THE SYMBOLIC SIGNIFICANCE OF PHARYNGEAL CONFIGURATION IN JAVANESE SPEECH: SOME PRELIMINARY NOTES

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Pharyngeal configuration is one feature distinguishing the light and heavy stops in Javanese, but this distinction is relative. Many speakers, while maintaining the light/heavy distinction, often, if not always, use a wider pharyngeal configuration than the neutral one throughout whole stretches of speech. Other speakers nearly always use a relatively constricted pharynx. These non-neutral pharyngeal configurations may symbolize body size or social status, or convey information about the speaker's mood, personality, or self-image.

0. STATEMENT OF THE PROBLEM

In traditional structuralist phonology it was generally thought that monolingual native speakers of a language were only capable of distinguishing articulatory variations that constituted phonemically significant units within their language. That this is not the case is clearly implied by studies conducted by Labov. In Labov (1963) four degrees of centralization of /aʊ/ were found to be readily distinguishable in the speech of residents of Martha's Vineyard, ranging from a non-centralized [æU] to a highly centralized [əU]. Centralization was found to be associated with a feeling of "native status" as a Vineyarder. In New York City (Labov 1966), it was found that all speakers, whether or not they themselves ever pronounced post-vocalic /r/, regarded its presence as more prestigious than its absence. Such correlations between phonetic variations (whether the presence or absence of a phoneme or variations in the realization of a particular phoneme or sequence of phonemes) and social attitudes would not be possible if the speakers could not recognize differences they were making and/or hearing. Nevertheless, studies on sound symbolism have to date dealt almost exclusively with the symbolic significance of phonemes.1

In this paper I would like to discuss the social implications and symbolic significance of a particular kind of non-phonemic articulatory variation found in the speech of the Javanese. This is the degree of pharyngeal constriction or expansion found overall in the speech of an individual, which may perhaps vary from one occasion to another.

1. TONGUE-ROOT ARTICULATION

1.1 The Nature of Tongue-Root Articulation

The problem under consideration here involves a set of phenomena often called "tongue-root articulation". Let us summarize the main features of this set of related phenomena before specifically discussing the Javanese problem. Gregerson (1978) points out that scholars working with Mon-Khmer languages have long recognized the following correlations between certain phonetic features: breathy consonants, relatively close vowels, and low pitch tend to cooccur on the one hand, while normal (non-
breathy) consonants, relatively open vowels, and high pitch tend to cooccur on the other hand. In addition, in Mnong, the first set of features correlates with initial voiced consonants, while the second set correlates with initial voiceless consonants. Gregerson explains these correlations as being the result of tongue root position. An advanced tongue root will affect the position of the tongue blade and produce relatively close vowels; at the same time it will expand the pharyngeal cavity, creating the "breathy" quality. A retracted tongue root will also affect the position of the tongue blade, producing relatively open vowels and at the same time result in a constricted pharyngeal cavity, producing a "clear" or "non-breathy" quality. The position of the tongue root also affects the larynx which explains the correlation of other advanced tongue root features with low pitch and a tendency toward initial voiced consonants, and the correlation of other retracted tongue root features with high pitch and a tendency toward initial voiceless consonants. Since the tongue mass is relatively heavy and more difficult to move than the blade, its position tends to remain constant at least through a syllable, and in many languages throughout a word, so that both consonants and vowels in a given syllable (or word) exhibit either advanced tongue root or retracted tongue root features.

1.2 The Place of Tongue-Root Articulation in Javanese Phonology

With regard to Javanese, many observers have noticed a "breathy" quality associated with Javanese "voiced" or "heavy" stops, which is absent in the "voiceless" or "light" stops. Early observers described it as aspiration, but Catford (1961) explained it as vertical displacement of the larynx and noted that not only the consonant but also the following vowel was affected by this breathy quality. Other observers have noted that relatively higher (close) allophones of the low vowels (/ɛ/ and /o/) follow Javanese voiced or heavy stops and that relatively lower (open) allophones follow Javanese voiceless or light stops.

