Having a good jaw:
voice-setting phonology

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Developments in the teaching of pronunciation do not seem to have kept pace either with developments in the teaching of language generally, nor with recent insights into speech production. The still very segmental approach to pronunciation teaching, as evidenced in current materials and teaching aids, is at odds both with the paradigm of holistic language use, and with suprasegmental phonetics, especially research into voice quality and settings. This article attempts to redress the balance of proposing activity types designed to sensitize learners to the importance of 'voice-setting phonology'.

The holistic paradigm

One of the implications of the (relatively) recent concern for language use as opposed to language usage has been the requirement 'to go beyond the sentence and to look at longer stretches of language' (Widdowson, 1978: 22). There has been a related movement in the study of lexis, from a concern, for example, for individual words to a focus on holophrases; and in phonology, from the segmental to the suprasegmental features of speech. A concern, in other words, less for the individual entities of language than for, in Eliot's words, 'the complete consort dancing together'.

The shift from an atomistic to a holistic view of language has, of course, been reflected in syllabus and materials design, in testing, and in classroom practice. The conventional, discrete-item approach, whereby

> a person begins his task of learning a second language from point zero and, through the steady accumulation of the mastered entities of the target language (e.g. sounds, morphemes, vocabulary, grammatical constructions, discourse units, etc.) eventually masses them in quantities sufficient to constitute a particular level of proficiency (Rutherford, 1987: 4)

has been challenged from many different perspectives, including second language acquisition theory. The consensus now is that language is acquired, comprehended, and produced largely by means of 'top-down' rather than 'bottom-up' processes.

Segmental vs suprasegmental phonology teaching

Strangely, however, this top-down, holistic paradigm seems not to have embraced the teaching of pronunciation. There seems to have been no systematic attempt to promote a 'top-down' methodology for phonology teaching: judging, that is, from the evidence of current materials and observed classroom practice. The two Headway Pronunciation courses

(Bowler and Cunningham, 1990, 1991), for example, while addressing areas such as sentence stress, rhythm, and intonation in a number of useful exercise types, are nevertheless predominantly 'segmental' in their approach. Even more so, the aptly named *Sounds English* (O'Connor and Fletcher, 1989), focuses almost exclusively on phoneme contrasts.

There seems to be a similar obsession, especially amongst native-speaker teachers, with segmental phonology as manifested in the so-called 'phonemic chart'—a diagrammatic arrangement of RP phonemes designed by Adrian Underhill—that has been uncritically adopted by many teachers as both the means and end of all classroom phonology work. 'Using the chart' or 'teaching the chart' now regularly appears as a syllabus item on initial teacher training courses. Practising teachers express guilt at not 'knowing the chart'. In short, 'the chart' has been invested with almost totemic significance, in much the same way that cuisenaire rods and 'Fidel charts' (from which the phonemic chart is no doubt derived) have become the ritual objects of Silent Way practitioners. 'Using the chart' is equated with good classroom practice, and 'miraculous' improvements in pronunciation are attested.

It seems, in fact, that we have come not much further, in the teaching of pronunciation, than the point first reached over a hundred years ago when the International Phonetics Association drafted its founding principles—specifically, that

> the teacher's first aim should be to thoroughly familiarise his pupils with the sounds of the foreign language. Towards this end he should use a phonetic transcription which will be employed exclusively in the early stages of the course without reference to conventional spelling. (IPA articles 1886, quoted in Stern, 1983: 89)

(Such a 'bottom-up' approach is analogous to the now widely criticized 'phonics' approach to the teaching of reading, and its core principle that the ability to read results from the ability to decode individual letters; see, for example, Smith, 1978.)

Nevertheless, important shifts in thinking have taken place since then: over twenty years ago Wilkins, for example, was warning that 'too many teachers have been trained to believe that pronunciation involves little more than a list of sounds . . . The practice of sounds in isolation is of limited value' (Wilkins, 1972, 1978: 59). It is my contention that it is time that this shift in thinking was realized in classroom practice.

Voice-setting phonology

My particular interest is the area sometimes termed voice-setting features (Pennington and Richards, 1986), or voice quality settings (Esling and Wong, 1983), or the bases of articulation (O'Connor, 1973), among others, and what I refer to here as voice-setting phonology. That is, the description of those features of accent that result from the characteristic disposition and use of the articulatory organs by speakers of a particular language, and which affects the production of all the individual sounds common to that language. Such features have been variously identified

and described, notably by Laver (1980), and might be summarized as the 'general differences in tension, in tongue shape, in pressure of the articulators, in lip and cheek and jaw posture and movement, which run through the whole articulatory process' (O'Connor, 1973: 289). These 'higher-level' settings account for the characteristic 'accent' of different language speakers, such as, for example, the following features:

> the greater part of English articulation takes place behind (loosely) closed jaws. It is this feature of English, no doubt, which helps to give foreigners the impression that we do not move or open our mouths when we speak. (Honikman, 1964, quoted in Laver, 1980)

or

> in English the lips and jaw move little, in French they move much more, with vigorous lip-rounding and spreading: the cheeks are relaxed in English but tensed in French: the tongue-tip is tenser in English and more used than in French, where the blade is dominant, and so on. (O'Connor, ibid.)

or

> in the United States, a broad model of voice quality setting might include the following features:
>
> 1. spread lips
> 2. open jaw
> 3. palatalized tongue body position
> 4. retroflex articulation
> 5. nasal voice
> 6. lowered larynx
> 7. creaky voice
>
> (Esling and Wong, 1983: 91)

A 'top-down' methodology

Consistent with the current holistic, top-down paradigm, the implications of such descriptions are, of course, that by teaching the 'whole', the bits might take care of themselves. (Or might, at least, be more easily 'taught'.) In other words, until the learner is able to approximate the voice-setting features of the target language, work on individual phonemes is largely whistling in the dark. As Esling and Wong suggest,

> It may be that a segmental approach is not the most efficient way of introducing pronunciation in a second language, since it focuses on the specific rather than first directing attention to the general characteristics of accent. (Esling and Wong, 1983: 90)

In fact, O' Connor was already making claims for a top-down methodology as long ago as 1973:

> The basis of articulation has already been shown to be important in foreign-language teaching: better results are achieved when the learner gets the basis of articulation right rather than trying for the foreign

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sound sequences from the basis of his own language. (O'Connor, 1973: 289)

But how would such a methodology work in practice?

