected no matter what methods are used."²³

The result is a situation where, on one hand, these phonological features receive top priority by most linguists and, on the other hand, the same features do not receive much classroom emphasis. What has developed, though, when suprasegmentals are taught, is a general reliance on contrastive analysis. This demonstrates the need for an examination of contrastive analysis and its application in suprasegmental teaching.

Contrastive Analysis in Language Teaching

Contrastive analysis, according to Bernard Spolsky, is a "simple mechanical drawing together of two complete grammars written in similar terms."²⁴ But the implication of this simple drawing together has caused enough controversy that Ronald Wardhaugh analyzed contrastive analysis by viewing it as two versions of the same hypothesis: the

²² Karen Kvavik, "Research and Pedagogical Materials on Spanish Intonation: A Re-Examination," Hispania 59 (1976):406.

²³ Pierre Léon and Philippe Martin, "Applied Linguistics and the Teaching of Intonation," Modern Language Journal 56 (1972):141.

²⁴ Bernard Spolsky, "Contrastive Analysis, Error Analysis, Interlanguage, and Other Useful Fads," Modern Language Journal LXII (Sept-Oct. 1979):252.

strong form and the weak form. In the strong view,

...it is possible to contrast the system of one language--the grammar, phonology and lexicon--with the system of a second language in order to predict those difficulties which a speaker of the second language will have in learning the first language and to construct teaching materials to help him learn that language.²⁵

The leading advocate of the strong form is Robert Lado who contends that "a speaker of one language tends to transfer the entire system of his language to the foreign tongue."²⁶ As a result, Lado asserts that a contrastive analysis of the two languages can predict areas of learning difficulties²⁷ and in "the comparison between native and foreign language learning lies the key to ease or difficulty in foreign language learning."²⁸

This strong version is in disfavor today: Jane Hill, for one, feels that there are definite reasons to abandon interference theories since children, who also have a first language, do not have so-called interference difficulties.²⁹ William Ritchie holds that since some language learners do not do what contrastive analysis would lead one to expect, it is difficult to predict difficulties on such a

²⁵Ronald Wardhaugh, "The Contrastive Analysis Hypothesis," TESOL Quarterly 4(1970):123-24.

²⁶Robert Lado, "A Comparison of the Sound Systems of English and Spanish," Hispania 39 (1969):26.

²⁷Robert Lado, Linguistics Across Cultures (Ann Arbor: University of Michigan Press, 1957), p.vii.

²⁸Ibid., p.1.

²⁹Jane Hill, "Foreign Accents, Language Acquisition, and Cerebral Dominance Revisited," Language Learning 20(1970):239.

basis.³⁰ Other factors, according to Jack Richards, must be involved, since a "variety of substitutions are often made by learners with the same mother tongue, including substitutions of some sounds which are not used in the mother tongue."³¹ E. J. Brière argue that difficulties of the second-language learner cannot be entirely predicted from a cross-language comparison.³² "As a foundation for language teaching," John Oller asserts, contrastive analysis "is entirely inappropriate."³³

The weak form, according to Wardhaugh, requires only that one use "the best linguistic knowledge available to him in order to account for observed difficulties in second language learning."³⁴ Stated another way, the weak form "can, at best, be used to explain the reason for errors after they have been made."³⁵ Obviously, less is expected of the contrastive analysis theory in the weak version.³⁶

³⁰William Ritchie, "On the Explanation of Phonic Interference," Language Learning 18 (1968):188.

³¹Jack Richards, "Second Language Learning," A Survey of Applied Linguistics, eds. Ronald Wardhaugh and Douglas Bowen (Ann Arbor: University of Michigan Press, 1976), p.122.

³²E. J. Brière, A Psycholinguistic Study of Phonological Interference (The Hague: Mouton, 1968), p.71.

³³John Oller, "Contrastive Analysis, Difficulty and Predictability," Foreign Language Annals 6 (1972):97.

³⁴Wardhaugh, "The Contrastive Analysis Hypothesis," p. 126.

³⁵Robert Politzer, Linguistics and Applied Linguistics: Aims and Methods (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1970), p. 88.

³⁶Wardhaugh, "Contrastive Analysis," p. 126.

Its supporters are often classroom teachers who, along with many linguists, are reluctant to reject the weak version.³⁷ Charles Hockett cautions, in support of the weak version, that though the analysis is necessary, also needed is empirical evidence based on actual classroom observation of errors made.³⁸

In terms of pedagogy, Rose Nash and Domitila Belavel state that while native-language interference cannot take responsibility for all the errors, these errors are "the easiest to spot, and given the proper contrastive approach, the most amenable to correction."³⁹ In an article on suprasegmental interference, Nash claims that "the student must understand why he is repeatedly making those mistakes before he can discover for himself how to avoid them."⁴⁰ John Carroll agrees that learning increases when similarities and contrasts are identified and explained to the student.⁴¹ Even classroom texts rely on contrastive analysis, as Wardhaugh notes, "conform to some of the demands made

³⁷ Ibid., p.128.

³⁸ Charles Hockett, "Learning Pronunciation," Readings on English as a Second Language, ed. Kenneth Croft (Cambridge, Mass.: Winthrop Publishers, Inc., 1972), p. 68.

³⁹ Rose Nash and Domitila Belavel, Readings in Spanish-English Contrastive Linguistics II (San Juan, Puerto Rico: Inter-American University Press, 1980), p.viii.

⁴⁰ Rose Nash, "Intonational Interference in the Speech of Puerto Rican Bilinguals," Journal of English as a Second Language 4 (1969): 42.

⁴¹ John Carroll, "Contrastive Analysis and Interference Theory," Report of the Nineteenth Annual Round Table Meeting on Linguistics and Language Studies (Washington, D.C.: Georgetown University Press, 1968), pp.116-17.

by the weak version of the theory and not at all to the demands of the strong version."⁴²

To summarize, the strong form of the contrastive analysis hypothesis has generally been rejected today but there still exists a reluctance to completely dismiss the weak version.

Contrastive Analysis in Suprasegmental Teaching

Many educators agree that when they are working with suprasegmentals in a class with a homogeneous language background, the ability to contrast the native language with the second language is very important; thus they support in some way the weak form of the hypothesis. One must keep in mind, however, that while the use of a contrastive approach in suprasegmental teaching appeals to one's common sense, an investigative study of the success of that use has not been found.

Wilkins maintains that language comparison is important because the extent to which suprasegmentals "will cause difficulties depends very much on the particular mother-tongue."⁴³ Graham agrees on the role of native language since it is only by understanding its pitch pattern, for example, that one can "appreciate the similarities with and differences between it and the target language."⁴⁴

⁴²Wardhaugh, "Contrastive Analysis," p.127.

⁴³Wilkins, Linguistics in Language Teaching, p. 192.

⁴⁴Graham, "Intonation and Emphasis," p.96.

Bolinger, who warned of giving suprasegmental features too much importance, feels that, nevertheless, when teaching those features, one needs to know how they are used in the native language.⁴⁵ Of course, Lado, as one of the chief proponents of contrastive analysis, claims that comparison is the best method.⁴⁶ Nash says to do otherwise is to refuse "to face the realities of the language learning situation"⁴⁷ and John Martin in The Sounds of English and Spanish states that one must use it in pronunciation instruction in order to be "maximally efficient."⁴⁸ Suprasegmental teaching "presupposes a previous comparative analysis" of the native and second languages, according to Léon and Martin.⁴⁹

James Lantolf claims that in his phonology classes, especially when he teaches suprasegmentals, "an explicit demonstration of the distinction between the native and target language is indispensable."⁵⁰ Such a technique is also favored by Bolinger, who argues that we cannot leave the student with "vague and useless generalizations that

⁴⁵ Bolinger, "Around the Edge of Language," p.283.

⁴⁶ Lado, Language Teaching, p.80.

⁴⁷ Nash, "Intonational Interference," p.42.

⁴⁸ John Martin, "Supplement: Distinctive Feature Systems of English and Spanish," The Sounds of English and Spanish by Robert Stockwell and Donald Bowen (Chicago: The University of Chicago Press, 1965), p. 155.

⁴⁹ Léon and Martin, "Applied Linguistics," p.140.

⁵⁰ James Lantolf, "On Teaching Intonation," Modern Language Journal 60 (1976):273.

establish no contrast with English nor merely ask the student to imitate without explaining to them what they are doing."⁵¹

An obvious limitation is that, for all practical purposes, the students in the classroom should share the same native language. Wardhaugh mentions that the teacher must know both languages in order to be able to point out the contrasts. When a contrastive method is possible, though, he contends that an analysis based on observable errors is the best of the contrastive approaches.⁵²

In summary, whether one accepts contrastive analysis or not, it has been considered useful when teaching suprasegmentals but no data have been found to support that impression of pedagogical usefulness.

⁵¹Bolinger, "Around the Edge of Language, p.293.

⁵²Ronald Wardhaugh, "Three Approaches to Contrastive Phonological Analysis," Canadian Journal of Linguistics 13 (1967):14.

III PROCEDURES

Background

This language study is an exploratory investigation of the effectiveness of a contrastive analysis methodology in the teaching of second-language suprasegmentals. Specifically, the purpose of the research is to determine whether or not a contrastive analysis methodology is more useful than an approach that does not use such methodology in teaching rhythm, stress, pitch pattern and terminal juncture to native speakers of English who are studying Spanish.

Research Setting

This study was designed for three separate second-year Spanish classes at Oregon State University, Corvallis, Oregon. Reasons for choosing the above groups were as follows: 1) the probability that the students were at the appropriate stage in their second-language learning to maximally benefit from suprasegmental instruction since a degree of fluency in the language is needed; 2) the control offered by the fact that all students were native speakers of English, were on relatively equal levels in Spanish-language competence and had no other significant outside contact with Spanish during the course of the research; 3) the linking of instruction to existing classes, thereby assuring continued participation on the part of the students; and 4) the high degree of cooperation on the part of the Spanish professors involved in the study.

Research Sample

The pre-test was administered to an original sample of seventy students in three second-year Spanish classes at Oregon State University. However, due to laboratory failure in the taping of the pre- and post-tests in some cases and the necessary elimination of subjects with less-than-perfect attendance in other cases, the final sample amounted to a total of twenty-four subjects, fourteen in the experimental group and ten in the control group.

The subjects were educated adults; all had English as their native language. Their backgrounds in Spanish varied but all were at a second-year university level in competence.

For testing and instructional purposes, the students were randomly divided into four different groups: Groups I and III, the experimental groups, were taught with contrastive analysis methodology; Groups II and IV, the control groups, were taught without the use of a contrastive analysis approach.