Fagan (1982), as the result of a detailed acoustic analysis, concludes that consonantal features play a much less important role in the light/heavy distinction than do features of the following vowel. Larynx lowering, reduction of fundamental frequency, and breathy voice phonation type are the primary distinguishing features of the "heavy" consonants.

2. ALLOWABLE VARIATION IN JAVANESE PRONUNCIATION

Although breathy voice and advanced tongue root are distinctive features of the heavy stops while absence of breathy voice and retracted tongue root are distinctive features of the light stops in Javanese, it is nevertheless possible to vary the degree of breathiness of heavy stops and/or adjust the exact range for the advanced/retracted tongue root distinction, forward or backward and still maintain phonemic distinctions required by the language.

The presence of breathiness has a positive value in Javanese. In the speech of a good dhalang (wayang or "shadow puppet" puppeteer) it should be somewhat exaggerated or at least clearly evident. The significance of overall tongue root position and consequently pharyngeal configuration is much more complex. Some speakers seem almost always to maintain either a relatively advanced or a relatively retracted tongue root position. Other phonetic features tend to accompany each position. Advanced tongue root position is accompanied by relatively low pitch as would be expected, but this position also tends to be accompanied by labialized voiced stops with exaggerated breathiness, and some degree of lip rounding, even of syllables containing front and central vowels, often with exaggerated protrusion of the lips. Retracted tongue root position is accompanied by relatively high pitch as would be expected also, but it also tends to be accom-
panied by spread lips and somewhat nasalized vowels.

In fact, it seems that three overall pharyngeal configurations which can be maintained throughout a stretch of speech should be distinguished. In addition to an unusually expanded or unusually constricted pharynx, a neutral middle configuration is also possible.

3. SOUND SYMBOLISM IN JAVANESE

3.1 General Comments

Certain types of phonemic variation in Javanese to indicate a particular meaning have been noted before. For example, the use of labialization to indicate an extreme degree in Javanese adjectives is generally recognized. Thus panas means 'hot', p'anas means 'very hot', and p'anas b'anganet means 'very, very hot'. It has not been explicitly noted, however, that labialization or lip rounding tends to be maintained throughout the word or phrase, that it is accompanied by protruded lips, and that breathiness of voiced stops is exaggerated. Also, of course, these words and phrases are uttered with advanced tongue root position.

It has also been noted repeatedly that raising front vowels to the highest position /i/, which is not generally found elsewhere in closed syllables, except in nicknames, has a similar meaning of extreme degree. Thus cilık means 'small', cilik means 'very small'; élék means 'ugly', elik means 'very ugly'. We would expect the high vowels to also be produced with advanced tongue root position, but, in fact, they are produced with retracted tongue roof, raised pitch, and often exaggerated spread lips. In explanation, it should be noted that the cooccurrence of phonetic features which Gregerson lists is merely a tendency. It is not physically impossible to combine features from the two lists. To produce a high vowel with retracted tongue root simply requires tensing and stretching the tongue.

Gregerson's discussion of sound symbolism in Rengao is also significant. In many languages high vowels symbolize small size while low vowels symbolize large size. In Rengao this is also true, but in addition a constricted pharyngeal cavity also symbolizes small size, a widened pharyngeal cavity large size, so that one can symbolize as many as nine degrees of size in Rengao by a combination of tongue position and configuration of the pharyngeal cavity.

Thus, if both high vowels and constricted pharynx have the same symbolic implications, it is not surprising that these features are combined in Javanese. The meaning, however, does not necessarily have to do with size. It may do so, as in cilık, cilik, and the extreme degree of gedhé 'large' in East Java is indicated with labialization and expanded pharynx gedhé. An expanded pharynx, then, may symbolize large size. However, in Central Java the extreme degree of gedhé is gedhi with a raised vowel, and there is a possibility in some geographic regions of combining both features to indicate an even greater degree of extremity: gedh-i, in which the pharyngeal configuration changes in the middle of the word. Thus the size of the pharyngeal cavity may be symbolic of size in Javanese, but either expanded or constricted pharynx can also symbolize extreme degree of any quality.

