This paper reports one aspect of the author's research on the phonology of the Spanish spoken in Tucson, Arizona. The specific aspect of the research considered there concerns "levels" of speech. "Levels" refers to the systematic variation in speech form that can be observed in the speech of one individual. The empirical phenomenon that the author uses to establish various levels is rate of speech: slow, medium, fast, and very fast. After describing the research methodology employed, the author presents data on the occurrence of a particular phoneme; the occurrence is seen to vary according to a varying rate of speech. (VM)
SPEECH LEVELS
AND
TUCSON SPANISH PHONOLOGY

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The purpose of this paper is to report on research in which I am currently engaged in completing my dissertation on Tucson Spanish phonology. The description of the Spanish of Arizona has been sadly neglected. The most comprehensive study of the sounds of the local Spanish is Post's *Southern Arizona Spanish Phonology* (1934). Although this work of forty years ago is invaluable, a comprehensive study is needed of the language today. My research, however, is not meant simply to modernize Post's description; it also proposes to explore new areas of inquiry that have received greater interest in recent years. One such inquiry, the only one that I will discuss here, has to do with the question of "levels" of speech.

What I mean by "level" is the systematic variation in speech form that can be observed in the speech of one individual, what is often referred to as "style." Voiceprints show how unique each person sounds. *Langacker* (1967:153) explains that "in purely objective terms, no two uttered sounds are ever exactly alike in all their phonetic detail. . . . The differences between two uttered sounds may be minute, almost immeasurable, but they are always there." *Labov* (1970:19) says that "there are no single-style speakers. By this we mean that
every speaker will show some variation in phonological and syntactical rules according to the immediate context in which he is speaking." Gleason (1961:406) mentions "levels of speech" saying that "a single speaker, without departing from the conventions usual in his area, speaks differently in different social situations. Different vocabulary, constructions, and even pronunciations are used in formal address and in familiar conversation." Goodenough (1971:11) writes: "There is no fixed number of discrete plans for speaking that a person may carry." In discussing stylistic switching, Ma and Herasimchuk (1971:360) refer to "differing speech styles, whose total effects are achieved by a subtle combination of phonological variation, contractions of common words, syntactic variation, change of content or topic of conversation, and, of course, intonational as well as extra-linguistic phenomena such as laughter and rapid speech." Labov (1966:112) said, "It is not contended that [the styles] are natural units of stylistic variation: rather they are formal divisions on the continuum set up for the purposes of this study, which has the purpose of measuring phonological variation along the stylistic axis."

Although the concept of levels of speech is relatively clear in a notional sense, it becomes quite elusive when one attempts to define precise levels empirically. Attempts at definition have been based on diverse variables. One variable is rate of speech. Post (1934:18), for example, felt the need to mention "rapid speech" to account for
alternate forms of pronunciation. Dalbor (1969:184) uses two styles of speech for his analyses: "slow, careful, formal" and "fast, conversational, informal." Ervin-Tripp (1972:238) writes: "Phonetically, a form which occurs in casual speech more than in polite styles is rapid speech, which entails horizontal changes..." She gives the following sentences as examples of three style levels: "What are you doing?" "Whaddya doing?" "Whach doon?" Harris (1969:6) distinguished four levels based on rapidity of speech: "Largo, Andante, Allegretto, and Presto." Samarin (1967:64) finds "speed of utterance" to be one of eight factors that correlate with speech diversity, stating "It is phonology which is most affected by speech tempo. In some languages the differences between 'slow' or 'deliberate' and 'fast' or 'allegro' speech can be correlated with morphophonemic changes... In other languages the differences are subphonemic." In an African language he finds these seven tempos (levels): "ceremonious, deliberate, slow, ordinary, rapid, hurried, slurred."

Another variable is based on social, cultural, or educational considerations. Matlack (1951:passim), for example, makes frequent reference to the speech of "la gente culta, semiculta or inculta," as well as of "la clase baja, el vulgo y gente rústica." Commenting on a speaker's awareness of his own linguistic system Honsa (1965:282) distinguishes "three types of native speakers: the uneducated speaker,
an educated speaker with no linguistic training, and an educated speaker who is a trained linguist."

Attention to language or attitude is a variable referred to in many linguistic works by the term "careful speech," which is often contrasted with "casual speech," as in Ma and Herasimchuk (1971:360) or Labov (1966:112). Joos (1968:188) distinguishes five styles: "frozen, formal, consultative, casual, and intimate." One of the eight factors of Samarin (1967:63) is "emotion at time of speaking," as feeling "bored," "interested," "unemotional," "angry," or "excited."

