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ХРЕСТОМАТІЯ

з теоретичної фонетики

АНГЛІЙСЬКОЇ МОВИ

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ХРЕСТОМАТІЯ З ТЕОРЕТИЧНОЇ ФОНЕТИКИ АНГЛІЙСЬКОЇ МОВИ

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допомогу у систематизації теоретичних знань про напрямки і методи дослідження

фонетичної будови сучасної англійської мови. Навчально-методичні матеріали також містять

докладні бібліографічні довідки до кожного з видатних науковців із зазначенням їх внеску в

розвиток теоретичної фонетики, що доповнює безпосередній зміст наданого уривка.

Наприкінці хрестоматії наведено короткий глосарій основних понять теоретичної фонетики.

Хрестоматія призначена для студентів, магістрантів, а також для всіх, хто цікавиться

теоретичними аспектами англійської мови.

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PART I

BASIC ASPECTS OF PHONETICS

Henry Sweet. Phonetics

PHONETICS (Gr. φωνή, voice), the science of speech-sounds and the art of pronunciation. In its widest sense it is the "science of voice," dealing not only with articulate, but also with the inarticulate sounds of animals as well as men. The originally synonymous term, "phonology," is now restricted to the history and theory of sound-changes. The most obvious of the practical applications of phonetics is to the acquisition of a correct pronunciation of foreign languages. But its applications to the study of the native language are not less important: it is only by the help of phonetics that it is possible to deal effectively with vulgarisms and provincialisms of pronunciation and secure uniformity of speech; and it is only on a phonetic basis that the deaf and dumb can be taught articulate speech. From a more theoretical point of view phonetics is, in the first place, the science of linguistic observation. Without phonetic training the dialectologist, and the missionary who is confronted with a hitherto unwritten language, can neither observe fully nor record accurately the phenomena with which they have to deal. These investigations have greatly widened the scope of the science of language. The modern philologist no longer despises colloquial and illiterate forms of speech. On the contrary, he considers that in them the life and growth of language is seen more clearly than in dead literary languages, on whose study the science of comparative philology was at first exclusively built up. It was not till philologists began to ask what were the real facts underlying the comparisons of the written words in Sanskrit, Greek, Latin, and the other Indo-European languages, embodied in such generalizations as Grimm's Law, that "letter-science" developed into "sound-science" (phonology). The rise and decay of inflexions, and the development of grammatical forms generally, are, from the formal point of view, mainly phonetic problems; and phonetics enters more or less into every department of historical and comparative grammar.

Methods of Study and Investigation.—Phonetics is the science of speech-sounds. But sounds may be considered from two opposite points of view—the organic and the acoustic. From the organic point of view a sound is the result of certain actions and positions of the organs of speech, as when we define f as a lipteeth (dento-labial) consonant. This is the point of view of the speaker of a language. To the hearer, on the other hand, f is not a lip-teeth, but a hiss consonant similar to that denoted by th. This is the acoustic point of view. Theoretically, the organic study of phonetics is a branch of anatomy and physiology: that part of these sciences which deals with the organs of speech and their functions, while, from the opposite point of view, the study of phonetics is based on that branch of physical science known as acoustics, together with the anatomy and physiology of the organs of Hearing (q, v).

Unfortunately, this basis is still imperfect. The principles of acoustics are well established, and we know much about the anatomy of the ear. But how the ear transmits to the brain the impression of sound is still a mystery. Again, although the mechanism of the vowel is clear enough, there is still no generally

received acoustic theory of its formation. In fact, from the physical science point of view there is as yet no science of phonetics.

The real function of phonetics is philological and literary. The only sound basis of a theoretical knowledge of phonetics is the practical mastery of a limited number of sounds—that is to say, of the sounds which are already familiar to the learner in his own language. It is evident that the more familiar a sound is, the easier it is to gain insight into its mechanism and to recognize it when heard. It is indispensable to cultivate both the organic and the acoustic sense. These processes we are continually carrying out in ordinary conversation. All, therefore, that we have to do in dealing with native sounds is to develop this unconscious organic and acoustic sense into a conscious and analytic one. The first step is to learn to isolate each sound: to pronounce it, as far as possible, apart from its context; and to preserve it unchanged through every variation of length and force, and in every combination of sounds. The next step is to analyse its formation. Let the student, for instance, compare the two consonants in such a word as *five* by isolating and lengthening them till he can both hear and feel the voice-vibration in the second one. In the same way let him learn to feel the changes in the position of the tongue and lips in passing from one vowel to another. When the native sounds have been thoroughly studied in this way, the learner will proceed to foreign sounds, deducing each new sound from those which are already familiar to him.