Pre/Post-Test Design and Administration

In order to determine the value, if any, of the contrastive analysis approach in the teaching of suprasegmentals, a pre/post-test was designed by the researcher-instructor with the aid of Robert Kiekel of the Spanish section of Oregon State University's Department of Foreign Languages and Literatures. The concept was approved by Marjorie Morray of the English Language Institute in Corvallis, Oregon. Appendix I contains the pre/post-test, including directions given,

transparencies used and the evaluation form.

The purpose of the test was not to test Spanish grammar, vocabulary or fluency; rather, the purpose was to evaluate Spanish suprasegmental use. In order to more accurately achieve that goal, the instructor, one day prior to the test administration, reviewed the test grammar and test vocabulary with the classes involved in the project.

The pre-test was administered with the use of an overhead projector on which were shown six drawings of a woman demonstrating certain actions; each illustration was identified with one appropriate verb. There were twenty-four anticipated responses involving the six aforementioned verbs: six present-tense ordinary statements, six past-tense ordinary statements, six information questions and six yes/no questions. The instructions were structured in such a way that the majority of the students' responses were not only similar but usually alike.

The pre/post-test directions were taped by the instructor; this reduced the instructor's role in the actual administration to that of pointing to the appropriate drawing and verb that were projected on the screen. The students received numbers, randomly chosen, to identify themselves on the test tape. The pre-test was given in the Kidder Hall Language Laboratory at Oregon State University.

Pre/Post-Test Evaluation

All the tests were taped and later evaluated by the instructor-researcher as to correctness of rhythm, stress, pitch pattern and

terminal juncture in Spanish. The evaluation was a "perceptual phonetic" one since it was conducted by ear and without the aid of research equipment. No instrumental data were presented. Kvavik stresses "that the lack of such scientific information does not at all negate a work based entirely on a perceptual analysis."⁵³

The comparison process was considered a two-class pattern in terms of acceptable-unacceptable. The evaluation yes indicated acceptable suprasegmental use in the area being evaluated, in other words, rhythm, stress, pitch pattern or terminal juncture. A no indicated unacceptable rhythm, stress, pitch pattern or terminal juncture. When a student failed to respond with a complete answer, the evaluation in all areas was termed unacceptable. The evaluation form is included in Appendix I.

The judgment of correct use of Spanish suprasegmentals was arrived at after lengthy reading of works in that field; a few of the most significant are: Introducción a una comparación fonológica del español y del inglés, Daniel Cárdenas; Spanish Pronunciation: Theory and Practice, John Dalbor; A Drillbook of Spanish Pronunciation, Roger Hadlich, James Holton and Matías Montes; Language Teaching, Robert Lado; The Sounds of English and Spanish, Robert Stockwell and Donald Bowen; and Teaching Spanish: A Linguistic Orientation, Robert Politzer and Charles Staubach.

⁵³ Kvavik and Olsen, "Theories and Methods," pp.79-80.

Teaching of Spanish Suprasegmentals

The pre-test administration was followed by four weekly lessons on suprasegmentals in the language laboratory. Each lesson lasted twenty minutes; therefore, each student had a total of eighty minutes of instruction. There were four groups: two were taught with a contrastive analysis methodology and the other two were taught without the use of contrastive analysis. For purposes of clarity, the groups will be referred to as two groups: the experimental group, with which contrastive analysis was used and the control group where contrastive analysis was not used.

A serious attempt was made to teach the two groups in the same manner; the only difference was the use of contrastive analysis in the experimental group. Detailed lesson plans, which can be found in Appendix II, were drawn up and followed; efforts were made to keep the instructor's bias, if one existed, out of the instruction. Neither group was aware of differences in teaching. In fact, attendance always had to be taken in order to prevent students from attending a group other than the one to which they had been assigned.

Suprasegmental teaching techniques were developed after extensive reading of the previously listed books; in addition, other books and journals were studied in detail and are listed under "Contrastive Analysis and Suprasegmental Pedagogy" in the bibliography.

The instruction was organized into the four rather traditional progressions advocated in A Drillbook of Spanish Pronunciation by Hadlich, Holton and Montes. Those steps are as follows:

1) explanation, 2) listening discrimination, 3) production and 4) internalization.⁵⁴

The explanation of the Spanish suprasegmental feature and following examples were the same for both groups except for the comparison and contrast to English received by the experimental group. In the control group, no comparison or contrast was made to English; only the Spanish feature was mentioned.

In the listening discrimination instruction, examples were given to the experimental group usually through the use of words or sentences contrasting the difference between English and Spanish; examples in Spanish were given to the control group without any comparison, either direct or indirect, to English.

The students' production exercises were the same for both the control and experimental groups. However, any review or reminder given to the students was in accordance with the methodology used.

To check the internalization process in spontaneous statements, where students evaluate their own pronunciation, the questions used to elicit statements were the same for both groups.

Post-Test

The post-test administered after the instruction was the same test as the pre-test. The procedure was the same in both cases with one exception: students taking the pre-test did not know what was

⁵⁴Roger Hadlich, James Holton, and Matías Montes, A Drillbook of Spanish Pronunciation (New York: Harper & Row, 1968). pp. xv-xvi.

being evaluated. Neither were they told prior to the post-test but one would assume, by that time, that they connected the suprasegmental instruction to the test evaluation.

It is doubtful that any learning, as such, took place during the pre-test that would affect post-test scores except in the development of familiarity of the testing procedures. In any case, all students were equally affected. As a result, any meaningful pre-test versus post-test interaction did not exist.

Hypotheses to Be Tested

In accordance with the major objectives of the study, the following hypotheses were tested:

- H_0^1 : Student performance in learning the rhythm of a second language, Spanish, is not affected by the instructor's use of methodology incorporating contrastive analysis as opposed to methodology which does not incorporate such analysis.
- H_0^2 : Student performance in learning the stress of a second language, Spanish, is not affected by the instructor's use of methodology incorporating contrastive analysis as opposed to methodology which does not incorporate such analysis.
- H_0^3 : Student performance in learning the pitch pattern of a second language, Spanish, is not affected by the instructor's use of methodology incorporating contrastive analysis as opposed to methodology which does not incorporate such analysis.
- H_0^4 : Student performance in learning the terminal juncture of a second language, Spanish, is not affected by the instructor's use of methodology incorporating contrastive analysis as opposed to methodology which does not incorporate such analysis.

Statistical Procedures

In order to test the four null hypotheses, an analysis of covariance was used wherein "scores on the dependent variable are adjusted according to scores on a related, often antecedent, variable."⁵⁵ The significance of the difference between the two adjusted means is measured by comparing the computed F-value with the tabular F-value. On that basis the hypotheses are either retained or rejected. A null hypothesis is rejected when the computed F-value is equal to or larger than the tabular F-value just as a null hypothesis is retained when the computed F-value is smaller than the tabular F-value.⁵⁶

⁵⁵ Wayne Courtney and Lorry Sedgwick, "Glossary," Individualized Curriculum for Research and Statistics (Corvallis, Ore.: Oregon State University, 1974), p.1.

⁵⁶ *Ibid.*, "Interpreting F Values," p.3.

IV PRESENTATION AND ANALYSIS OF DATA

In this analysis of covariance, the scores on the dependent variable, the post-test, are adjusted to scores on the earlier variable, the pre-test. Whether or not the difference between the scores is significant is determined by comparison of computed F-values to tabular F-values. A null hypothesis is rejected when the computed F-value is equal to or larger than the tabular F-value. A null hypothesis is retained when the computed F-value is smaller than the tabular F-value. The customary significance level used to find the tabular F-value in studies such as this is at the .05 level. The degrees of freedom are one and twenty-one. Interpreting the F-tables with these numbers sets the critical point of significant difference for this study at 4.32. Therefore, the comparison of the computed F-values to the tabular F-value of 4.32 determines whether to reject or retain the hypothesis.

H_0^1 : Student performance in learning the rhythm of a second language, Spanish, is not affected by the instructor's use of methodology incorporating contrastive analysis as opposed to methodology which does not incorporate such analysis.

Table 1: Means and F-value of English-speaking adults' performance in the use of rhythm in Spanish.

| Adjusted Group Means | | F-value | H_0^1 Decision $\alpha=.05, df 1, 21$ |
|----------------------|---------|---------|--|
| Experimental | Control | | |
| 10.890 5.759 | 14.453 | 3.754 | Retain |

In this analysis of covariance, there is no significant difference in students' performance in the use of rhythm in Spanish between the experimental group and the control group. This decision was reached by comparing the computed F-value of 3.754 to the tabular F-value of 4.32. The computed F-value is smaller; therefore, H_0^1 is retained.

H_0^2 : Student performance in learning the stress of a second language, Spanish, is not affected by the instructor's use of methodology incorporating contrastive analysis as opposed to methodology which does not incorporate such analysis.

Table 2: Means and F-value of English-speaking adults' performance in the use of stress in Spanish.

| Adjusted Group Means | | F-value | H_0^2 Decision $\alpha = .05, df 1, 21$ |
|----------------------|---------|---------|--|
| Experimental | Control | | |
| 18.930 | 18.698 | .054 | Retain |

In this analysis of covariance, there is also no significant difference in students' performance in the use of stress in Spanish between the experimental group and the control group. This decision was reached by comparing the computed F-value of .054 to the tabular F-value of 4.32. The computed F-value is smaller; therefore, H_0^2 is retained.

H_0^3 : Student performance in learning the pitch patterns of a second language, Spanish, is not affected by the instructor's use of methodology incorporating contrastive analysis as opposed to methodology which does not incorporate such analysis.

Table 3: Means and F-value of English-speaking adults' performance in the use of pitch patterns in Spanish.

| Adjusted Group Means | | F-value | H_0^3 Decision $\alpha=.05, df 1,21$ |
|----------------------|---------|---------|---|
| Experimental | Control | | |
| 16.686 | 17.939 | .469 | Retain |

In this analysis of covariance, there is again no significant difference in students' performance in the use of pitch patterns in Spanish between the experimental group and the control group. This decision was reached by comparing the computed F-value of .469 to the tabular F-value of 4.32. The computed F-value is smaller; therefore, H_0^3 is retained.

H_0^4 : Student performance in learning terminal juncture of a second language, Spanish, is not affected by the instructor's use of methodology incorporating contrastive analysis as opposed to methodology which does not incorporate such analysis.

