CERTAIN PHONETIC TENDENCIES PERCEIVED
IN THE IDIOLECTS OF SELECTED NATIVE TEXANS

TELETÉ ZORAYDA LAWRENCE *

The study of distinctive phonetic characteristics in the speech of Texas has been,
and continues to be, a subject of investigation. A primary study analyzed the
responses of 20 Texas-born and educated university student-informants (Lawrence,
1963). Identical material, 160 sentences exemplifying the vowel forms of American
English, was used to determine the phonic forms and features inherent within the
various idiolects at the time of interview. Subsequent observation and analyses
substantiate and support the initial investigation.

Scholars have observed that in English the vowels provide the "main vehicle for
dialectal differences" (Fry, 1964; Kurath and McDavid, Jr., 1961). The speech of
Texas, a deservedly unique dialect of American English geographically situated in
a transition area, is accordant with this observation. Numerous phonetic changes
are encountered on vocalic forms and certain phonetic tendencies are operant
(Malmberg, 1963).

The front vowels [r, e, æ] demonstrate instability within certain phonic contexts.
Here a tendency is evidenced toward an interchange of these particular forms with,
however, no apparent confusion in word meaning. The most persistent phonic inter-
change is raising [e] > [i] before nasals /n, m/ and consonantal /s, t, d, k/. Conver-
sely, [e] may be lowered to [æ] within similar sound contexts. Less regularly [i]
may be lowered to [e], usually preceding /n, m/. The most unique variation is the
lowering of [i] > [œ] before the velar-nasal [3]. This change does not appear to be
a phonetic accident. It was noted in 45% of the cases in the primary study and con-
tinues to occur with regularity in subsequent analyses. Due to the inconsistency of
sound shifts, frequently unpredictable even within one idiolect, the chief phonetic
characteristic is the interchange itself.

The tendency toward raising and tensing certain vocalic forms is routinely perci-
* Fort Worth, Texas, Texas Christian University.
1 Primary study supported by Faculty Research Grant, Texas Christian University, Fort
Worth, Texas, 1961—1963. Subsequent observations and analyses conducted at the same insti-
tution.
2 Vocalic forms [i, e, æ, u, o, a] in Grant Fairbanks, Voice and Articulation
ved. This is more apparent on monophthongal \([i, e, a]\), the first element of diphthongal \([aɪ, aʊ, a]\) and the last element of complex \([j, u]\). A multiplicity of phone types are under each particularized symbolic form as exemplified:

\[
\begin{align*}
[i] & \rightarrow [i', i'', i''', i''''], [i] \mid [e', e'', e''', e''''], [e] \\
[a] & \rightarrow [a', a'', a''', a''''], [a] \\
[ar] & \rightarrow [ar', ar'', ar''', ar''''], [ar] \\
[aɪ] & \rightarrow [aɪ', aɪ'', aɪ''', aɪ''''], [aɪ] \\
[jʊ] & \rightarrow [jʊ', jʊ'', jʊ''', jʊ''''], [jʊ]
\end{align*}
\]

The acoustic factor of half-long to long prolongation is noted. However, the variable of noticeable nasality (nasalization) — "at least qualities which are interpreted as being nasal"— is the most characteristic accompanying feature of this specific tendency (for quote, Van den Berg, 1962). The nasalized acoustic impression is undoubtedly due to the increased localized muscular tension evidenced physiologically in production and not of necessity the acoustic result solely of an insufficiency closure of the velopharyngeal sphincter. To illustrate: in the \([i, e]\) variants, the blade of the tongue is tensed and the oral resonating cavity is constricted; in the \([j, u]\) variants, hypertensive palatalization occurs; in the \([a, ar]\) variant forms, the dorsum of the tongue is unduly raised, tensed and usually retacted with an accompanying factor of hypertensive musculature in the velar, faucal and pharyngeal areas. All of these factors contribute adversely to the realization of the optimum resonance potential. This suprahyoid hypertension has a pervasive tensing effect upon the subhyoid musculature and, it is hypothesized, upon the internal as well as the external laryngeal musculature; thus, it becomes a prime etiological element in the perceived "nasality" (Greene, 1964). With this hypertensive syndrome operant, the complex overtone spectrum has been acoustically altered by certain formant shifts on these particular phonemes (Luchsinger and Arnold, 1965). The term "phonemic nasality (nasalization)" has been suggested to describe this accompanying feature of functional etiology perceived on certain raised and tensed vocalic forms (Lawrence, 1967).