What, then, is the point of the symbolism if both large and small symbolize the same thing? An answer to this question is suggested by Javanese popular philosophy. Rather than seeing the world in terms of a dichotomy between black and white, evil and good, the Javanese tend to view the middle position as the norm with extremes in either direction representing aberrations from the norm. This does not mean, however, that only the middle position is good or desirable. Another tenet of Javanese philosophy is that one should be natural. That is, one should be whatever one is. Thus if one naturally possesses characteristics of an extreme position, one should be that way and not attempt to change.
3.2 Voices of Wayang Characters as Exaggerated Examples

How this philosophy correlates with voice symbolism is clearer if we observe the voice types characteristic of various wayang (shadow puppet) characters. Before we proceed, however, another variable in Javanese voice production must be described, and that is intonation. An erratic, jagged intonation pattern, characteristic of an emotional delivery and common when the ngoko or lower speech level is used, contrasts with a smooth monotonal contour, characteristic of a calm, unemotional delivery and common when krama, the high or polite level is used. In wayang we find that the speech of most giants is characterized by expanded pharyngeal cavity and jagged intonation contours. The expanded pharynx may be simultaneously symbolic of large size and departure from the norm in terms of behavior. The jagged intonation contour symbolizes a rude and unrefined personality type. Servants and other low class characters often use a constricted pharynx and jagged intonation. Here the reduced size of the pharyngeal cavity may symbolize smallness in regard to social position. The jagged intonation correlates with an unrefined manner. Upper class characters on the right or winning side tend to use monotonal intonation and neutral pharyngeal configuration. Female noble and royal characters often use a constricted pharynx. This may perhaps symbolize smaller size or lower status or it may simply stem from a tradition of male dhalangs attempting to produce the high-pitched voice of a woman. It is, of course, easier to raise the pitch if the pharyngeal cavity is constricted.

These correlations are tendencies, however, not rules. There are particular characters who do not conform to the expected voice patterns. Cakil, for example, is a giant, but he speaks with constricted rather than expanded pharynx, perhaps because of his small size, for a giant. Sembodro and Drupadi are noble women, but they do not use a constricted pharynx, suggesting that they have calm and quiet, easy-going characters, and that they are not coquetish. Bima is a noble character, but he uses an expanded pharynx, perhaps to symbolize size. Krishna, a noble character, and Narada, a god, both use constricted pharynx and jagged intonation contours. Aberrations from the norm are noticeable in themselves. They may express personality types. Since it is also a tenet of Javanese philosophy that one should be what one is, to be as one naturally is, even if that is aberrant from the norm, is acceptable.

3.3 Significance of Variation in Daily Speech

In ordinary life one also finds pharyngeal configuration used by the Javanese to express character, role and attitude. Pharyngeal expansion combined with rounded and protruding lips may be adopted on occasion to express anger, irritation, or other negative emotions, or these features may also be adopted, particularly by children, to express enthusiasm when telling a story which is viewed as extreme in some way. Occasionally individuals, usually though not necessarily men, seem almost always to speak with an expanded pharynx. This may reflect personality or express the individual's self-image. A few of these individuals are bad-tempered people who react negatively to almost everything, but many people who usually speak with an expanded pharynx have a very positive outlook. They are generally very large in size and react to everything with great enthusiasm. It is even more common for individuals to speak nearly all of the time with pharyngeal constriction. However, this phenomenon is more common in some groups than in others. I have made the following observations:

1. Women use a constricted pharynx more often than men.
2. Village women use a constricted pharynx more often than city women.
3. Lower class uneducated women use a constricted pharynx more often than higher class educated women.
4. High class women with a traditional orientation may use a constricted pharynx, but those with modern or academic
orientation rarely do.
5. In modern theater, pharyngeal constriction by men is used for comic effect and to portray low class characters.
6. In real life men who view themselves as comedians tend to use pharyngeal constriction.