The natural method of learning sounds is mainly a subjective one. We listen patiently till our ears are steeped, as it were, in the sound; and then, after repeated trials, we hit on the exact position of the organs of speech by which we can reproduce the sound to the speaker's satisfaction. But the natural method admits also of objective control and criticism of the movements of the lips and Jaws by direct observation. The movements and positions of the tongue and soft palate, and other modifications of the mouth and throat passages are also more or less accessible to observation in the case of self-observation with the help of a small mirror held in the hand. If the mirror is small enough to go into the mouth, and is fixed obliquely to a handle, so that it can be held against the back of the mouth at such an angle as to reflect a ray of light down the throat, we have the *laryngoscope*. Laryngoscopy has confirmed earlier results, and has also added to our knowledge of the throat sounds. But, on the other hand, it has been a fruitful source of error. There has been great discrepancy between the results obtained by different observers; and many results which were at first received with implicit confidence for their supposed rigorously scientific and objective character have been found to be worthless. It seemed at first as if Rontgen's discovery of the so-called X-rays would meet the want of a means of direct observation of the positions of the tongue, not lengthways, but from the side, as also of the interior of the throat. But although the cheeks are to a certain extent transparent to these rays, the shadow of the tongue projected on the screen is too indistinct to be of any use.

But there are other methods besides those of direct observation by which the positions of the tongue may be objectively determined and measured with more or less accuracy. The interior of the mouth may be explored by the fingers. If the little finger is held against the gums during the articulation of the vowels in *it*, *ate*, *at*, the difference in the height of the tongue will at once become apparent in the formation of the first vowel the tongue is pressed strongly against the artificial palate, while in that of the second it only just touches it, and in that of the third it does not touch at all

Several forms of apparatus have been devised for a more accurate determination of the positions of the tongue and the other movable organs of speech. The best results hitherto as regards the vowel-positions have been obtained by Grandgent, who uses disks of cardboard of various sizes fixed to silver wires. A full description of this and other methods will be found in Scripture's *Elements of Experimental Phonetics*.

There are other methods whose results are obtained only indirectly. The simplest of these are the *palatographic*, by which are obtained "palatograms" recording the contact of the tongue with the palate. The apparatus most generally used consists of a thin, shell-like artificial palate, which is covered with chalk and placed in the mouth; when the sound is made, the articulation of the tongue is inferred from the contact-marks on the plate. This method is evidently limited in its application. It, too, has the drawback of not being applicable to the sounds formed in the back of the mouth. The outlines of palatograms are much vaguer than they appear in the published drawings of them; and it is a question whether the thickness even of the thinnest plate does not modify the record.

The methods hitherto considered are all comparatively simple. They require no special knowledge or training, and are accessible to all. But there are more elaborate methods—with which the name "experimental phonetics" is more specially connected—involving special training in practical and theoretical physics and mathematics, and requiring the help of often complicated and costly, and not easily accessible, apparatus. The investigation of the speech curves of phonograph and gramophone records is a typical example. Good examples of these methods are afforded by E. A. Mever's investigations of vowel-quantity in English (Englische Lautdauer, Uppsala, 1903). Their characteristic feature is their delicacy, and the minuteness of their distinctions, which often go beyond the range of the human ear. Although their results are often of value, they must always be received with caution: the sources of error are so numerous.

The claims of instrumental phonetics have been so prominently brought forward of late years that they can no longer be ignored, even by the most conservative of the older generation of phoneticians. But it is possible to go too far the other way. Some of the younger generation seem to think that the instrumental methods have superseded the natural ones in the same way as the Arabic superseded the Roman numerals. This assumption has had disastrous results. It cannot be too often repeated that instrumental phonetics is, strictly speaking, not phonetics at all. It is only a help. it only supplies materials which are useless till they have been tested and accepted from the linguistic phonetician's point of view. The final arbiter in all phonetic questions is the trained ear of a practical phonetician: differences which cannot be perceived must—or at least may be—ignored; what contradicts the trained ear cannot be accepted.

Sound-Notation; Spelling Reform.—Next to the analysis of the sounds themselves, the most important problem of phonetics is their representation by means of written and printed symbols. The traditional or "nomic" orthographies of most languages are only imperfectly phonetic. And, unfortunately, of the languages in most general use, two are exceptionally unphonetic in their orthographies, French showing the greatest divergence between sound and symbol, while English shows the maximum of irregularity and arbitrariness. The German orthography is comparatively phonetic: it has hardly any silent letters, and it generally has one symbol for each sound, each symbol having only one value, the exceptions falling under a few simple rules, which are easily remembered. There are other languages which have still more phonetic orthographies, such as Spanish, Welsh and Finnish. But even the best of them are not perfect: even when

they are not actually misleading, they are always inadequate. On the other hand, no system of writing is wholly unphonetic. Even in French and English there are many words whose spelling not even the most radical reformer would think of altering. In fact, all writing which has once emerged from the hieroglyphic stage is at first purely phonetic, as far as its defective means will allow. The divergence between sound and symbol which makes spelling unphonetic is the result of the retention of phonetic spellings after they have become unphonetic through changes in the pronunciation of the words themselves. Thus, such English spelling as *knight* and *wright* were still phonetic in the time of Chaucer; for at that time the initial consonants of these words were still pronounced, and the *gh*still had the sound of *ch* in German *ich*. So also *see* and *sea* are written differently, not by way of arbitrary distinction, but because they were pronounced differently till within the last few centuries—as they still are in Irish-English.