Conversely, a tendency toward backing and/or lowering is noted on vocalic forms \([o, a, a]\), especially before \([j, f]\) in the centering diphthongal combinations \([or, ar, ar]\) \(\rightarrow [o', o'', o''', o''''], [o] \mid [a', a'', a''', a''''], [a] \mid [ar', ar'', ar''', ar''''], [ar] \mid [o', o'', o''', o''''], [o] \mid [a', a'', a''', a''''], [a] \mid [ar', ar'', ar''', ar''''], [ar]

The relationship to the acoustic variable of duration is apparent. However, due to the changes in pitch and timbre perceived during the emission of these complex forms, the effect of this tendency upon the overall rhythm and melody pattern is of even greater import.

Again, conversely, a tendency toward the monophthongization of a more complex form is demonstrated on phonemic \([ar, a]\) as the initial element is retained with half-long to long prolongation and the second element is omitted. The lax \([ar]\) form is rarely perceived; rather, \([ar] \rightarrow [a', a]; a''; a'; a'''] with additional accompaning features. The phonetic form \([pr]\) \(\rightarrow [p', r', r''', r''''], [pr] \mid [s', r', r''', r''''], [s] \mid [a', a]; a''; a'; a'''] proceeding \([s, r, e]\) with backing on the first prolonged element frequently perceived.

The speech of Texas is an area for research which warrants investigation in greater depth and scope. Certain acoustical and physiological findings already apparent have fat-reaching implications for clinical phoniatric procedures.

REFERENCES


DISCUSSION

Annan:

The allophonic variations within vowels in given contexts will, I consider, be similar and will not basically affect the system, e.g. [I + η] > [æ]; [æ + η] > [ā-r].

McDavid:

It would be desirable to know the homes of the selected informants and the distribution of these phonetic features according to regions of Texas. Even of the conclusion is reached that these features occur in all parts of Texas, we should first have the data by informants and communities before we generalize.

MacCarthy:

You stated, regarding the tendency to nasalise vowels, that often the soft palate was not lowered. Were the contexts of the vowels in question pre-nasal consonant (in which case presumably the soft palate would have been lowered), and if not, what is your evidence for your statement?

Lawrence:

Ad Annan: The allophonic variations within vowels in given contexts will be similar and therefore will not basically affect the system; thus, your deduction could be expected to be valid. However, it must be pointed out that the tendency toward raising is routinely associated with the acoustic impression of nasalization and not the lowering signal as indicated in your example.

Ad MacCarthy: The acoustic impression “interpreted as being nasal” (quote from Van den Berg) is routinely perceived on vocalic forms not in pre-nasal position; thus, the familiar phenomenon of assimilative nasality would not be suspect as the causative factor. My evidence for the described hypertensive syndrome being the primary etiological factor involved in this specific tendency, that it is not of necessity the acoustic result solely of an insufficient closure of the velopharyngeal sphincter, is derived primarily from practical clinical experience. However, conclusions advanced by Van den Berg and Greene (see above References) are highly supportive.

Ad McDavid Jr.: The data you mention exists in the body of the primary study relative to the 20 student-informants comprising that particular study. The same described phonetic tendencies continue to be demonstrated by subsequent student-informants born and educated in numerous additional areas of Texas. The usage-patterns are on a highly individualized basis, not all informants employing all tendencies. In addition, specific tendencies do not appear to be confined to specific regions. These observations are admittedly but a beginning and serve as an indication of the magnitude of the task ahead before definitive conclusions can finally be drawn for this vast geographical area.