Table 4: Means and F-value of English-speaking adults' performance in the use of terminal juncture in Spanish.

| Adjusted Group Means | | F-value | H_0^4 Decision $\alpha=.05, df 1, 21$ |
|----------------------|---------|---------|--|
| Experimental | Control | | |
| 20.465 | 21.549 | 1.554 | Retain |

In this last analysis of covariance, there is no significant difference in students' performance in the use of terminal juncture in Spanish between the experimental group and the control group. This decision was reached by comparing the computed F-value of 1.554 to the tabular F-value of 4.32. The computed F-value is smaller; therefore, H_0^4 is retained.

Table 5: Means and F-values for all four null hypotheses.

| H_0 | Adjusted Group Means | | F-value | H_0 Decision $\alpha=.05, df 1,21$ |
|---------------------------------|----------------------|---------|---------|---|
| | Experimental | Control | | |
| H_0^1 Rhythm | 10.890 | 14.453 | 3.754 | Retain |
| H_0^2 Stress | 18.930 | 18.698 | .054 | Retain |
| H_0^3 Pitch Pattern | 16.686 | 17.939 | .469 | Retain |
| H_0^4 Terminal Juncture | 20.465 | 21.549 | 1.554 | Retain |

For all four hypotheses, the F-value was not found to be at the critical point; as a result, all four null hypotheses were retained. The conclusion is that there were no significant differences existing between the adjusted means for the experimental and control groups included in the research.

V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Though the value of contrastive analysis in second language teaching is often questioned, the lack of any other acceptable pedagogy has led to a reliance on contrastive analysis, whenever possible, to teach suprasegmentals. No research has been found as a basis for this tendency to rely on such analysis.

This exploratory study was undertaken to determine whether or not the use of a contrastive analysis methodology improved the performance in students' use of suprasegmentals, namely, rhythm, stress, pitch pattern and terminal juncture. Experimental and control groups, consisting of twenty-four second-year university level Spanish students whose native language was English, were taught Spanish suprasegmental features. Four twenty-minute periods of instruction were preceded by a pre-test and followed by a post-test; both tests were evaluated according to a perceptual analysis of the acceptability of Spanish suprasegmental use.

The objectives were stated as four null hypotheses and are summarized as follows: Student performance in learning the rhythm, stress, pitch pattern and terminal juncture of a second language, Spanish, is not affected by the instructor's use of methodology incorporating contrastive analysis as opposed to methodology which does not incorporate this analysis. These objectives were tested by an analysis of covariance to discover significant differences between the two groups.

Conclusions

The exploratory study found that, between the group where contrastive analysis methodology was used and the group where it was not, there was no significant difference in student performance in the use of Spanish suprasegmental features of rhythm, stress, pitch pattern and terminal juncture. Consequently, the results of the study, as evaluated by the test designed for the investigation, suggest that contrastive analysis methodology does not improve students' performance in second-language suprasegmentals more than a methodology that does not use contrastive analysis.

Recommendations

Further research is suggested in these areas:

- 1) The value of contrastive analysis methodology in suprasegmental teaching in an Indo-European language other than Spanish.
- 2) The comparison of contrastive analysis to other suprasegmental teaching techniques, e.g. teaching with the tracking advocated by Joan Morley in Improving Spoken English⁵⁷ or the technique where spoken pitch patterns show on computer screens developed by Léon and Martin.⁵⁸

⁵⁷ Joan Morley, Improving Spoken English (Ann Arbor: University of Michigan Press, 1980), p.73.

⁵⁸ Léon and Martin, "Applied Linguistics," pp.139-44.

3) The reasons for the large variations between the adjusted means of rhythm and terminal juncture, such as in the experimental group's rhythm score of 10.890 and the terminal juncture score of 20.465.

4) The question of which feature is actually the most difficult to learn.

5) Replication of the study in a situation where the instructor-researcher is also the principal teacher of two separate but same-level classes. As a result, the instruction could be less condensed, more naturally taught within the context of the lesson and therefore more applicable to a normal teaching situation. A larger sample could be obtained because perfect attendance would not be necessary.

6) Replication of the study where the suprasegmental use is evaluated in the pre/post-test language tapes by more than one evaluator.

7) Replication of the study when and if more reliable information becomes available on how individual students learn.

BIBLIOGRAPHY

Suprasegmental Theory

- Brière, Eugene John. A Psycholinguistic Study of Phonological Interference. The Hague: Mouton, 1968.
- Crystal, David. Prosodic Systems and Intonation in English. Cambridge University Press, 1969.
- Ladd, D. Robert, Jr. The Structure of Intonational Meaning. Bloomington: Indiana University Press, 1978.
- Lehiste, Ilse. Suprasegmentals. Cambridge: The M.I.T. Press, 1970.
- Lenneberg, Eric. Biological Foundations of Language. New York: John Wiley & Sons, Inc., 1967.
- Lieberman, Philip. Intonation Perception and Language. Cambridge: The M.I.T. Press, 1967.
- Lieberman, Philip. "On the Acoustic Basis of the Perception of Intonation by Linguists," Word 21(1965):40-54.
- Pike, Kenneth. "Suprasegmentals in Reference to Phonemes of Item, of Process, and of Relation." In Studies in Tone and Intonation, pp. 45-56. Edited by Ruth Brend. Basel, Switzerland: S. Karger AG, 1975.

Suprasegmental Pedagogy and Contrastive Analysis

- Allen, Virginia French. "Teaching Intonation, from Theory to Practice," TESOL Quarterly 5(1971):73-81.
- Anderson, Roger W., ed. The Acquisition and Use of Spanish and English as First and Second Languages. Washington, D.C.: Teachers of English to Speakers of Other Languages, 1979.
- Bandura, A. Principles of Behavior Modification. New York: Holt Rinehart and Winston, 1969.
- Belasco, Simon. "C'est la guerre: Or Can Cognition and Verbal Behavior Co-Exist in Second Language Learning," Modern Language Journal 54 (1970):395-312.

- Bergen, John J. "A Practical Framework for Teaching Pronunciation in Beginning Spanish Courses," Hispania 57(1974):479-83.
- Beym, Richard. "Practical Phonological Orientation for Effective Spoken Spanish," Hispania 43(1960):67-69.
- Bolinger, Dwight L. "Around the Edge of Intonation," Harvard Educational Review 34(1964):282-296.
- Bolinger, Dwight L. Aspects of Language. New York: Harcourt, Brace, Jovanovich, Inc., 1975.
- Bolinger, Dwight L. Modern Spanish. New York: Harcourt, Brace & World, 1960.
- Bolinger, Dwight L. "Three Analogies," Hispania 44(1961):134-37.
- Bowen, J. Donald. "A Comparison of the Intonation Patterns of English and Spanish," Hispania 36(1956):30-35.
- Bowen, J. Donald. "Contextualizing Pronunciation Practice in the ESL Classroom," TESOL Quarterly 6(1972):83-94.
- Bowen, J. Donald and Stockwell, Robert P. Patterns of Spanish Pronunciation. Chicago: University of Chicago Press, 1960.
- Brown, T. Grant. "In Defense of Pattern Practice," The Art of TESOL: Selected Articles from the English Teaching Forum, Part One. Washington D.C.: English Teaching Forum, 1975.
- Bull, William E. Spanish for Teachers: Applied Linguistics. New York: The Ronald Press Co., 1965.
- Bull, William E.; Briscoe, Laurel; Dellaccio, Carl; and Brown, Margaret. Spanish for Communication, Level One. Boston: Houghton Mifflin Co., 1972.
- Byrd, Charles W., Jr. "Intensive Language Instruction at a Small Liberal Arts College: The Dartmouth Model at Emory and Henry," Modern Language Journal 64(1980):297-302.
- Cárdenas, Daniel N. Applied Linguistics: Spanish. Boston: Heath and Company, 1961.
- Cárdenas, Daniel N. Introducción a una comparación fonológica del español y del inglés. Washington, D.C.: Center for Applied Linguistics, 1960.
- Carroll, John B. "Contrastive Analysis and Interference Theory," Report of the Nineteenth Annual Round Table Meeting on Linguistics and Language Studies. Washington, D.C.: Georgetown University Press (1968):113-22.

- Coates, Thomas J. and Regdon, Patricia. "Thrice: A Technique for Improving the American English Language Delivery of Non-Native Speakers," TESOL Quarterly 8(1974):363-73.
- Courtney, E. Wayne and Sedgwick, Lorry K. Individualized Curriculum for Research and Statistics. Corvallis, Ore.: Oregon State University, 1974.
- Dalbor, John B. Spanish Pronunciation: Theory and Practice. New York: Holt, Rinehart and Winston, 1980.
- de Balbín, Rafael. Sistema de rítmica castellana. Madrid: Biblioteca Románica Hispánica, 1962.
- Delattre, Pierre; Olsen, Carroll; and Poenack, Elmer. "A Comparative Study of Declarative Intonation in American English and Spanish," Hispania 45(1962):233-41.
- Diller, Karl C. "Some New Trends for Applied Linguistics and Foreign Language Teaching in the United States," TESOL Quarterly 9(1975): 65-73.
- Dulay, Heidi C. and Burt, Marina K. "A New Perspective on the Creative Construction Process in Child Second Language Acquisition," Language Learning 24(1974):253-78.
- Dulay, Heidi C. and Burt, Marina K. "Goofing: An Indicator of Children's Second Language Learning Strategies," Language Learning 22(1972):235-52
- Finocchiaro, Mary. English as a Second Language: From Theory to Practice. New York: Regents Publishing Co., Inc., 1974.
- Fischer, Robert A. "The Inductive-Deductive Controversy Revisited," Modern Language Journal LXIII(1979):98-105.
- Fries, Charles C. Teaching and Learning English as a Foreign Language. Ann Arbor: University of Michigan Press, 1948.
- Graham, Rosemary. "Intonation and Emphasis in Spanish and English," Hispania 61(1978):95-101.
- Hadlich, Roger L.; Holton, James S.; and Montes, Matías. A Drillbook of Spanish Pronunciation. New York: Harper & Row, 1968.
- Hammerly, Hector M. "Teaching Pronunciation and Generative Phonology," Foreign Language Annals 6(May 1973):487-89.