The situation determining the selection is another important variable. The more common terms, which seem to parallel "careful" and "casual," are "formal" and "informal," as in Ervin-Tripp (1972:235-36). Bolinger (1968:137) recognizes that "even the most careful speakers permit themselves a style of speech at home that is different from the one they use in public." The situation or context within the interviewing session was the basis for isolation of styles in the detailed study by Labov on New York City English. Digressions or speaking with a third person or on certain topics, answering formal interview material, reading prose and reading word lists yielded four styles respectively. Ornstein (1970:142) refers to Joshua Fishman's "preoccupation with developing a hierarchical set of constructs which relate language choice to domains of social interaction." Fishman
(1971:465-79) worked with many other variables, such as demo-
graphic data as age, sex, etc., as well as isolation by context, to
study the predictions of variables within a bilingual speech community.
It was concluded that "differential use of a variant in Puerto Rican
Spanish (SpC-O) was predicted best, as hypothesized, on the basis of
speech context." (476)

The analysis of phonological levels of speech in my disserta-
tion is to be based on the speech of informants from a small area in
Tucson. They are all of Mexican descent, born in Tucson or here by
age 5, so there are first, second and third generation informants.
They have lived in Tucson all their lives, and, at the time of taping,
lived in a few-block-square area called La Reforma homes, just
southwest of downtown Tucson. It is public housing, where one pays
according to one's income. To live there a family of four cannot have
more than an annual income of $5,000, and many of the families in La
Reforma receive welfare benefits. Before moving into La Reforma
most lived in the general area, which, as La Reforma, has a lower
percentage of Anglos than is represented in the population of Tucson
as a whole. The Mexican-Americans living in La Reforma are
relatively homogeneous in regard to socioeconomics, religion, and
education. They have attended the same schools. The young people
tend to drop out of high school, whereas their parents usually did not
attend high school. In spite of these generalizations, however, there
are great differences in the homes, in individuals, and in parental origin. They knew I was studying Spanish, but they did not know the focus was phonetic, as I did not want to cause any more alteration of speech than an interview situation usually creates.

One of these informants, whom I will refer to as Informant II, is an 18-year-old female, born in Tucson of Mexican-born parents. When taped she had just stopped school in the middle of her senior year. Although she has had no formal courses in Spanish, she can read it, albeit slowly and by word boundaries. She and her ten siblings speak English well, but they usually speak Spanish at home because their mother does not speak English. Informant II is assured and comfortable in Spanish, with clear, light, slightly nasal speech. She has a relatively fast rate of speech. All of the examples of speech in this paper will be those of Informant II.

Usually the interview sessions are tape-recorded in the informant's home, although my car has been used when there were little children in the home. The interview begins with counting in Spanish from one to ten and then from ten to one to allow the informant an adaptation period. If he can read Spanish, approximately five minutes are then devoted to his reading about 15 isolated words, some 30 sentences of varying lengths, each containing a certain phoneme in high frequency, as /b/, in "Bueno, probablemente estaban borrachos," and a brief paragraph. The main part of the interview which lasts
more than a half hour, is sentence creation interspersed with informal chatting. In the former the informant reads aloud a word (or hears it from the interviewer if the informant is a non-reader); he is then to create a sentence employing that word. There are many types of responses on the tape. Non-use of the word occurs, as silence, laughter, or a comment such as, "Operando. Eso no puedo pensar tampoco." Another type consists of simple phrases or sentences as "Sangre. No me gusta mirar sangre." As the interview progresses a response may contain several sentences, some of greater length, and complexity. An example is "Largas. Ahí donde trabajo las horas se hacen muy largas, pero cuando estamos aquí en la casa, luego luego se van. Mientras, ch, cuando estoy trabajando, no. Se duran más." Occasionally the informant digresses with or without use of the word. For example, part of a long response to the word "reloj" is Informant II's explanation of an expired warranty: "Es cuando se me quebró, en diciembre. Y me lo compraron en ... Se me quebró en octubre y me lo compraron en diciembre. En di ... en diciembre que pasó ya. el pasado ... el que pasó antes de que pasó éste." Another type was answers to the interviewer’s questions about the content of the created sentence, as "Hueso. Me duele el hueso porque el otro día me caí, y me duele. [¿Dónde se cayó?] En trabajo ... en el trabajo. [¿En el trabajo?] Me caí en de lado y me duele mi hueso acá." The purpose is to elicit a natural utterance made from a word the informant is
familiar with, and that is selected for its own phonetic elements and for possible combinations of sounds. As the sentences are from the informant's stock of vocabulary, ideas and interests rather than the interviewer's, further development of a topic can lead into speech in which the informant gets more involved in content and less conscious of his surroundings and of his speech. The corpus elicited by these techniques will be expanded by inclusion of free or directed dialogues between the informant and a close friend of his. The data pertinent to age, birthplace, etc., are obtained at least several weeks prior to the interview in order to avoid any awkwardness felt because of somewhat personal questions.

