It is now over twenty-five years since Rulon Wells and Kenneth L. Pike published on the pitch and intonation of American English. These authors implied that every adult used all intonation (or pitch) patterns in the situations they described, and publications since that time, which are available to me, do not state otherwise.

Recently, however, while summarizing English phonology for a group of English teachers from the Soviet Union, and providing patterns for them to imitate, I often found myself dissatisfied with the pronunciation of several of them (some of the men, especially) in spite of the fact that they were apparently mimicking my pronunciation correctly. This experience led me to an investigation of the differences in the use of specific intonation patterns in the speech of men and women in the midwestern part of the United States.

Pike, in his 1945 volume, presented a comprehensive listing and discussion of intonation patterns, including their meanings and variations. In a very short section on dialect differences, he tentatively concluded that very little, if any difference is found in the intonation patterns of American dialects. He minutely discussed the circumstances in which the different patterns were used, but said very little concerning which speakers used the different patterns.

My preliminary studies indicate, however, some very definite preferences in the general usage and avoidance of some of these patterns by men versus women. Certain patterns which both sexes use in common need only be briefly mentioned—for example, the down-glides which end at the lowest level of pitch in utterance-final and non-final positions as in:

(1) I want to / &lt;h/r/,
[don't I] think it's his.
He's gone.

the upstep patterns (from low to low-mid) or the downstep ones (from high-mid to low-mid) which indicate incompleteness in utterance-medial positions, as in:

(2) When I / went down town, I saw a / &lt;h/here.
When I / went down [town], I saw at / &lt;h/here.

and the upstep in various kinds of interrogative sentences, as in:

(3) Are you /'going? Is it / there? Are you /'comming, off? He's / comming?

Other patterns which were catalogued by Pike, however, do not seem to be used equally by men and women. Certain ones seem to be completely lacking from men's speech, while others are differently preferred by men and women. For example, men tend to use the incomplete 'deliberative' (here and below, Pike's labels are used) pattern, i.e., the small upstep from low, as in:

(4) 'Yes, yes, I / know.

much more often than women, who, contrary to men, prefer the 'more polite' incomplete longer upstep as in:

(5) 'Yes, yes, I / know.

The 'unexpectedness' and 'surprise' patterns of high-low down-glides as:

(6) [Oh, that's 'awful!]

appear to be absent from men's speech (or at least are much more often used by women) as are the 'request confirmation' patterns such as:

(7) You / he / has / not?

Although the incomplete and non-final pattern-medial upstep of (2) seems to be used by both sexes, the varying 'implication' non-final patterns as in:

(8) I know he has / not.

and the hesitation pattern:

(9) Well, I /'st idied...

...tend to be found solely in women's speech. The 'polite, cheerful' pattern:

(10) Are you /'comming?

is used only by women, I believe. The 'reverse-glide, incomplete deliberation' pattern is used by both men and women when spread over several words or syllables as in:

(11) /'What are you having?
but men seem not to use this pattern on one syllable, as in:

(12) Oh 's.

The 'polite and cheerful, incomplete sequence and surprise' forms of:

(13) Won't you 'come' in?

are used only by women, in very restricted circumstances (such as when speaking to small children, etc). Women also seem to be the only users of the 'incomplete and unexpected' pattern as in:

(14) What's my 'name'?

Some summarization of the above may now be possible. Men consistently avoid certain intonation levels or patterns: they very rarely, if ever, use the highest level of pitch that women use. That is, it appears probable that most men have only three contrastive levels of intonation, while many women, at least, have four. Men avoid final patterns which do not terminate at the lowest level of pitch, and use a final, short upstep only for special effects (for example, pattern [2] for deliberativeness), for incomplete sequence, and for certain interrogative sentences. Although they also use short down-glide also, occasionally, they seem in general to avoid the one-syllable, long pitch glides, and completely avoid the reverse glides on one syllable. (Of course it is possible for any speaker to use any pattern if he wishes, I have been referring here to general communication situations.)

Pike does make some statements which indicate that he may have been aware of some of the materials I have presented. When discussing the sentence-final hesitation pattern (9), for example, he states that occasionally this pattern "especially when used by female speakers, implies ENDEARMENT".1 From this brief study it seems clear that there are indeed specific differences in male and female intonation patterns (although some of the specifics herein mentioned may vary to some extent from dialect to dialect and, to a lesser degree, from speaker to speaker within one dialect). I now believe that contrasting male-female speech may be present in many more languages than those for which it has already been reported, and, indeed, may be present in all languages. (Dr. Robin Lakoff recently informed me that she has been studying vocabulary differences in men's and women's speech in American English and it appears that our studies complement and confirm one another.)

1 Another of Pike's many far-sighted intuitive comments is the following: "The meaning of incompleteness added by the rising contour can be interpreted to imply (1) the necessity for information from the hearer, or (2) doubt on the part of the speaker". It seems to me that this statement could be directly incorporated into the current discussion on presuppositions.

The pedagogical importance for teaching English as a foreign language is obvious. Many well-meaning teachers must have been teaching their students to speak culturally-unacceptable intonation patterns, and it is hoped that some of the findings presented here will reach the authors of English-language textbooks, so that they may be included.

REFERENCES


DISCUSSION

JÜRGENSEN (Copenhagen)

Had the lecturer noticed at what age these differences may be supposed to start?

BREND

No, I am sorry, I have not. All of my observations have been of adult speakers— I have not listened carefully to speakers below, say, the age of twenty or more. Such a study, of course, would be of interest.

ELERY (Umeå)

Have you tried to separate the biological and social factors involved?

BREND

Regarding biological versus sociological differences: I have endeavored to distinguish between these. When I mentioned that men did not have the highest level of pitch which many women have, I meant that they do not have this CONTRASTIVE level (rather than referring to an absolute pitch level).

SMITH, S. (Hamburg)

There is one interesting feature about women's speech in many countries. Unlike men they have two ranges of intonation: a higher one with a shift of register and a lower one, when as men mostly remain within one register using smaller variations. This may have some importance for your findings.
BRENDB
Yes, thank you very much... your remarks confirm my observations.

WELLS (London)
Congratulations on an excellent paper. Two questions:
1. Have you collected any systematic body of data to support your findings?
2. What about the speech of certain male homosexuals who are considered to speak in a ‘feminine’ way? What are the phonetic correlates of this ‘feminineness’? Do you think intonation might be among the most important?

BRENDB
Replying to your second question first, that would be a useful area of study and others have also suggested to me that I observe the more militant ‘women’s-lib’ members to see if they have eliminated female patterns from their speech.

WODE (Kiel)
Do the intonation patterns characterized as ‘female’ carry the same implication when spoken by males as they do when uttered by females?

BRENDB
My reaction (to men using these patterns) is that such utterances are quite odd. Pike’s record was made for practice in mimicking intonation patterns and, personally, I find some of the male speech on it rather affected.