- Heflin, William H., Jr. "The Audio-Lingual Approach to the Teaching of Spanish Pronunciation and Writing: A Close Look," Hispania 56(1973):99-102.
- Higgins, J. J. and Lewis, J. Windsor. "Teaching Intonation in the Language Laboratory," English Language Teaching 24(October 1969):46-48.
- Hill, Jane H. "Foreign Accents, Language Acquisition, and Cerebral Dominance Revisited," Language Learning 20(1970)237-48.
- Hockett, Charles. "Learning Pronunciation," Modern Language Journal XXXIV(March 1950):261-269.
- Hockett, Charles. "learning Pronunciation." In Readings on English as a Second Language, pp. 61-70. Edited by Kenneth Croft. Cambridge, Mass: Winthrop Publishers, Inc., 1972.
- Hoge, Henry W. "Testing in the Language Laboratory: A Laboratory Experiment in Spanish Pronunciation," Hispania 42(1959):147-52.
- Kvavik, Karen H. "Research and Pedagogical Materials on Spanish Intonation: A Re-Examination," Hispania 59(1976):406-17.
- Kvavik, Karen H. and Olsen, Carroll L. "Theories and Methods in Spanish Intonational Studies," Phonetica 30(1974):65-100.
- Kreidler, Charles W. "Teaching English Spelling and Pronunciation," TESOL Quarterly 6(March 1972):8-12.
- Lado, Robert. Language Teaching. New York: McGraw-Hill, Inc., 1964.
- Lado, Robert. Linguistics Across Cultures. Ann Arbor: University of Michigan Press, 1957.
- Lado, Robert. "A Comparison of the Sound Systems of English and Spanish," Hispania 39(1969):26-29.
- Lantolf, James P. "On Teaching Intonation," Modern Language Journal 60(1976):267-74.
- Léon, Pierre. "Teaching Pronunciation." In Trends in Language Teaching, pp. 57-79. Edited by Albert Valdman. New York: McGraw-Hill, 1966.
- Léon, Pierre and Martin Philippe. "Applied Linguistics and the Teaching of Intonation," Modern Language Journal 56(1972):139-144.

- Martin, John W. "Supplement: Distinctive Feature Systems of English and Spanish." In The Sounds of English and Spanish, pp. 139-163. By Robert P. Stockwell and J. Donald Bowen. Chicago: The University of Chicago Press, 1965.
- Morley, Joan. Improving Spoken English. Ann Arbor: University of Michigan Press, 1980.
- Nash, Rose. "Intonational Interference in the Speech of Puerto Rican Bilinguals," Journal of English as a Second Language IV(1969): 1-42.
- Nash, Rose and Belaval, Domitila, eds. Readings in Spanish-English Contrastive Linguistics, Vol. II. San Juan, Puerto Rico: Inter-American University Press, 1980.
- Navarro Tomás, Tomás. Manual de entonación española. Mexico, D.F.: Colección Malaga, 1966.
- Navarro Tomás, Tomás. Manual de pronunciación española. New York: Hafner Publishing Co., 1963.
- Oller, John W., Jr. "Contrastive Analysis, Difficulty and Predictability," Foreign Language Annals 6(1972):95-106.
- Parish, Charles. "A Practical Philosophy of Pronunciation," TESOL Quarterly 11(1977):311-317.
- Pella, Carmen and Lueders, A. R. Sounds of Spanish. Washington, D.C.: English Language Services, Inc., 1964.
- Pierce, Joe E. A Linguistic Method of Teaching Second Languages. New York: Pageant Press, Inc., 1968.
- Pike, Kenneth, The Intonation of American English. Ann Arbor: University of Michigan Press, 1945.
- Politzer, Robert L. Foreign Language Learning. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1970.
- Politzer, Robert L. Linguistics and Applied Linguistics: Aims and Methods. Philadelphia: The Center for Curriculum Development, Inc., 1972.
- Politzer, Robert L. and Ramirez, Arnulfo. "An Error Analysis of the Spoken English of Mexican-American Pupils in a Bilingual School and Monolingual School," Language Learning 23(1973)39-62.
- Politzer, Robert L. and Staubach, Charles. Teaching Spanish: A Linguistic Orientation. Boston: Blaisdell, 1965.

- Prator, Clifford H., Jr. Manual of American English Pronunciation. New York: Holt, Rinehart and Winston, 1957.
- Prator, Clifford H., Jr. "Phonetics vs Phonemics in the ESL Classroom: When Is Allophonic Accuracy Important?," TESOL Quarterly 5(1971):61-72.
- Ramirez, Manuel; Macauley, Ronald; Gonzales, Alexander; Cox, Barbara; and Perez, Manuel. Bilingual Education Series: 5. Washington, D.C.: Center for Applied Linguistics, Revision of 1974 investigation, n.d.
- Richards, Jack C. "Second Language Learning." In A Survey of Applied Linguistics, pp. 113-137. Edited by Ronald Wardhaugh and H. Douglas Bowen. Ann Arbor: University of Michigan Press, 1976.
- Ritchie, William C. "On the Explanation of Phonic Interference," Language Learning XVIII (December 1968): 183-197.
- Rivers, Wilga M. The Psychologist and the Foreign Language Teacher. Chicago: University of Chicago Press, 1964.
- Robinett, Betty Wallace. "Simple Classroom Techniques for Teaching Pronunciation." In Readings on English as a Second Language, pp. 80-86. Edited by Kenneth Croft. Cambridge Mass: Winthrop Publishers, Inc., 1972.
- Scovel, Tom. "Foreign Accents, Language Acquisition and Cerebral Dominance," Language Learning XIX (December 1969):245-53.
- Spolsky, Bernard. "Contrastive Analysis, Error Analysis, Inter - language and Other Useful Fads," Modern Language Journal LXII (Sept.-Oct. 1979):250-56.
- Stockwell, R. P. and Bowen, J. D. The Sounds of English and Spanish. Chicago: University of Chicago Press, 1965.
- Stockwell, Robert P.; Bowen, J. Donald; and Silva-Fuenzalida, I. "Spanish Juncture and Intonation," Language 32(Oct.-Dec. 1956): 641-65.
- Teaching English to Cubans. General Information Series #25. Washington, D.C.: Center for Applied Linguistics, 1981.
- Tireman, L.S. Teaching Spanish-Speaking Children. New York: Arno Press, 1976.
- Varvel, Terry. "The Silent Way: Panacea or Pipedream?" TESOL Quarterly 13(1979):483-94.

Vodden, M. "Rhythm and Intonation," English Language Teaching 22
(May 1968):246-52.

Wardhaugh, Ronald. "An Evaluative Comparison of Present Methods for
Teaching English Phonology," TESOL Quarterly 4(1970):63-72.

Wardhaugh, Ronald. Introduction to Linguistics. New York: McGraw-
Hill Book Co., 1977.

Wardhaugh, Ronald. "The Contrastive Analysis Hypothesis," TESOL
Quarterly 4(1970):123-130.

Wardhaugh, Ronald. "Three Approaches to Contrastive Phonological
Analysis," Canadian Journal of Linguistics 13(1967):3-14.

Wilkins, D. A. Linguistics in Language Teaching. Cambridge: The
M.I.T. Press, 1972.

APPENDICES

APPENDIX I

Script of Taped Pre/Post-Test: Evaluation of Use of Spanish
Suprasegmentals

Taped length: Fourteen minutes, 35 seconds

Instructions: In a few minutes, I am going to project a series of drawings on the screen. I will ask you to tell me something specific about each drawing or to ask me a question about each one. My request will be in English; your answer will be in Spanish.

You will tape all of your answers. I will explain how you are to do that before we proceed any further. In your booth, move the knob on the right side of the control panel to the STOP position. Next notice a black switch located to the left of the STOP knob. It is called a toggle switch although it is not labeled as such on your panel. Raise your hand if you have not found the toggle switch. (Be prepared to stop tape at this point.) Your voice will be recorded only during the time you have depressed the toggle switch. When you are not speaking and recording, release the toggle switch.

Lower the microphone to a spot near your mouth. One way to determine if each booth is functioning properly is to check if you can hear your own voice in the headset. Say "Soy estudiante" into the microphone and do not depress the toggle switch. (Pause)

Now say the same thing but first depress the toggle switch and release it when you are done. (Pause) There should be a distinct difference in the sound as you hear yourself speak. If there is not, please raise your hand.

Continuation of Test Script

(Projection of drawings.) Here are examples of the drawings. All involve a woman we will call Mary and each one has a specific verb shown with it. Use that verb when I point to a drawing.

I might ask you, for example, to ask me if Mary is pretty. You might respond by saying: ¿Es linda María?

Let's try that. Ask me if Mary is pretty. Depress the toggle switch, say "¿Es linda María?" and release the toggle switch. (Pause)

Or I might ask you to tell me that Mary is in the kitchen. You might respond by saying: María está en la cocina. Let us try this one also. Tell me that Mary is in the kitchen. Now depress the toggle switch, say "María está en la cocina". (Pause) Release the toggle switch when you are through.

Any problems? (Be prepared to stop the tape.)

(Projection of test drawing.) The drawing we will use is on the screen now. I will make each request only twice as I point to the specific drawing. You will be allowed 15 seconds to complete the taping of your response. Your response will be a statement or a question, depending upon my request. Respond only once and do so as quickly and as well as you can. There will be a total of 24 responses--18 in the present tense and six in the past. Remember: All of your answers should be in Spanish. Are there any questions?

Notice the information on the board.

