

Teaching the basis of articulation

Piers Messum

In Speak Out! 46, Constantine Borissoff (2012) argued that we should restore the original meaning to the phrase 'basis of articulation' (BoA), and amend our use of the phrase 'articulatory setting' (AS). BoA should refer to the basic positioning of just the tongue for a given language, he suggests, while AS should be used not as a synonym for this but instead to describe the characteristic setting of all the articulators – lips, vocal folds, etc – for a given language.

Borissoff adopted Hardcastle's (1976:101) division of the muscles of the tongue into a Tongue Body system and a Tip-Blade system, with the former serving as the 'positioning agent' for the latter. He adapted some 'stick man' pictures from Lindblom (1983) to illustrate the BoA concept as it would apply in different languages.

For teaching purposes, I think it would be useful to further adapt these pictures. My (photocopiable) suggestion for this is on the next page.

At the simplest level, the pictures can be used to illustrate the basic point that the way we position ourselves makes certain tasks easier. So in the top two pictures the man is well positioned to clean the right hand pane but not the middle pane, for which he has to cross his arm awkwardly in front of his chest. The solution, in the bottom picture, is to reposition his whole body, and we can tell our learners that we make it easier to pronounce English if we reposition the 'body' of our tongues for the particular demands that this language makes.

If Honikman (1963) and others are correct, then most of our learners will be speakers of languages where the **blade** of the tongue is used to contact the alveolar ridge in the production of [t] [d] [n] and [l]-type sounds. Laver (1980:23) describes this arrangement as part of his 'neutral' or typical configuration of the supralaryngeal tract. (The tongue **tip** will then most naturally come into contact with the back of the upper front teeth which means that they are sometimes called 'dentals'.)

The pictures illustrate this if one imagines them mapping onto a right facing head, as Borissoff also did. Then for most of our learners, the top picture shows the positioning

of their tongue tip during, for example, a /t/. The right hand pane of glass is then the area behind the upper front teeth and the man's right hand is the tongue tip.

With the tongue body set for this BoA, it is unnatural to use the tip, rather than the blade, to strike the alveolar ridge for alveolar consonants in English. As in the middle picture, it involves an awkward manoeuvre. The solution is to draw the body back (for the man to move leftwards in the bottom picture) so that the "sides [of the tongue] rest along the inner surface of the upper lateral gums and teeth" as Honikman described it. She noted that in English,

[T]he lateral rims of the tongue very seldom entirely leave this part of the roof of the mouth, whereas the tip constantly ... moves up and down. Thus, one might regard the tethered part — in this case, the lateral contact — as the *anchorage*, and the untethered part as the *free* or *operative part* of the tongue-setting.

In Messum (2010) I argued that the most plausible mechanism by which English-speaking children come to adopt the English BoA is as a by-product of the distinctive style of speech breathing they develop to implement sentence stress in English. Whether this or another explanation is correct, from a teaching point of view we need an economical way of drawing our students' attention to their tongue position when we suspect it has reverted to the L1 'home', and pointing at these pictures can serve that purpose.

References

Borissoff, C. (2012). Basis of Articulation or Articulatory Setting? *Speak Out!* (Whitstable, IATEFL) 46, 9-13.

Hardcastle, W. (1976) *Physiology of speech production.* London: Academic Press

Honikman, B. (1964). Articulatory Settings. In Abercrombie, D. (Ed.) *In Honour of Daniel Jones*. London: Longman.

Laver, J. (1980). The Phonetic Description of Voice Quality. CUP.

Lindblom, B. (1983). Economy of speech gestures. In P.F. MacNeilage (ed.), The Production of Speech. New York: Springer, 217-246.

Messum, P.R. (2009). Grounding stress in expiratory activity. *Speak Out!* (Whitstable, IATEFL) 41, 12-16.

Messum, P.R. (2010). 'Understanding and teaching the English articulatory setting' *Speak Out!* (Whitstable, IATEFL) 43, 20-24.

Piers Messum is a freelance teacher from London with a PhD from the Department of Phonetics at UCL. His teaching articles can be found at www.pronsci.com and he can be contacted at p.messum@gmail.com