Where there is no traditional orthography, as when Old English (Anglo-Saxon) was first written down in Latin letters, spelling was necessarily phonetic; but where there is a large literature and a class of professional scribes, the influence of the traditional orthography becomes stronger, till at last the invention of printing and the diffusion of one standard dialect over a large area occupied originally by a variety of other dialects make changes of spelling as inconvenient as they were once easy and natural. The ideal orthography for printers is one which is absolutely uniform over the whole territory of the language, and absolutely unchangeable. In such orthographies as those of the present English and French there is no longer any living correspondence between sound and symbol: they are, in intention at least, wholly unphonetic; they are preserved by graphic, not by oral, tradition.

But unphoneticness has its practical limits. A purely unphonetic degradation of an originally phonetic system of writing—one in which there is absolutely no correspondence between sounds and letters—could not be mastered even by the most retentive memory: it would be even more difficult than the Chinese writing. Hence a phonetic reaction is inevitable. In the middle ages the spelling was periodically readjusted in accordance with the changes of pronunciation-as far, of course, as the imperfections of the existing orthography would allow. This adjustment went on even after the introduction of printing. In fact, it is only within the last hundred years or so that the orthographies of English and French have become fixed. One result of this fixity is that any attempt to continue the process of adjustment assumes a revolutionary character. When, in 1849, the pioneers of the modern spelling-reform movement—A. J. Ellis and I. Pitman brought out the Fonetic Nuz, few of those who joined in the chorus of ridicule excited by the new alphabet stopped to consider that this uncouthness was purely the result of habit, and that the Authorized Version of the Bible in the spelling of its first edition would seem to us not less strange and uncouth than in the newfangled phonotypy of Messrs Ellis and Pitman. Nor did they stop to consider that phonetics and phonetic spelling, so far from being innovations, are as old as civilization itself. The Alexandrian grammarians were not only phoneticians—they were spelling-reformers; they invented the Greek accents for the purpose of making the pronunciation of Greek easier to foreigners. The Romans, too, were phoneticians: they learnt Greek by phonetic methods, and paid great attention to niceties of pronunciation. The Sanskrit grammarians were still better phoneticians.

As a matter of fact, English spelling was still phonetic as late as the time of Shakespeare—in intention, at least. But although people still tried to write as they spoke, the inherited imperfections of their

orthography made it more and more difficult for them to do so. Hence already in the 16th century a number of spelling-reformers made their appearance, including classical scholars such as Sir John Cheke, and A. Gill, who was head-master of St Paul's School in London. Gill has left us extracts from Spenser's *Faerie Queene* in phonetic spelling; but, strange to say, nothing of Shakespeare's, although he and Shakespeare were exact contemporaries. But Gill's and the other alphabets proposed were too intricate and cumbrous for popular use.

Nevertheless, some important phonetic reforms were successfully carried through, such as getting rid of most of the superfluous final e's, utilizing the originally superfluous distinctions in form between i and j, u and v, by using i, u only as vowels, j, v only as consonants, instead of at random—a reform which seems to have begun in Italy. Another important reform was the introduction of ea and oa, as in sea and boat, which had hitherto been written with ee and oo, being thus confused with see and boot.

All these were as much phonetic reforms as it would be to utilize long s and tailed z (f, g) to denote the final consonants in *fish* and *rouge* respectively; a reform first suggested by A. J. Ellis, who was himself the first to call attention to the works of these early phoneticians and to utilize them in the investigations enshrined in his great work on *Early English Pronunciation*.

With all its defects, the present English spelling is still mainly phonetic; we can still approximately guess the pronunciation of the vast majority of words from their spelling. So when we say that English spelling is unphonetic we merely mean that it is a bad phonetic spelling; and all that spelling-reformers aim at is to make this bad into a good phonetic spelling, that is, an efficient and easy one. But the difficulties are great; and the more we know of phonetics, and the more we experiment with different systems of spelling, the more formidable do they appear. One of the difficulties, however, that is commonly supposed to stand in the way of spelling-reform is quite imaginary: namely, that it would destroy the historical and etymological value of the present system. Thus E. A. Freeman used to protest against it as "a reckless wiping out of the whole history of the language." Such critics fail to see that historical spelling, if carried out consistently, would destroy the materials on which alone history can be based, that these materials are nothing else but a series of phonetic spellings of different periods of the language, and that if a consistent historical and etymological spelling could have been kept up from the beginning, there would have been no Grimm's Law, no etymology; in short, no comparative or historical philology possible.

