

A COMPARATIVE STUDY OF THE VOWELS OF DIFFERENT ACCENTS OF ENGLISH

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This paper is a preliminary statement of my aims and method. The intention is to make a spectrographic analysis of recordings made by native English speakers, the speakers being from any area where English is spoken as an LI (e.g. R. P., General American, Australian, Scottish and Yorkshire). They must be educated to the level of University Entrance and be "mutually intelligible" and not be capable of classification as dialect speakers where by dialect I understand a form of language differing from the Standard in Lexis, Syntax and Pronunciation.

The material for recording is a list of English monosyllables read as citation forms and on a falling intonation. The spectrograms are made on a Kay Sonagraph and are on a scale of 0—4000 c.p.s. with a Broad Band resolution. Sections are taken for each vowel at an arbitrarily selected mid-point in terms of duration and values are read off at the central point of frequency of formant pattern. The resultant

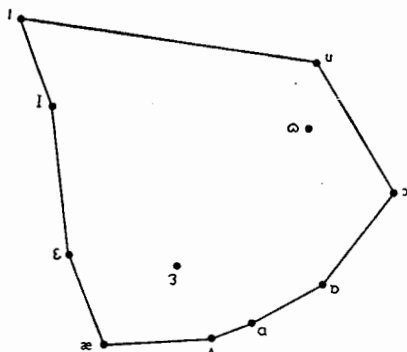


Fig. 1. Vowels of R. P. English.

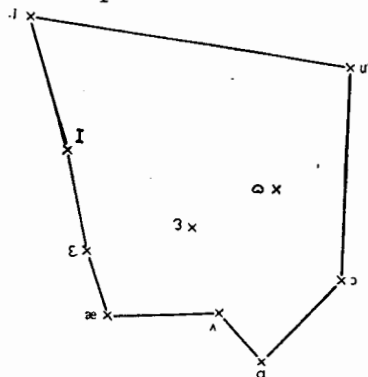


Fig. 2. Vowels of General American.

readings are plotted on a formant chart (F_1 , F_2). No account is taken of F_3 and no attempt to find average values for speakers of the "same" accent are made. The formant diagrams are copied onto tracing paper with no record of their frequencies and are compared. The method of comparison is to assume the vowel [i] as common and then to rotate the diagram in such a way as to determine which vowels are located in the same area (see Fig. 3).

T. Hill makes the statement that "we may suppose that, for complete mutual comprehension, any two speakers of a koine must have sound systems such that

'corresponding' vowel phonemes, for instance, occupy corresponding places when plotted within their systems on a cardinal vowel chart or formant chart."¹ This is the starting point of my work and has, as you will see on Fig. 3, produced some interesting points. Between two speakers, one of General American and the other an R. P. speaker, we have four points of congruity or near congruity: [ɛ] [æ] [ʌ] and [u].

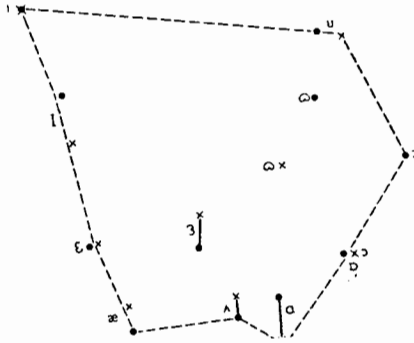


Fig. 3. Composite Picture.

These are, for me, points of mutual intelligibility within my framework. Now, if you compare R. P. [ɒ] and G. A. [ɔ] you will see congruity as well. Their functions are phonologically distinct within their respective accents and I would suspect that this is an area where 'complete mutual comprehension' would not exist, remembering that I am dealing purely with citation forms and that there is a need for other contextual clues to perception.

One of the major difficulties with which I am dealing is the problem of a vowel (monophthong) in one accent, being in systemic terms a diphthong in another (e.g. Scots [e] in 'day' as opposed to R. P. [er]). I have not included these in my example but would propose that comparison may be made by using the prolongable element of the diphthongs as my norm. Further to this point is the question of [r]-pronouncing accents; i.e. accents of English like Scots which pronounce [r] in post-vocalic position. It has been suggested that they might be treated as special types of diphthong.

In this paper I have attempted to produce little more than a tentative statement and, also, to ask some questions which I consider relevant to the problem of perception and analysis.

¹ T. Hill, 'Institutional Linguistics', *Orbis*, vol. VII, No. 2, 1958, p. 454.