1. Ignore all other signs in this room.
2. Knob should be on STOP

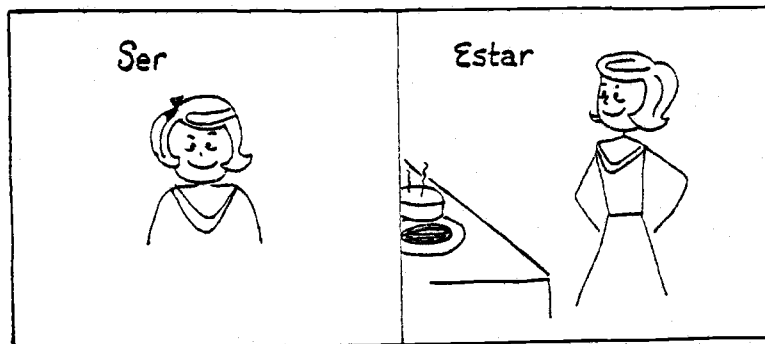
Continuation of Test Script

3. Depress toggle switch when you want to record your voice.

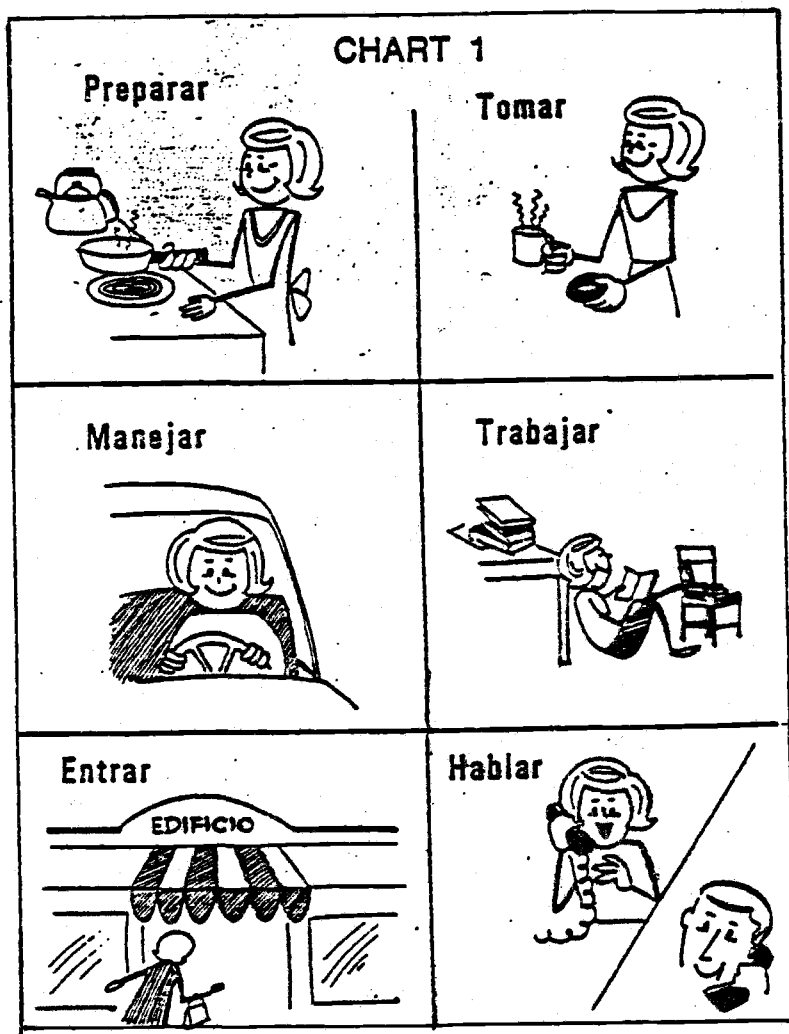
Release switch when not recording.

Now depress the toggle switch and record in English the number you were assigned. (Pause) We will now begin.

Facsimile of Transparency Used to Demonstrate the Example in Directions of Pre/Post-Test



Facsimile of Transparency Used in Pre/Post-Test



Instructor's Taped Verbal Requests Designed to Elicit a Response from the Student:

1. Tell me that Mary prepared the meal in the kitchen every day.
2. Ask me what Mary prepares.
3. Tell me that Mary prepared the meal in the kitchen yesterday.
4. Ask me if Mary prepares the meal.
5. Tell me that Mary drinks coffee every day.
6. Ask me why Mary drinks coffee.
7. Tell me that Mary drank coffee yesterday.
8. Ask me if Mary drinks coffee.
9. Tell me that Mary drives her car very well.
10. Ask me where Mary drives.
11. Tell me that Mary drove her car last week.
12. Ask me if Mary drives the car to school.
13. Tell me that Mary works a lot in Barcelona.
14. Ask me why Mary works.
15. Tell me that Mary worked in the office yesterday.
16. Ask me if Mary works.
17. Tell me that Mary enters the building.
18. Ask me where Mary enters the building.
19. Tell me that Mary entered the building.
20. Ask me if Mary enters the building.
21. Tell me that Mary talks with a friend every day.
22. Ask me when Mary talks with Thomas on the telephone.
23. Tell me that Mary talked to her friend.
24. Ask me if Mary talks everyday with the professor.

Pre/Post-Test Evaluation of Spanish Suprasegmental Use

Student number _____

Circle: Pre or post test

Date _____

Evaluator _____

General Criteria:

1. Rhythm-The entire sentence must be syllable-timed instead of stress-timed.
2. Stress-Each word, whether correctly used or not, must be pronounced with stress on the proper syllable.
3. Intonation patterns (The specific pitch contour and terminal juncture will be noted under each response)-
 - a. Pitch contour: Each sentence must conform to the anticipated pitch contour.
 - b. Terminal juncture: Each sentence must end with the anticipated terminal juncture.

Expected Responses and Specific Criteria:

1. María prepara la comida en la cocina todos los días.
Circle yes or no:

| | | |
|--|-----|----|
| a. Syllable-timed rhythm..... | yes | no |
| b. Correct stress on each word..... | yes | no |
| c. Correct pitch contour /211/ or /221/ instead of /231/..... | yes | no |
| d. Correct terminal juncture ↓ | yes | no |

2. ¿Qué prepara María?
Circle yes or no:

| | | |
|--|-----|----|
| a. Syllable-timed rhythm..... | yes | no |
| b. Correct stress on each word..... | yes | no |
| c. Correct pitch contour /211/ or /221/ instead of /231/..... | yes | no |
| d. Correct terminal juncture ↓ | yes | no |

3. María preparó la comida en la cocina ayer.
Circle yes or no:

| | | |
|--|-----|----|
| a. Syllable-timed rhythm..... | yes | no |
| b. Correct stress on each word..... | yes | no |
| c. Correct pitch contour /211/ or /221/ instead of /231/..... | yes | no |
| d. Correct terminal juncture ↓ | yes | no |

4. ¿Prepara María la comida?
Circle yes or no:

| | | |
|--|-----|----|
| a. Syllable-timed rhythm..... | yes | no |
| b. Correct stress on each word..... | yes | no |
| c. Correct pitch contour /222/ or /223/ instead of /233/..... | yes | no |
| d. Correct terminal juncture † | yes | no |

5. María toma café todos los días.
Circle yes or no:
- | | | |
|--|-----|----|
| a. Syllable-timed rhythm..... | yes | no |
| b. Correct stress on each word..... | yes | no |
| c. Correct pitch contour /211/ or /221/ instead of /231/..... | yes | no |
| d. Correct terminal juncture ↓ | yes | no |
6. ¿Por qué toma café María?
Circle yes or no:
- | | | |
|--|-----|----|
| a. Syllable-timed rhythm..... | yes | no |
| b. Correct stress on each word..... | yes | no |
| c. Correct pitch contour /211/ or /221/ instead of /231/..... | yes | no |
| d. Correct terminal juncture ↓ | yes | no |
7. María tomó café ayer.
Circle yes or no:
- | | | |
|--|-----|----|
| a. Syllable-timed rhythm..... | yes | no |
| b. Correct stress on each word..... | yes | no |
| c. Correct pitch contour /211/ or /221/ instead of /231/..... | yes | no |
| d. Correct terminal juncture ↓ | yes | no |
8. ¿Toma María café?
Circle yes or no:
- | | | |
|--|-----|----|
| a. Syllable-timed rhythm..... | yes | no |
| b. Correct stress on each word..... | yes | no |
| c. Correct pitch contour /222/ or /223/ instead of /233/..... | yes | no |
| d. Correct terminal juncture ↑ | yes | no |
9. María maneja muy bien su coche.
Circle yes or no:
- | | | |
|--|-----|----|
| a. Syllable-timed rhythm..... | yes | no |
| b. Correct stress on each word..... | yes | no |
| c. Correct pitch contour /211/ or /221/ instead of /231/..... | yes | no |
| d. Correct terminal juncture ↓ | yes | no |
10. ¿Dónde maneja María?
Circle yes or no:
- | | | |
|--|-----|----|
| a. Syllable-timed rhythm..... | yes | no |
| b. Correct stress on each word..... | yes | no |
| c. Correct pitch contour /211/ or /221/ instead of /231/..... | yes | no |
| d. Correct terminal juncture ↓ | yes | no |
11. María manejó su coche la semana pasada.
Circle yes or no:
- | | | |
|--|-----|----|
| a. Syllable-timed rhythm..... | yes | no |
| b. Correct stress on each word..... | yes | no |
| c. Correct pitch contour /211/ or /223/ instead of /231/..... | yes | no |
| d. Correct terminal juncture ↓ | yes | no |

12. *¿Maneja María el coche a la escuela?*
Circle yes or no:
- | | | |
|--|-----|----|
| a. Syllable-timed rhythm..... | yes | no |
| b. Correct stress on each word..... | yes | no |
| c. Correct pitch contour /222/ or /223/ instead of /233/..... | yes | no |
| d. Correct terminal juncture ↑ | yes | no |
13. *María trabaja mucho en Barcelona.*
Circle yes or no:
- | | | |
|--|-----|----|
| a. Syllable-timed rhythm..... | yes | no |
| b. Correct stress on each word..... | yes | no |
| c. Correct pitch contour /211/ or /221/ instead of /231/..... | yes | no |
| d. Correct terminal juncture ↓ | yes | no |
14. *¿Por qué trabaja María?*
Circle yes or no:
- | | | |
|--|-----|----|
| a. Syllable-timed rhythm..... | yes | no |
| b. Correct stress on each word..... | yes | no |
| c. Correct pitch contour /211/ or /221/ instead of /231/..... | yes | no |
| d. Correct terminal juncture ↓ | yes | no |
15. *María trabajó en la oficina ayer.*
Circle yes or no:
- | | | |
|--|-----|----|
| a. Syllable-timed rhythm..... | yes | no |
| b. Correct stress on each word..... | yes | no |
| c. Correct pitch contour /211/ or /221/ instead of /231/..... | yes | no |
| d. Correct terminal juncture ↓ | yes | no |
16. *¿Trabaja María?*
Circle yes or no:
- | | | |
|--|-----|----|
| a. Syllable-timed rhythm..... | yes | no |
| b. Correct stress on each word..... | yes | no |
| c. Correct pitch contour /222/ or /223/ instead of /233/..... | yes | no |
| d. Correct terminal juncture ↑ | yes | no |
17. *María entra en el edificio.*
Circle yes or no:
- | | | |
|--|-----|----|
| a. Syllable-timed rhythm..... | yes | no |
| b. Correct stress on each word..... | yes | no |
| c. Correct pitch contour /211/ or /221/ instead of /231/..... | yes | no |
| d. Correct terminal juncture ↓ | yes | no |
18. *¿Dónde entra María en el edificio?*
Circle yes or no:
- | | | |
|--|-----|----|
| a. Syllable-timed rhythm..... | yes | no |
| b. Correct stress on each word..... | yes | no |
| c. Correct pitch contour /211/ or /221/ instead of /231/..... | yes | no |
| d. Correct terminal juncture ↓ | yes | no |