The advantages of beginning a foreign language in a phonetic notation are many and obvious. In the first place, the learner who has once mastered the notation and learnt to pronounce the sounds the letters stand for, is able to read off at once any text that is presented to him without doubt or hesitation, and without having to burden his memory with rules of pronunciation and spelling. Another advantage of phonetic spelling is that when the learner sees the words written in a representation of their actual spoken form he is able to recognize them at once when he hears them. And if the learner begins with the phonetic notation, and uses it exclusively till he has thoroughly mastered the spoken language, he will then be able to learn the ordinary spelling without fear of confusion, and quicker than he would otherwise have done.

Spelling-reform may be carried out with various degrees of thoroughness. After the failure of many schemes of radical reform, an attempt was made to begin with those numerous spellings which are both unphonetic and unhistorical, or are against the analogy of other traditional spellings. Accordingly, in 1881

the Philological Society of London "aproovd (*sic*) of certain partial corections (*sic*) of English spellings," which were also approved of by the American Spelling-reform Association; and a list of them was issued jointly by the two bodies, and recommended for general adoption. A similar movement has been started in France. But the general feeling appears to be that it is better to keep the ordinary spelling unchanged, and wait till it is possible to supersede it by one on a more or less independent basis.

If the existing Roman alphabet is made the basis of the new phonetic notation of any one language, the most obvious course is to select one of the various traditional representations of each sound, and use that one symbol exclusively, omitting, of course, at the same time all silent letters. A. J. Ellis's *English Glossic* is an example of such a phonetic spelling on a national basis. The following is a specimen:—

Ingglish Glosik iz veri eezi too reed. Widh proper training a cheild foar yeerz oald kan bee redili taut too reed, Glosik buoks.

But a system which, like this, writes short and long vowels with totally different symbols (i, ee) is only half phonetic: it is phonetic on an unphonetic basis.

A fully phonetic system, in which, for instance, long vowels and diphthongs are expressed by consistent modifications or combinations of the symbols of the short vowels, and in which simple sounds are, as far as is reasonable and convenient, expressed by single letters instead of digraphs such as sh, must necessarily discard any national basis., The best basis on the whole is obtained by giving the letters their original common European sounds, i.e. by returning to the Late Latin pronunciation, with such modifications and additions as may be advisable. As regards the vowels at least, this Latin basis is very well preserved in German and Italian. In French, on the other hand, the Latin tradition was greatly corrupted already in the earliest period through the rapid changes which the language underwent. Thus when the Latin u in luna assumed the sound it now has in French lune, the symbol u was still kept; and when the sound u afterwards developed again out of the diphthong ou, this digraph was used to denote the sound. So when the French system of spelling came into use in England after the Norman Conquest these unphonetic symbols were introduced into English spelling, so that such a word as Old English and Early Middle English $h\bar{u}s$, "house," was written hous in the Late Middle English of Chaucer, although the sound was still that of Scotch hoos, ou (ow) being also used to denote a true diphthong (ou) in such words as knou, know, from Old English $cn\bar{a}wan$.

Another important general distinction is that between "broad" and "narrow" systems of notation. A broad notation is one which makes only the practically necessary distinctions in each language, and makes them in the simplest manner possible, omitting all that is superfluous. From a practical point of view the necessary distinctions are those on which differences of meaning depend. A distinction of sound which is significant in one language may be insignificant in another. Thus the distinction between close \acute{e} and open \acute{e} , \acute{e} is significant in French, as in \acute{pe} cher; so if in French phonetic writing the former is denoted by (e), it is necessary to find a new symbol (\acute{e}) for the open sound. But in languages such as English and German, where the short e is always open, there is no practical objection to using the unmodified (e) to denote the open sound, even if we regard (e) as the proper symbol of the close sound. And in those languages in which the short e is always open and the long e always close it' is enough to mark the distinction of quantity, and leave the distinction of quality to be inferred from it (e, ee). In such a case as this it is, of

course, possible to apply the principle of ignoring superfluous distinctions in the opposite way: by writing the long and short vowels in such a language (e, ϵ) , leaving the quantity to be inferred from the quality. But the former method is the more convenient, as it does not require any new letter. The "broad" principle is especially convenient in writing diphthongs. Thus in English Broad Romic we write the diphthongs in *high* and *how* with the same vowel as *ask* (*hai*, *hau*, *ask*), although all these (a)'s represent different sounds in ordinary southern English pronunciation. But the pronunciation of these diphthongs varies so much in different parts of the English-speaking territory, and the distinctions are so minute that it would be inconvenient to express them in writing; and as these distinctions are non-significant, it would be useless to do so. (ai) and (au) are symbols, not of special diphthongs, but of two classes of diphthongs: they can stand for any diphthongs which begin with a vowel resembling the Italian a, and end with approximations to i and u respectively. Theoretically it would be just as correct in English and German to write these diphthongs (ae, ao). But these notations are misleading, because they suggest simple sounds.