That women use a constricted pharynx more than men and that lower class women do so more than higher class women may correlate with the small size symbolism of a constricted pharynx. There are also instances of adult women who use a constricted pharynx to appear childlike because they regard this as cute and appealing.

3.4 Ongoing Changes

Attitudes toward the significance of pharyngeal configuration may be in a state of flux. That this may be so is suggested by the fact that the desired quality for a sinden (female vocalist) appears to be moving from one produced by extreme pharyngeal constriction to one involving less pharyngeal constriction.7

Another indication that attitudes are changing is that in wayang, many noble female characters speak with constricted pharynx, but this style of speaking is rarely found now among urban, educated women under the age of 40, and probably not at all among women who are modern (non-traditional) in their orientation.

4. CONCLUSION

The conclusions presented here are preliminary in nature. They are based on extensive observation but no attempt has been made to record or measure phonetic features or to survey attitudes in a statistically valid manner. A more detailed study is perhaps in order. Nevertheless one can draw the following preliminary conclusion: though the breathy quality associated with Javanese voiced stops and its absence in association with voiceless stops are a distinctive feature in the phonology of the language, the pharyngeal expansion or constriction which accompanies the presence or absence respectively of breathiness can be used in combination with related phonetic features throughout a phrase, sentence or discourse to convey a complex set of sociolinguistic meanings which are only partially related to size symbolism.

NOTES

1. Jakobson and Waugh (1979) stress the importance of dealing with distinctive features rather than phonemes. Nevertheless, they appear to mean: features which are distinctive in differentiating phonemes.
2. According to Ladefoged (1975) breathy voice or murmur occurs when the vocal cords are only slightly apart. They can still vibrate but a great deal of air passes through the glottis.
3. This observation agrees with Gregerson's statements about the tendency of certain features to co-occur with one or the other tongue root position.
4. Indonesian, though a distinct language, is increasingly becoming one code regularly used by the Javanese for communication in certain situations (see Wolff and S. Poedjosoodarmo, 1982). In Indonesian, when
spoken by non-Javanese, the voiced stops do not have this quality. When Javanese speakers speak Indonesian, the tendency to produce breathy voiced stops carries over in varying degrees. Generally older, rural, less-educated and/or more conservative speakers retain a high degree of breathiness in their voiced stops when speaking Indonesian. More urban and educated speakers tend to retain a moderate degree of breathiness in their voiced stops when speaking Indonesian. Lately it has been noticed that some young, educated Javanese, particularly those whose orientation is modern and national rather than traditional and local, exhibit a total absence of breathiness in their voiced stops when speaking Indonesian. While the distinction between a moderate and a high degree of breathiness in the voiced stops of Javanese speaking Indonesian, identifying urban and educated individuals versus rural and uneducated individuals respectively, is a fairly well-established pattern, the distinction between the presence of breathiness to indicate a traditional and local orientation versus the absence of breathiness to indicate a modern and national orientation is a fairly recent phenomenon.

5. Anderson (1965) points out that the great variety in personality found in wayang characters make the Javanese more tolerant of variation found in real life.

6. A more complete description of the use of voice to characterize wayang figures is given in S. Poedjosoeoedarmo et al. (1986).

7. A similar tendency has been noted in singing styles in other Asian languages, which in general tend to involve a more constricted pharynx than do European singing styles (A. Johansson, personal communication). The observation about Javanese singing styles is based on impressionistic observation. A valid study would have to record a variety of singing styles and present them to listeners of varying age, occupation, and social class for evaluation.

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