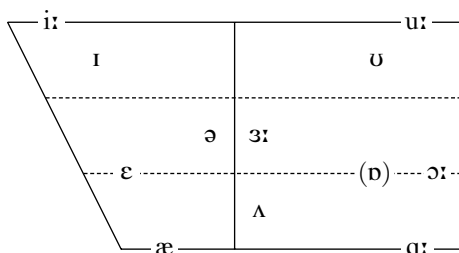


One possible solution is to abandon an articulatory approach to vowel classification altogether, and turn instead to an analysis of the speech wave itself: but acoustic phonetics is beyond the scope of this book. In any case, it is true that most speakers of particular accents or even languages will produce certain vowels in an articulatorily similar fashion. For comparative purposes, what we need is an approach which allows vowel qualities to be expressed as relative rather than absolute values.

We can achieve this comparative perspective by plotting vowels on a diagram rather than simply defining them in isolation. The diagram conventionally used for this purpose is known as the Vowel Quadrilateral, and is an idealised representation of the vowel space, roughly between palatal and velar, where vowels can be produced in the vocal tract. The left edge corresponds to the palatal area, and hence to front vowels, and the right edge to the velar area, and back vowels. The top line extends slightly further than the bottom one because there is physically more space along the roof of the mouth than along the base. Finally, the chart is conventionally divided into six sectors, allowing high, high-mid, low-mid and low vowels to be plotted, as well as front, central and back ones. There is no way of reading information on rounding directly from the vowel quadrilateral, so that vowels are typically plotted using an IPA symbol rather than a dot; it is essential to learn these IPA symbols to see which refer to rounded, and which to unrounded vowels. The SSBE and GA monophthongs discussed in Section 6.2 are plotted in (13); the monophthongs of the two accents are similar enough to include on a single chart, although the [ɒ] vowel is bracketed, since it occurs in SSBE but not in GA, where words like *lot* have low [ɑ:] instead.

(13) *SSBE and GA monophthongs*



Diphthongs are not really well suited to description in terms of the labels introduced above, since they are essentially trajectories of articulation starting at one point and moving to another; in this respect, they are parallel to affricate consonants. Saying that [ɔɪ] in *noise*, for instance,