A possible teaching sequence Set out below are some tentative suggestions for exercise types that might constitute the basis for such a methodology. The aim of the teaching sequence is to sensitize (Spanish-speaking) students to the importance of vocal setting, and to encourage them to modify their own vocal setting in the direction of their chosen L2 model. In fact, it is a 'menu' of activities, but they are arranged in sequence. Some are considered 'more optional' than others, and are therefore marked with an asterisk. They are not intended to comprise one lesson, nor even a sequence of complete lessons, but might instead be spread over, and interspersed among, a number of lessons.

1 Record each student doing a simple task in English—e.g. describing something/someone they know well. No feedback, but save for future reference.

2 Play short taped extracts of speakers of different nationalities speaking their mother tongue, including at least one English speaker. Students identify the nationality (perhaps by selecting from a list). Compare notes and give feedback.

3 Play a similar tape of the same nationalities, this time speaking Spanish. Same task as 2.

*4 Play short extracts of different nationalities (including Spanish) each speaking English. Identify/select/discuss.

5 Contrast a Spanish speaker of English and a native speaker performing the same task in English on tape. Students listen and note any characteristics in pronunciation, perhaps selecting from a list and matching them to the speaker. For example:
   a. he/she sounds flat
   b. he/she speaks with a 'creaky' voice
   c. he/she hisses a lot
   d. he/she says some things fast and some things slow
   e. he/she speaks 'through her nose'

After group/pair discussion, the teacher leads an open discussion about salient suprasegmental features of Spanish and English accent (including features of stress and rhythm, as well as voice qualities).

*6 Play a video extract of the same speakers as in (5) performing the same task. Students identify any paralinguistic differences, including observable mouth, teeth, and tongue settings.

*7 Play a similar video extract of two or more speakers, with the sound switched off. Students identify what language each speaker is speaking—Spanish or English—on the basis of the features identified in (6).

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*8 Play a tape of different language speakers, including English, recorded from a distance or with overlaid foreground noise, so that only suprasegmental features are audible. Identify/discuss.

9 Play tapes of individual phonemes edited out of longer conversations: students identify the language. Play the sound in its context as a means of checking.

10 Have students reproduce cognates (publicity/publicidad; hippopotamus/hipopótamo, sardines/sardinas, etc., i.e. voice-setting 'minimal pairs'), exaggerating the vocal-setting features of the respective languages.

11 Students in pairs have short conversations in Spanish, but with an English accent. (The teacher could demonstrate, or simply remind students how English/American characters are played in Spanish films. Even better, have a film clip or two to show them.)

*12 Give students some short conversations with prominent vocal setting features of English—e.g. sibilant fricatives and dentals, highly aspirated plosives—for home/lab practice; or tongue twisters.

13 Supply students with tapes of different English speakers (US, Australian, RP, Scottish, etc.) to listen to at home or in the lab. Have subsequent class discussion about their preferred model, and why. (Teacher should remain non-judgemental.)

14 On the basis of their individual preferences, supply students with tapes for home or lab use for listening and imitation practice, focusing on those features outlined in (5) and (6).

15 In pairs, have students rehearse a dialogue (read aloud, initially), using the accent they have been studying and practising.

*16 Repeat (15), this time with an alternative, strongly marked, accent—e.g. upper-class English, broad southern US, etc.

*17 Record students doing a dialogue, once with a Spanish accent, and once with an English native-speaker accent.

*18 Role play, where students are given different roles for a script that remains basically the same for each role play—e.g. meeting and talking about the family. Roles might include well-known public and media figures, both Spanish and English speakers. Accents must adjust accordingly.

*19 Dubbing a movie. A very short extract taken from a movie dubbed in Spanish, to be 'restored' to its original using correct accents. Students first script the segment, then try and lip-synch it, recording on to a cassette.

20 Pairs/group-work dialogue preparation, rehearsal and performance, matching accents to roles—e.g. American tourist, Spanish student, etc. During performance, the other students try to identify the accents.

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21 Record each student performing the task in (1) and allow students to make their own evaluation of the difference.

22 Open-class feedback on the sequence of exercises so far, in which targets for future class and individual work are discussed and set.

Comment In designing the sequence above, I have drawn on both Acton (1984) and Morley (1991), who between them have proposed a number of guiding principles for the programming of pronunciation teaching, among which is the importance of the link between listening and pronunciation, including the use of sensitizing, recognition, and discrimination tasks. I have also attempted to incorporate the principle of learner choice and responsibility, whereby learners are encouraged to select their own criteria, set their own objectives, and assess their own progress. The approach is essentially a 'discovery' one, whereby the learning takes place by induction rather than through explicit descriptions or models of voice-setting features (as in the earlier examples), on the premise that such descriptions, while useful for the teacher to refer to, are not very helpful for the learner. How, for example, does one lower one's larynx and palatize one's tongue position? It should also be emphasized that these suggestions are simply suggestions: proof of their effectiveness awaits proper trial and evaluation.

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