In comparing the sounds of a variety of languages, or of dialects of a language, and still more in dealing with sounds in general, we require a "narrow," that is a minutely accurate, notation covering the whole field of possible sounds. It is evident from what has been said above that such a universal scientific alphabet is not suited for practical work in any one language. But the symbols of such a notation as Sweet's "Narrow Romic" are of the greatest use as keys to the exact pronunciation of the vaguer symbols of the Broad Romic notations of each language.

To prevent confusion between these two systems of notations Broad Romic symbols are enclosed in (), Narrow Romic in [], which at the same time serve to distinguish between phonetic and nomic spellings. This in English i (i) = [i] means that the English vowel in *finny* is the "wide" sound, not the "narrow" one in French *fini*, although in the Broad Romic notations of both languages (fini) is written for *finny* and *fini* alike.

Narrow Romic was originally based on A. J. Ellis's "Palaeotype," in which, as the name implies, no new letters are employed. The symbols of Palaeotype are made up, as far as possible, of the letters generally accessible in printing-offices, the ordinary Roman lowercase letters being supplemented by italics and small capitals (i, i, I) and turned letters (0,0), many digraphs (th, sh) being also used. This notation was a reaction from Ellis's earlier phonotopy, in which a large number of new letters were used. Some of these, however, such as $\int = (sh)$, $\int = (sh)$, were afterwards adopted into Broad and Narrow Romic. In his Palaeotype Ellis also discarded diacritical letters, which, as he rightly says, are from a typographical point of view equivalent to new letters. In Narrow Romic a certain number of diacritical letters are used, such as (\tilde{n}, \tilde{a}) , most of which are already accessible. Palaeotype is a Roman-value notation, the main difference as regards the values of the symbols between it and the later systems, being that it is more complex and arbitrary. Ellis afterwards had the unhappy idea of constructing a "Universal Glossic" on an English-values basis, which is even more cumbrous and difficult to remember than Palaeotype.

Sweet's Romic systems were made the basis of the "International" alphabet used in *Le Maître Phonétique*, which is the organ of the *International phonetic Association*, directed by P. Passy. Although this system is at the present time more widely known and used than any other, and although it is constructed on the international Romic principle, it is not really an international system. It is rather an attempt to make a special adaptation of the Romic basis to the needs of the French language into a general notation for all

languages. But the phonetic structure of French is so abnormal, so different from that of other languages, that the attempt to force a Broad Romic French notation on such a language as English is even more hopeless than it would be to reverse the process. Although well suited for French, this alphabet must from a wider point of view be regarded as a failure: it is too minute and rigid for practical, and yet not precise enough for scientific purposes. In short, although it has done excellent service, and has helped to clear the way for a notation which shall command general acceptance, it cannot be regarded as a final solution of the problem.

Of the numerous other notations now in use, some still adhere to the diacritic principle of Lepsius's *Standard Alphabet* (1855), intended for missionary use, but found quite unfit for that purpose because of the enormous number of new types required. Most of them prefer to use new letters formed by more or less consistent modifications of the existing italic letters. A J. Lundell's Swedish dialect alphabet and O. Jespersen's Danish dialect alphabet are good specimens of this tendency. In the latter Roman letters are used for special distinctions, just as italic letters are used in the Romic systems.

Vowel-length is in some systems denoted by doubling (aa), in others by special marks (a: &c.), the diacritic in \bar{a} being used only in the nomic orthographies of dead and oriental languages.

All the systems of phonetic notation hitherto considered are based on the Roman alphabet. But although the Roman alphabet has many advantages from a practical point of view, it is evidently impossible to build up a consistent and systematic notation on such an inadequate foundation of arbitrary signs. What is wanted, for scientific purposes especially, is a notation independent of the Roman alphabet, built up systematically—an alphabet in which there is a definite relation between sound and symbol.