19. María entró en el edificio.
Circle yes or no:
- | | | |
|--------------------------------------|-----|----|
| a. Syllable-timed rhythm..... | yes | no |
| b. Correct stress on each word..... | yes | no |
| c. Correct pitch contour | | |
| /211/ or /221/ instead of /231/..... | yes | no |
| d. Correct terminal juncture ↓ | yes | no |
20. ¿Entra María en el edificio?
Circle yes or no:
- | | | |
|--------------------------------------|-----|----|
| a. Syllable-timed rhythm..... | yes | no |
| b. Correct stress on each word..... | yes | no |
| c. Correct pitch contour | | |
| /222/ or /223/ instead of /233/..... | yes | no |
| d. Correct terminal juncture ↑ | yes | no |
21. María habla con un amigo todos los días.
Circle yes or no:
- | | | |
|--------------------------------------|-----|----|
| a. Syllable-timed rhythm..... | yes | no |
| b. Correct stress on each word..... | yes | no |
| c. Correct pitch contour | | |
| /211/ or /221/ instead of /231/..... | yes | no |
| d. Correct terminal juncture ↓ | yes | no |
22. ¿Cuándo habla María con Tomás por teléfono?
Circle yes or no:
- | | | |
|--------------------------------------|-----|----|
| a. Syllable-timed rhythm..... | yes | no |
| b. Correct stress on each word..... | yes | no |
| c. Correct pitch contour | | |
| /211/ or /221/ instead of /231/..... | yes | no |
| d. Correct terminal juncture ↓ | yes | no |
23. María habló con un amigo.
Circle yes or no:
- | | | |
|--------------------------------------|-----|----|
| a. Syllable-timed rhythm..... | yes | no |
| b. Correct stress on each word..... | yes | no |
| c. Correct pitch contour | | |
| /211/ or /221/ instead of /231/..... | yes | no |
| d. Correct terminal juncture ↓ | yes | no |
24. ¿Habla María todos los días con el profesor?
Circle yes or no:
- | | | |
|--------------------------------------|-----|----|
| a. Syllable-timed rhythm..... | yes | no |
| b. Correct stress on each word..... | yes | no |
| c. Correct pitch contour | | |
| /222/ or /223/ instead of /233/..... | yes | no |
| d. Correct terminal juncture ↑ | yes | no |

APPENDIX II

Lesson Plan One: RhythmBoth Groups

I am going to play on the tape two very short recordings. I hope to have the sound so low that you cannot hear specific words. There are two sentences in Spanish and two in English and both mean the same thing. I want to see if you can identify each language without hearing the words. I will play one, then the other and finally I will repeat them. Then I will ask you to identify the language on each tape. (Tape) What language is Recording One? And Recording Two? How do you think you could tell one language from the other?

What you recognized was the rhythm, stress and intonation of each language...the musical qualities of a language. This is what we will be studying for 20-minute periods each week in the lab.

As children, we mastered intonation before we were able to use words. Yet many times, in second language learning, it is one of the last things we study. The person who has a good ear and a natural talent for imitation may easily pick up these qualities--but many of us have to be trained to hear these qualities and be taught how to produce them.

Today we will work on only one part of this--rhythm--although all these qualities overlap, making it difficult to talk about one without the other.

* * * * *

Experimental Group

(Projection of English sentences.) In English we keep the same amount of time between one stressed syllable and the next stressed

Continuation of Lesson Plan One: Rhythm

Experimental Group

syllable. In order to keep the rhythm, we say the unstressed--or unaccented--syllables faster and we lengthen the accented syllables. It is called a stress-timed language. These sentences take the same amount of time. I'll read them again.

(Projection of Spanish sentences.) In Spanish, all syllables have nearly the same length, the accented as well as the unaccented. It is called a syllable-timed language. The length of the phrase grows as we add syllables. It gives that rapid-fire, machine-gun and staccato sound to Spanish. We'll read these sentences again.

We think native Spanish speakers speak Spanish faster than we speak English--and they think the same of us--this is due to different rhythms.

Overhead Transparency Facsimile

The doctor is a surgeon.

The doctor is a good surgeon.

The doctor is a very good surgeon.

La muchacha es bonita.

La muchacha no es bonita

La muchacha no es muy bonita.

Control Group

(Projection of Spanish sentences.) In Spanish, all syllables have nearly the same length, the accented as well as the unaccented. It is called a syllable-timed language. The length of the phrase grows as we

Continuation of Lesson Plan One: RhythmControl Group

add syllables. It gives that rapid-fire, machine-gun and staccato sound to Spanish. Let's read these sentences again.

Overhead Transparency Facsimile

La muchacha es bonita.

La muchacha no es bonita.

La muchacha no es muy bonita.

* * * * *

Both Groups

Before you can say a sound correctly, you have to hear it correctly. Listen carefully.

* * * * *

Experimental Group

I'll pronounce this word in two different ways. One pronunciation will be with a syllable-timed rhythm and one with a stress-timed rhythm. In other words, one as if it were an English word and one with a Spanish pronunciation: fenómeno. I'll repeat it. Raise your hand if you think I'm using the Spanish rhythm.

Control Group

I'll pronounce this word with a syllable-timed rhythm where each syllable lasts as long as the other: fenómeno

* * * * *

Both Groups

Now we will try some other words: español, simbólico, ganábamos, económico, famosa, clasificado, policía.

Continuation of Lesson Plan One: Rhythm

Both Groups

Now that you can hear the Spanish rhythm, you will be able to produce the rhythm yourself. First, I have a few hints:

1. Exaggerate. You are in the privacy of your own booth so go to it.
2. Feel the rhythm. Make a physical movement in time with the beat of the sentence--tap your book with your hand or pencil--move your head in time with the rhythm--tap your foot--whatever works.
3. Self-monitor. You have to learn to hear and correct yourself. Try to hear correctly and adjust your speech accordingly.

(Projection of es-se-mu-cha-cho.) There are some phrases on the screen. The top row is written the way you normally see them. Right below that they are broken into syllables illustrating how you will pronounce them. I will say each phrase and have you repeat it twice. Remember to exaggerate, keep time and to self-monitor. All syllables are the same length. Do not lengthen the accented syllables.

Overhead Transparency Facsimile

ese muchacho

e-se-mu-cha-cho

esta mañana

es-ta-ma-ña-na

somos chinos

so-mos-chi-nos

Continuation of Lesson Plan One: RhythmBoth Groups

gana mucho

ga-na-mu-cho

bésame mucho

bê-sa-me-mu-cho

una muchacha feminina

u-na-mu-cha-cha-fe-me-ni-na

(Projection of transparency: porque no te preparaste bien.)

The next exercise is one where word by word, you start at the end and build up to a longer phrase. I'll say it and then you repeat it with me.

Overhead Transparency Facsimile

bien

preparaste

te preparaste

no te preparaste bien

porque no te preparaste bein

(Projection of 10 sentences.) Now we will work on longer sentences from the tape that goes with Lesson Seven in your book. Rather than using your books, I have made a transparency of the sentences. First listen to the sentence and say it out loud; then we'll listen for a second time and repeat it for a second time as well. What should you remember? Exaggerate, feel the rhythm and self-monitor. All syllables are the same length.

Continuation of Lesson Plan One: Rhythm

Overhead Transparency Facsimile

Experimental and Control Groups

Modelo: Le faltan los pañuelos.

Le falta el pañuelo.

1. Nos faltan los papeles.

Nos falta el papel.

2. Me hacen falta los platos.

Me hace falta el plato.

3. Te quedan las tazas.

Te queda la taza.

4. Les cansan las tareas.

Les cansa la tarea.

5. Le interesan los viajes a México.

Le interesa el viaje a México.

6. A José y a Ricardo les gustan los dramas.

A José y a Ricardo les gusta el drama.

7. A tu vecina le gustan las flores.

A tu vecina le gusta la flor.

8. Me duelen las piernas.

Me duele la pierna.

9. Te faltan los periódicos.

Te falta el periódico.

10. Les caen bien los convidados.

Les cae bien el convidado.

Continuation of Lesson Plan One: Rhythm

Experimental and Control Groups

11. Le gustan las sillas.
Le gusta la silla.
12. Les gustaron las películas.
Les gustó la película.

Lesson Plan Two: Pitch Pattern and Terminal Juncture in an Ordinary Statement

Both Groups

Lesson: Have you been listening to Spanish rhythm?

* * * * *

Experimental Group

Comparing it to the rhythm of English?

* * * * *

Both Groups

Practicing outloud at home? Let's quickly review a couple of sentences from last week. Remember, Spanish is a syllable-timed language. What does that mean? When you pronounce the words, all the syllables have the same length, the accented as well as the unaccented.

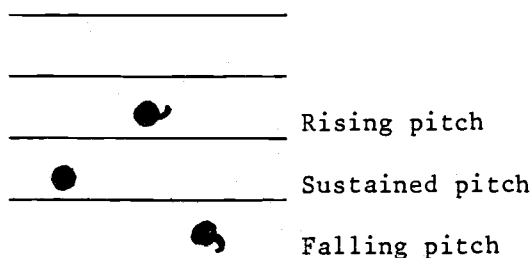
(Projection of Spanish sentences from last week: la muchacha no es bonita.) When we read these sentences, what three hints should we remember? Exaggerate, feel the rhythm and self-monitor. Repeat the sentences after I say them.

(Projection of musical scale.) Today we are going to study intonation which is the name given to the levels of pitch, meaning the relative height of a voice, within a sentence and at the end of a sentence where the pitch rises or falls. We use the term "relative" because the height of the pitch varies from speaker to speaker. We will use a musical scale to show where pitch rises and where it is lower. (Explain projection: scale, rising pitch, sustaining pitch and falling pitch.) Wherever your voice starts, wherever its normal and usual level falls, is often the second line on the scale.

Continuation of Lesson Plan Two: Pitch Pattern and Terminal Juncture
in an Ordinary Statement

Both Groups

Overhead Transparency Facsimile



* * * * *

Experimental Group

(Projection of English sentences with musical notes.) In English, if someone asked you where you were going, you would answer it like this: I'm going home./231↓/. That is considered a normal uncolored sentence. Under different circumstances, depending on what you would like to express, you might say it differently. For now, though, we are working only with what are called normal sentences.

On the other hand, if someone asked you in Spanish: ¿Dónde vas? /211↓/ and you used the English intonation and replied: Voy a casa. /231↓/, you would sound, to a native Spanish speaker, irritated by the question.