In attempting to analyze this corpus for variations in levels of speech, I decided to reject the situation or activity-oriented style selections as arbitrary for my study because I found too much overlapping. Also, some of my informants cannot read. Studying James Harris' descriptions of levels (styles), I saw he considered first speed, secondly care, then relative naturalness according to some norm. Change of speed was also one of Labov's channel cues to change of style. Because my group of informants is relatively homogeneous socioeconomically, culturally and educationally, I have elected to consider levels by speed: slow, medium, fast, and very fast. This selection allows for what Harris refers to as the change back and forth from one level to another in the same context. I
therefore divided my informants' speech into relative speeds, no matter in what part of the interview it occurred. It was a subjective judgment based on what I felt their careful but natural speech was. Thus far, slow speed corresponds generally to the reading and hesitant speech in the interview, medium speed to the created sentences, and fast usually occurs in anecdotal chatting. As yet, I do not have an ample selection of "very fast" speeds, that which Labov mentions as occurring when the door closes behind the interviewer.

Let me illustrate the procedure that I am following with my tentative treatment of the phoneme /s/. The allophones of /s/ in the speech of Informant II are distributed as follows:

**FIGURE 1**

\[
/s/ \rightarrow \begin{cases} [s] \hspace{1cm} /C_v/ \\ [z] \hspace{1cm} /V/ \text{ word final} \\ [h] \hspace{1cm} /V/ \text{ (not utt. final)} \\ \emptyset \hspace{1cm} \text{elsewhere} \\ [s] \hspace{1cm} \text{elsewhere} \end{cases}
\]

\[
[\text{gsmwii}] 
[\text{gzmeho}_r] 
[\text{nমসক্বা̃দo}] 
[\text{laho}_nse] 
[\text{supapeles}] 
[\text{sustral}] 
\]

The frequency counts and percentages of those allophones of /s/ that are listed above in free variation are given in Tables 1 and 2.
TABLE 1

/s/ BEFORE VOICED CONSONANT

<table>
<thead>
<tr>
<th></th>
<th>SLOW</th>
<th>MED.</th>
<th>FAST</th>
</tr>
</thead>
<tbody>
<tr>
<td>[s]</td>
<td>4</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>[z]</td>
<td>9</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>SLOW</th>
<th>MED.</th>
<th>FAST</th>
</tr>
</thead>
<tbody>
<tr>
<td>[s]</td>
<td>44%</td>
<td>66%</td>
<td>0%</td>
</tr>
<tr>
<td>[z]</td>
<td>56%</td>
<td>33%</td>
<td>100%</td>
</tr>
</tbody>
</table>

The occurrences in Table 1 are too few to consider their percentages valid, whereas in Table 2 the number is large enough to indicate a trend towards aspiration as speed increases. The number of zero allophones in Table 2, although small, will not be overlooked, because the next step will be the comparison of idiolects.

TABLE 2

/s/ IN WORD FINAL (NOT UTT. FINAL) POSITION

<table>
<thead>
<tr>
<th></th>
<th>SLOW</th>
<th>MED.</th>
<th>FAST</th>
</tr>
</thead>
<tbody>
<tr>
<td>[s]</td>
<td>66</td>
<td>70</td>
<td>18</td>
</tr>
<tr>
<td>[h]</td>
<td>0</td>
<td>20</td>
<td>16</td>
</tr>
<tr>
<td>ø</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>SLOW</th>
<th>MED.</th>
<th>FAST</th>
</tr>
</thead>
<tbody>
<tr>
<td>[s]</td>
<td>100%</td>
<td>76%</td>
<td>51%</td>
</tr>
<tr>
<td>[h]</td>
<td>0%</td>
<td>22%</td>
<td>46%</td>
</tr>
<tr>
<td>ø</td>
<td>0%</td>
<td>2%</td>
<td>3%</td>
</tr>
</tbody>
</table>

0 0 2

66 92 35

100% 100% 100%
Similar treatment is being given the other allophones in free variation, such as the fricatives [b], [d], [g], and [y] in certain positions and the [r].

In this preliminary report I have shown that rate of speech is an important variable in the delineation of levels in Tucson Spanish. It is to be hoped that more comprehensive documentation will soon be available on levels of speech in Southwest Spanish.
BIBLIOGRAPHY