This relation may be regarded either from the organic or the acoustic point of view. The tendency of the earlier attempts at an a priori universal alphabet was to symbolize the consonants organically, the vowels acoustically, as in E. Brucke's *Phonetische Transscription* (1863). It is now generally acknowledged that the vowels as well as the consonants must be represented on a strictly organic basis. This was first done in A. M. Bell's *Visible Speech* (1867), which appeared again (1882) in a shorter form and with some modifications under the title of *Sounds and their Relations*. Bell's pupil, H. Sweet, gave a detailed criticism of Visible Speech in a paper on *Sound-notation* (Trans. of Philological Society, 1880–1881), in which he described a revised form of it called the *Organic Alphabet*, which he afterwards employed in his *Primer of Phonetics* and other works. Sweet's Narrow Romic notation already mentioned is practically a transcription of the Organic Alphabet into Roman letters.

Such notations are alphabetic: they go on the general principle of providing separate symbols for each simple sound. But as the number of possible shades of sounds is almost infinite, even the most minutely accurate of them can do so only within certain limits. The Organic Alphabet especially makes a large use of "modifiers"—characters which are added to the other symbols to indicate nasal, palatal, &c., modifications of the sounds represented by the latter, these modifiers being generally represented by italic letters in the Narrow Romic transcription; thus (ln) = nasalized(l).

In the Roman alphabet such symbols as f, v are arbitrary, showing no connection in form either with one another or with the organic actions by which they are formed; but in the Organic symbol of v, for instance, we can see the graphic representation of its components "lips, teeth, voice-murmur." By omitting superfluous marks and utilizing various typographical devices the notation is so simplified that the symbols,

in spite of their minute accuracy, are often simpler than in the corresponding Roman notation. The simplicity of the system is shown by the fact that it requires only about 110 types, as compared with the 280 of Lepsius's very imperfect Standard Alphabet.

All the systems hitherto considered are also alphabetic in a wider sense: they are intended for continuous writing, the more cumbrous "narrow" notations being, however, generally employed only in writing single words or short groups. An "analphabetic" basis was first definitely advocated by Jespersen, who represents each sound by a group of symbols resembling a chemical formula, each symbol representing not a sound, but an element of a sound: the part of the palate, tongue, &c., where the sound is formed, the degree of separation (openness) of the organs of speech, and so on. The two great advantages of such a system are that it allows perfect freedom in selecting and combining the elements and that it can be built up on the foundation of a small number of generally accessible signs.

As regards Jespersen's scheme, it is to be regretted that he has not worked it out in a more practical manner: that in his choice of the thirty odd symbols that he requires he should have gone out of his way to mix up Greek with Roman letters, together with other characters which would be avoided by any one constructing even a scientific alphabetic notation. And his use of these symbols is open to much criticism. In fact, it cannot be said that the analphabetic principle has yet had a fair trial.

The Organs of Speech. Most speech-sounds are formed with air expelled from the lungs (voice-bellows), which passes through the two contractible bronchi or bronchial tubes into the also contractible wind-pipe or trachea, on the top of which is fixed the larynx (voice-box). Across the interior of the larynx are stretched two elastic ledges or cushions called "the vocal chords." They are inserted in front of the larynx at one end, and at the other they are fixed to two movable cartilaginous bodies "the aretynoids," so that the passage between them—the glottis—can be narrowed or closed at pleasure. The glottis is, as we see, twofold, consisting of the chord glottis and the cartilage glottis. The two can be narrowed or closed independently. The chords can also be tightened or relaxed, lengthened and shortened in various degrees.

When the whole glottis is wide open, no sound is produced by the outgoing breath except that caused by the friction of the air. Sounds in whose formation the glottis is in this passive state are called "breath" sounds. Thus (f) is the breath consonant corresponding to the "voice" or "voiced" consonant (v). In the production of voice, the chords are brought close enough together to be set in vibration by the air passing between them. In the "thick" register of the voice (chest voice) the chords vibrate in their whole length, in the "thin" register or falsetto only in part of their length. If the glottis is narrowed without vibration, "whisper" is the result. In the "weak whisper" there is narrowing the whole glottis; in the "strong whisper," which is the ordinary form, the chord glottis is entirely closed, so that the breath passes only through the cartilage glottis. In what is popularly called "whisper"—that is, speaking without voice—the breath sounds remain unchanged, while voiced sounds substitute whisper (in the phonetic sense) for voice. Thus in whispering such a word as *feel* the (f) remains unchanged, while the following vowel and consonant are formed with the glottis only half closed. Whispered sounds—both vowels and consonants—occur in ordinary loud speech in many languages. Thus the final consonants in such English words as *leaves*, *oblige* are whispered, except when followed without a pause by a voiced sound, as in *obliging*, where the (3) is fully voiced.