(Addition of the Spanish overlay with musical notes.) Here is how the native Spanish speaker would say it: Voy a casa./211↓/ or /221↓/. As a native English speaker, which you all are, say it in Spanish as if you are a little angry. You will not sound angry to a Spanish speaker. A good rule of thumb is to make your Spanish statements sound the way that commands sound in English. Say: Voy a casa./211↓/. Repeat.

Continuation of Lesson Plan Two: Pitch Pattern and Terminal Juncture
in an Ordinary Statement

Experimental Group

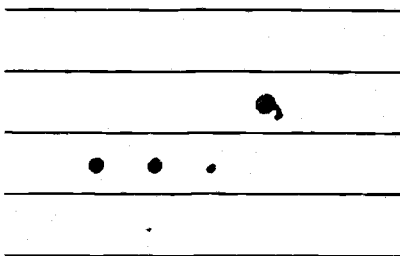
To take this comparison a bit further, the correct Spanish intonation pattern when used in English has the meaning of annoyance, disinterest or disgust. I'm going home./211+/.

Let's make these comparisons with another sentence. Imagine someone asked you in English where you were from. You would respond in this way: I'm from Colombia./231+/. However, if they asked you in Spanish: ¿De dónde es usted?/211+/, you should respond correctly in this matter: Soy de Colombia./211+/. If you used the English intonation, you would sound strangely insistent. (repeat with /231+ / pattern.) If you use the Spanish pattern in English, you sound disinterested: Soy de Colombia./231+/.

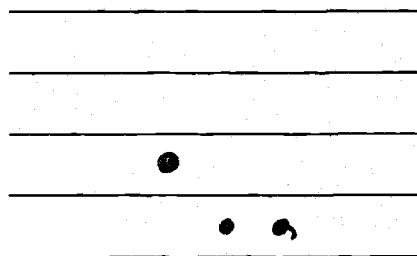
How should you say normal statements in Spanish? What hints do you remember? Let's say these a few times using the correct Spanish intonation.

Overhead Transparency Facsimile

Experimental Group



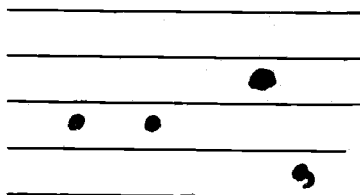
I need a map



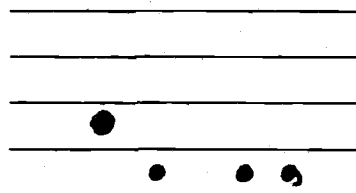
Voy a casa.

Continuation of Lesson Plan Two: Pitch Pattern and Terminal Juncture
in an Ordinary Statement

Experimental Group



I'm from Colombia.



Soy de Colombia.

Control Group

(Projection of Spanish sentences.) In Spanish, if someone asked you: ¿Dónde vas?/211↓/, you would answer by saying: Voy a casa./211↓/ or /221↓/. Your response is considered a normal uncolored sentence without any particular emotion. Under different circumstances, depending on what you would like to express, you might say it differently. Right now, though, we are working with what are called normal or ordinary sentences.

Let's look at the Spanish sentences. Notice that the pitch doesn't go much higher than the level where it began. Repeat it after me: Voy a casa./211↓/.

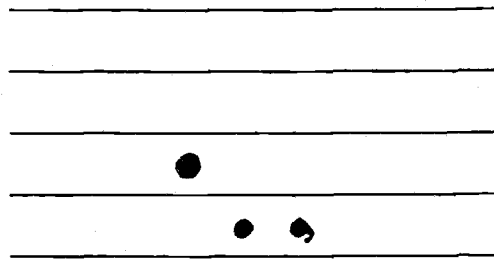
Let's go on to another sentence. If someone asked you, in Spanish, where you were from: ¿De dónde es usted?/211↓/, you would respond using the same intonation as in the earlier example: Soy de Colombia./211↓/. Repeat after me.

We need to say these a few times using the correct Spanish intonation.

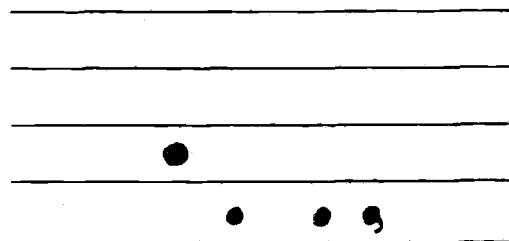
Continuation of Lesson Plan Two: Pitch Pattern and Terminal Juncture
in an Ordinary Statement

Overhead Transparency Facsimile

Control Group



Voy a casa.



Soy de Colombia.

* * * * *

Experimental Group

(Projection of 10 sentences.) I will pronounce these sentences with English intonation and then with the Spanish. Listen to the difference. Which one is the Spanish intonation? Repeat after me. Remember the Spanish rhythm; also say each sentence as if you were angry or issuing a command. Look at the musical scale if that helps.

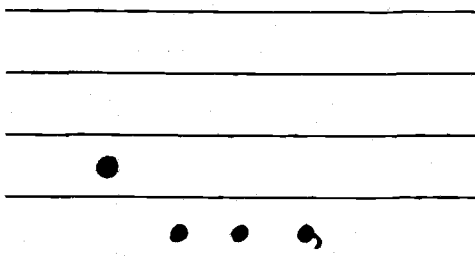
Control Group

I will say a sentence and you repeat it after me. Remember to use syllable-timed rhythm and not to raise the pitch any higher than from where you started. Look at the musical scale if that helps.

Continuation of Lesson Plan Two: Pitch Pattern and Terminal Juncture
in an Ordinary Statement

Overhead Transparency Facsimile

Experimental and Control Groups



1. Dice que es verdad.
2. Creo que la quiere.
3. Voy a faltar a esa clase.
4. Tengo que estudiar esta noche.
5. Preferimos no hacer nada.
6. Tú siempre dices eso.
7. Carlos está casado.
8. Ella tomó café.
9. Carmen comió papas.
10. Julia y Ana lo saben muy bien.

* * * * *

Both Groups

For a minute, think about where you are from, where you will go when you leave here and what you are doing right now. Also think about intonation and rhythm. Now I'll ask you a couple of questions--all of your answers will be different so you must self-monitor. Listen and correct yourself. Answer these questions in Spanish outloud. We'll do this a few times.

¿Dónde vas? ¿De dónde es usted? ¿Qué hace usted ahora?

Lesson Plan Three: Ordinary Information Questions

Both Groups

Let us review some of the pronunciation features that we have been studying. Remember that syllable-timed rhythm requires that each syllable is the same length as other syllables, the accented as well as unaccented. Exaggerate, feel the rhythm and self-monitor. Don't go higher than the pitch where you began. In normal statements think about a falling pitch.

* * * * *

Experimental Group

Sound as if you are irritated. Say normal statements as if they were commands.

* * * * *

Both Groups

(Projection of sentences from last week.) First we will review some sentences from last week with the musical scale showing. After a few sentences, I'll cover up the scale. Remember, it doesn't matter exactly when your voice goes down, just so it does go down. The intonation patterns we are using are merely among the most common in Spanish. You will hear native speakers using others. However, if you begin by mastering the ones presented here, your Spanish intonation will be authentic and you can eventually imitate other patterns you might hear.

* * * * *

Experimental Group

Ordinary information questions are questions that always begin with interrogative words such as: dónde=where, qué=what, cómo=how, quién=who, por qué=why, etc. You cannot answer these questions with a

Continuation of Lesson Plan Three: Ordinary Information QuestionsExperimental Group

yes or no. If someone asked: ¿Dónde va usted?, you cannot answer: sí. If someone asked: Where are you going?, it would not be appropriate to answer: No. In both cases, you should tell the questioner where you are going. Such questions are called information questions. There are many ways to ask information questions--insulting ways, demanding ways--that we all probably know way too well. Now, however, we are working on ordinary uncolored information questions.

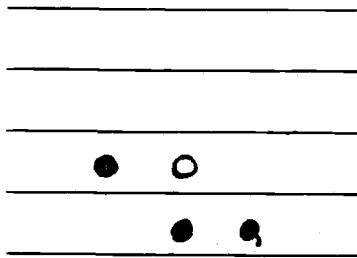
(Projection of the English pattern.) As luck would have it in English, the intonation pattern for an information question is the same as for an ordinary statement that we studied last week. You might think that we raise our voices at the end of all questions but, in fact, we do not. In English, just as we said: I'm going home./231↓/, we say: Where are you going?/231↓/.

(Addition of the Spanish overlay.) The same holds true in Spanish where the intonation pattern for an informative question is the same as for the normal statement that we studied last week. In Spanish, the voice is not raised at the end of information questions either. Remember: Voy a casa./211↓/. It is the same intonation pattern. The hollow note /221↓/ indicates an alternative. It doesn't matter when your voice goes down, just so it goes down. Let's practice the sentences. Remember to sound irritated or as if you were giving a command. Don't raise your pitch above where you start the sentence.

Continuation of Lesson Plan Three: Ordinary Information Questions

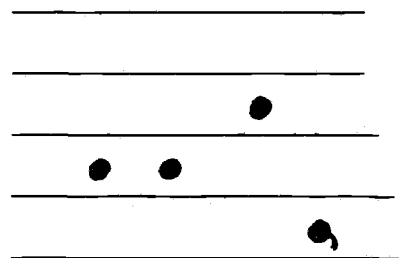
Overhead Transparency Facsimile

Experimental Group



¿Dónde va usted?

¿Quién es tu padre?



Where are you going?

Who is your father?

Control Group

Ordinary information questions are questions that always begin with interrogatives such as: dónde, qué, cómo, quién, and por qué. You cannot answer these questions with a Sí or No. If someone asked: ¿Dónde va usted?/2114/, you cannot answer: Sí. You should tell the person where you are going; therefore, the questions are called information questions. Also there are many ways to ask information questions--insulting ways, condescending ways--that we all probably know way too well. Today's questions, however, are ordinary uncolored information questions.

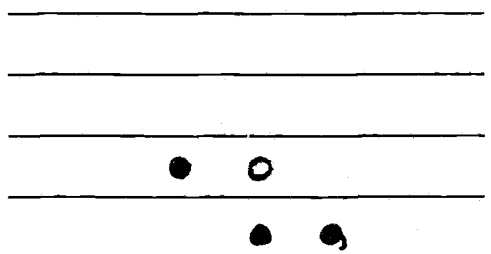
Continuation of Lesson Plan Three: Ordinary Information Questions

Control Group

(Projections of Spanish sentences.) As luck would have it, the intonation is the same as it is for a normal ordinary uncolored statement in Spanish, the kind we studied last week. Remember: Voy a casa. /211↓/. It is the same. Even though we are asking a question, a falling tone marks the end of the question. The pitch does not go up at the end. The hollow note indicates an alternative; it doesn't matter when your voice goes down, just so it goes down. Let's practice these sentences. Remember not to raise your pitch above where you started.