Above the glottis — still within the larynx — comes the "upper" or "false" glottis, by which the passage can be narrowed. On the top of the larynx is fixed a leaf-like body, the "epiglottis," which in swallowing, and sometimes in speech, is pressed down over the opening of the larynx. The contractible cavity between the larynx and the mouth is called the "pharynx." The roof of the mouth consists of two parts, the "soft" and the "hard palate." The lower pendulous extremity of the soft palate, the "uvula," in its passive state leaves the passage into the nose open. In the formation of non-nasal sounds, such as (b), the uvula is pressed up so as to close the passage from the pharynx into the nose. If (b) is formed with the passage open, it becomes the corresponding nasal consonant (m). The other extremity of the (hard) palate is bounded by the teeth, behind which are the gums, extending from the teeth-rim to the arch-rim—the projection of the teeth-roots or alveolars.

There is great diversity among phoneticians as regards the mapping out—the divisions—of the palate and tongue, and their names. Foreign phoneticians generally adopt very minute distinctions, to which they give Latin names. Bell in his *Visible Speech* makes a few broad fundamental divisions. In the arrangement adopted here (mainly based on his) sounds formed on the soft palate are called "back," and are subdivided into "inner" = nearer the throat, and "outer" = nearer the teeth, further subdivisions being made by the terms "innermost," "outermost," the position exactly half way between these two last being defined as "intermediate back." Sounds formed on the hard palate or teeth may be included under the common term "forward," more accurately distinguished as "teeth" (dental), "gum," "front" (palatal, afterwards called "top" by Bell), which last is really equivalent to "mid-palatal," including the whole of the hard palate behind the gums. All of these divisions are further subdivided into "inner," &c., as with the back positions.

Of the tongue we distinguish the "back" (root), "front" or middle, "point" (tip), and "blade," which includes the point and the surface of the tongue immediately behind it. The tongue can also articulate against the lips, which, again, can articulate against the teeth. The lip passage can be closed, or narrowed in various degrees. Sounds modified by lip-narrowing are called "lip-modified" (labialized) or "round" (rounded), the last being specially used in speaking of vowels.

Speech-sounds.—The most general test of a simple as opposed to a compound sound (sound-group) is that it can be lengthened without change. As regards place of articulation, no sound is really simple: every sound is the result of the shape of the whole configurative passage from the lungs to the lips; and the ultimate sound-elements, such as voice, are never heard isolated. The most indistinct voice-murmur is as much the result of the shape of the super glottal passages as the clearest and most distinct of the other vowels; and its organic formation is as definite as theirs is, the only difference being that while in what we regard as unmodified voice all the organs except the vocal chords are in their passive, neutral positions, the other vowels are formed by actively modifying the shape of the super-glottal passages—by raising the tongue towards the palate, narrowing the lips, &c.

The most important elements of speech-sounds are those which are dependent on the shape of the glottis and of the mouth passage respectively. It is on the relation between these two factors that one of the oldest distinctions between sounds is based: that of *vowel* and *consonant*. In vowels the element of voice is the predominant one: a vowel is voice modified by the different shapes of the super glottal passages. In consonants, on the other hand, the state of the glottis is only secondary. Consonants are generally the result

of audible friction, as in (f), or of complete stoppage, as in (p). If the glottis is at the same time left open, as in (f, p), the consonant is "breath" or "voiceless"—if it is narrowed enough to make the chords vibrate, as in (v, b), the consonant is "voice" or "voiced"; intermediate positions producing the corresponding "whispered" consonants. Vowels are characterized negatively by the absence of audible friction or stoppage: if an (i) is formed with the tongue so close to the palate as to cause buzzing, it becomes a variety of the front consonant (j). There is, of course, no difficulty in forming a vowel with the glottis in the position for breath and whisper. Thus breath (i) may often be heard in French in such words as *ainsi* at the end of a sentence, the result being practically a weak form of the front-breath consonant (ç). The division between vowel and consonant is not an absolutely definite one. As we see, the closer a vowel is—that is, the narrower its configurative passage is—the more like it is to a consonant, and the more natural it is to devocalize it. Some voice consonants, on the other hand, have so little buzz that acoustically they constitute a class between consonants and vowels—a class of "vowel-like" or "liquid" consonants, such as n, m, l).