Control Group

Overhead Transparency Facsimile



¿Dónde va usted?

¿Quién es tu padre?

* * * * *

Experimental Group

(Projection of sentences without musical scale overlay.) I will read the sentences twice, once using the Spanish pattern /211↓/ and once using the English pattern /231↓/. I want you to choose the Spanish intonation.

Continuation of Lesson Plan Three: Ordinary Information Questions

Control Group

I will read the sentences twice using two different patterns (the Spanish pattern /211↓/ and Spanish pattern /211↑/). I want you to choose the correct intonation.

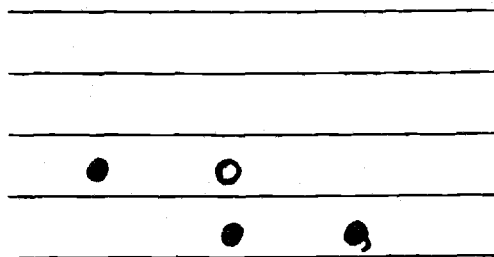
* * * * *

Both Groups

(Projection of the musical scale overlay on the sentences.) We will practice the sentences twice with the musical scale and follow that two more times without the musical scale. With the last three longer sentences, we will begin pronunciation at the end and work toward the beginning.

Overhead Transparency Facsimile

Experimental and Control Groups



1. ¿Cómo se llama?
2. ¿Para dónde vas?
3. ¿Qué quieres?
4. ¿Quién dice eso?
5. ¿Dónde vive ese señor?
6. ¿Cuándo sale el tren?
7. ¿Por qué me lo preguntas?

Continuation of Lesson Plan Three: Ordinary Information Questions

Experimental and Control Groups

8. ¿Qué importa que Ricardo se vaya?
9. ¿Por qué querías que él te lo mandara?
10. ¿Por qué tenías miedo de que ellos se lastimaran?

Both Groups

Teacher: I'll ask you to ask me my name, to ask me when the train leaves, to ask me where I live and to ask me why I am doing this--all in Spanish.

Pregúntenme cómo me llamo.

Pregúntenme cuándo sale el tren.

Pregúntenme dónde vivo.

Pregúntenme por qué yo hago esto.

Pregúntenme qué hora es.

Lesson Plan Four: Yes/No Questions and StressBoth Groups

Review the previous three lessons.

Yes/no questions are ones that require a yes/no or a sí/no answer.

An information question begins with a question word such as: dónde, quién, qué, etc. In these cases, our voices did not rise at the end and the question itself required that some information be given in the answer. Yes/no questions require an answer that need not be any more than yes/no or sí/no.

* * * * *

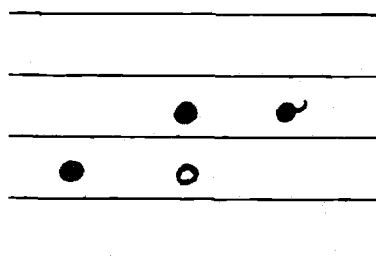
Experimental Group

(Projection of English sentences.) In English, the voice rises and goes up at the end; however, it is not crucial because the question is already indicated by sentence order. How would you make statements out of these?

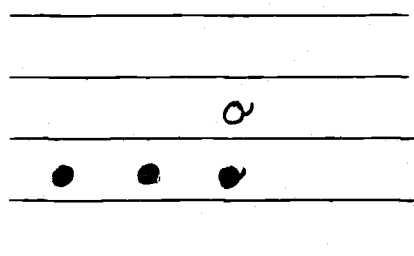
(Projection of Spanish overlay.) Here the rise at the end is crucial because often these questions are not indicated by sentence order. In the most normal pattern, the pitch rises on the last syllable and usually the rise is ONLY that little rise at the end. The rise has to occur, however, for the listener to know it is a question.

Continuation of Lesson Plan Four: Yes/No Questions and StressExperimental Group

Overhead Transparency Facsimile



Do you speak Spanish
Are you going home?



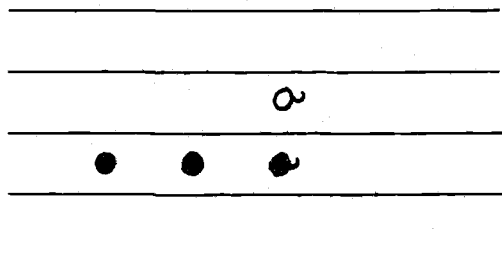
¿Habla español?
¿Vas a casa?

* * * * *

Control Group

(Projection of Spanish sentences.) Here, in Spanish, the rise at the end is crucial because often these questions are not indicated by sentence order. In the most normal pattern, the pitch rises on the last syllable and usually the rise is ONLY that little rise at the end. The rise has to occur, however, for the listener to know it is a question.

Overhead Transparency Facsimile



¿Habla español?
¿Vas a casa?

Continuation of Lesson Plan Four: Yes/No Questions and StressExperimental Group

(Projection of sentences.) I will pronounce these sentences in different ways and I'll want you to tell me which is the proper Spanish intonation. /233↑/ vs /222↑/.

Control Group

(Projection of sentences.) I will pronounce these sentences in different ways and I'll want you to tell me which is the proper Spanish intonation. /222↑/ vs /222↓/.

* * * * *

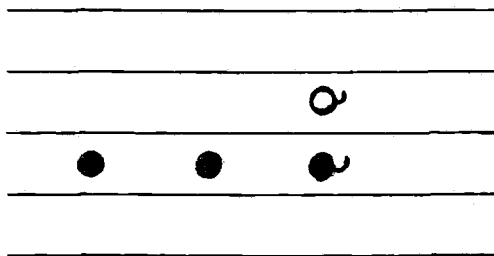
Both Groups

Practice saying the sentences first with the musical scale and then without it.

Ask me the following questions: Ask me if I'm going home. Ask me if I speak Spanish. Ask me if I want to eat. Ask me if I live in Corvallis.

Experimental and Control Groups

Overhead Transparency Facsimile



(Accompanying sentences follow on next page.)

Continuation of Lesson Plan Four: Yes/No Questions and Stress

Experimental and Control Groups

1. ¿Van mañana?
2. ¿Son las doce?
3. ¿Son de los Estados Unidos?
4. ¿Sabe la dirección?
5. ¿Quieres que lo haga?
6. ¿Quieren que lo repita?

Both Groups

Stress is loudness or volume. Think of where the accent falls in a word and we'll call that stress. In all of the following words, the stress dictates a change in meaning. Can you all hear the difference? Tome (take) vs tomé (I took); canto (I sing) vs cantó (he sang); entre (between) vs entré (I entered); ésta (this) vs está (estar-third person).

(Projection of stress rules with bottom half of transparency covered. Review rules; having students recall rules by looking at certain words, after which they are shown the rule below the words.)

Overhead Transparency Facsimile

mapa
pelo
hablando
cantan
cortes

---Most words ending in a vowel or n or s have the second-to-last syllable stressed.

---Most words ending in a consonant other than n or s have the last syllable stressed.

Continuation of Lesson Plan Four: Yes/No Questions and Stress

Both Groups

ángel
túnel

---Words whose stress patterns do not conform to the two most frequent patterns must have a written accent on the stressed syllable.

* * * * *

Experimental Group

(Projection of cognates.) Stress problems occur many times with cognates, which are words that in both English and Spanish have more or less the same spelling and may even be pronounced much alike but often have different stress patterns. Let's pronounce these words. In English we make the vowels a little longer and sometimes reduce them. In Spanish they are the same length. In English they are higher in pitch and not so much so in Spanish.

Overhead Transparency Facsimile

Experimental Group

| | | |
|----------------------|----|--------------------|
| <u>hospital</u> | vs | hospita <u>l</u> |
| comm <u>u</u> nicate | vs | comunicar <u>a</u> |
| im <u>a</u> gine | vs | imaginar <u>a</u> |

(English pronunciation)

(Spanish pronunciation)

(Projection of imaginar conjugation with bottom half covered.) The stress problem is complicated when the verb is a cognate, as is the verb imaginar. We tend to pronounce it through all the verb changes as if it were English. Let's pronounce these conjugations.

Look at imaginar on the screen, conjugated in the present and preterite tenses. What do you notice about the endings of all the

Continuation of Lesson Plan Four: Yes/No Questions and Stress

Experimental Group

conjugations? Yes, all end in a vowel or n or s. Then where would the stress be? On the second-to-last syllable.

(Show the bottom half of the transparency.) This is where each word is stressed. I'll say each word and you repeat it after me.

Overhead Transparency Facsimile

Experimental and Control Groups

| | <u>Presente</u> | <u>Preterito</u> |
|------------|-----------------|------------------|
| (yo) | imagino | imaginé |
| (tú) | imaginas | imaginaste |
| (usted) | imagina | imaginó |
| (nosotros) | imaginamos | imaginamos |
| (ellos) | imaginan | imaginaron |
| | imagino | imaginé |
| | imaginas | imaginaste |
| | imagina | imaginó |
| | imaginamos | imaginamos |
| | imaginan | imaginaron |

Control Group

(Projection of imaginar conjugation with bottom half covered.)
 Look at imaginar on the screen, conjugated in the present and preterite tenses. What do you notice about the endings of all the conjugations? Yet, all end in a vowel or n or s. Then where would the stress be? On the second-to-last syllable. (Show bottom half of transparency). This is where each word is stressed. I'll say each word and repeat after me.

* * * * *

Both Groups

Let's practice using this verb. Say: I imagine that; He imagines a lot; I imagined that. Let's do it a few more times.

Continuation of Lesson Plan Four: Yes/No Question and Stress

Both Groups

(Projection of sentences.) Let's quickly review everything we have studied. Now with the sentences on the screen, I first want you to pronounce them aloud, then I will say it and the third time we will say it together. All the while you will be self-monitoring and correcting your own pronunciation.

Overhead Transparency Facsimile

1. ¿Practica la canción?
2. ¿Dónde practicas el discurso?
3. Practico aquí.
4. ¿Quién comunica con nosotros?
5. Comunicamos muy bien.
6. ¿Comunicas mucho?
7. Yo no imaginé nada.
8. ¿Imaginan eso?
9. ¿Qué imagina?