The changes in sounds which result from active narrowing of the passages admit of an important distinction as "sound modifying" and "sound-colouring," although the distinction is not always definite. Nasality and rounding are examples of sound-modifying processes. Thus we hear a certain resemblance between (b) and (m), (i) and (y), but we regard all these four as distinct and practically independent sounds. Contraction of the pharynx, on the other hand, as also of the false glottis and windpipe, have only a soundcolouring effect: if a vowel is formed with such contractions its quality (timbre) is altered, but it still remains the same vowel. It follows from the definition of speech-sounds that they admit of a twofold classification: (1) organic and (2) acoustic. As already remarked, the older phoneticians used to classify the consonants organically, the vowels mainly from the acoustic point of view. The first to give an adequate organic classification of the vowels was the author of Visible Speech. Bell gave at the same time an independent acoustic classification of the consonants as well as the vowels. His acoustic classification consists simply in arranging the sounds in the order of their "pitches" (tone-heights). The pitches of the breath consonants are absolutely fixed in each individual pronunciation, while those of spoken vowels can be varied indefinitely within the compass of each voice by tightening the vocal chords in various ways and shortening their vibrating portions the tighter and shorter the vibrating body, the quicker its vibrations, and the higher the tone. But when a vowel is whispered or breathed nothing is heard but the resonance of the con figurative passages, especially in the mouth, and the pitches of these resonant cavities are as fixed as those of the breath consonants; in other words, a whispered (or breathed) vowel cannot be sung. Although the absolute pitches of voiceless sounds may vary from individual to individual the *relations* of the pitches are constant: thus in all pronunciations (c) and whispered (i) are the highest, breath (w) in what and whispered (u) nearly the lowest in pitch among consonants and vowels respectively.

If phonetics were an ideally perfect science there would be no occasion to discuss whether the acoustic or the organic study of the vowels and the other speech-sounds is the more important: a full description of each sound would necessarily imply (1) an exact determination of its organic formation, (2) an acoustic analysis of the sound itself, both from the objective physical point of view and from the subjective one of the impression received by the ear, and (3) an explanation of how (2) is the necessary result of (1). Even this last question has already been solved to some extent. In fact, the connection between the organic

formation and the acoustic effect is often self-evident. It is evident, for instance, that (i) and (ç) owe their clear sound and high pitch to their being formed by short, narrow passages in the front of the mouth, while (u) owes its low pitch to being formed in exactly the opposite way, the sound being farther muffled and the pitch consequently still more lowered by the rounding.

One reason why it is impossible to classify the vowels exclusively on acoustic principles is that two vowels formed in quite different ways may have the same pitch. Thus the "high front-round" (y) and the "high-mixed" (i) have the same pitch, the tongue-retraction of the mixed position of the latter having the same effect as the rounding of the former. It is evident, therefore, that the fundamental classification of the vowels must, like that of the consonants, be purely organic. And although for practical purposes it is often convenient to classify sounds partly from the acoustic point of view, a full scientific treatment must keep the two points of view strictly apart, and make a special chapter of the relations between them.

Vowels.—The most obvious distinction between vowels is that which depends on the share of the lips in their articulation. In such non-round vowels as (i) and (a) the lips are passive, or even separated and spread out at their corners, by which the vowels assume a clearer resonance. If, on the other hand, the lips are actively approximated, they become the round vowels (y) and "open" (o) respectively.

owels are formed with different degrees of rounding. As a general rule, the narrowness of the lip-passage corresponds to the narrowness of the mouth-passage. Thus, in passing from the vowel of *too* to those of *no* and *saw* the back of the tongue is progressively lowered, and the rounding is diminished in the same proportion.

But there is also abnormal rounding. Thus, if we pronounce (o) with the lips in the position they have in forming (u), the resulting "over-rounded" vowel sounds half-way between (o) and (u); the second element of the diphthong (ou) in *go* is formed in this way. Conversely, the (u) in *put* is "under-rounded" in the North of England: the tongue position is kept, but the lips are only brought together a little at the corners, as in (a).

The mouth positions of the vowels are the result of two factors: (1) the height of the tongue—its nearness to the palate—and (2) the degree of its retraction. Bell distinguishes three degrees of height: in his system (u) is "high," the (o) of *boy* is "mid," and the (o) of *saw* is "low." He also has three degrees of retraction: in "back" vowels, such as (u), the root of the tongue is drawn to the back of the mouth, and the whole tongue slopes down from back to front. In "front" vowels, such as (i), the front of the tongue is raised towards the hard palate, so that the tongue slopes down from front to back.

Most of these slope-positions yield vowels of a distinct and clear resonance. There is also a class of "flat" vowels. such as (a), in which the tongue is in a more or less neutral position. If the tongue is raised from the low-flat position of (99) in *bird* to the high position, we get the (i) of North Welsh *dyn* "man," which, as already observed, is acoustically similar to (y).

The flat vowels were called "mixed" by Bell, in accordance with his view that they are the result of combining back and front articulation. And although this view is now generally abandoned, the term "mixed" is still retained by the English school of phoneticians.

In this way Bell mapped out the whole mouth by the following cardinal points:

high-back

• high-mixed

• high-front

mid-back
 mid-mixed
 mid-front

low-back
 low-mixed
 low-front

In this arrangement "high-back," &c., are fixed points like those of latitude and longitude. Thus normal "high" means that the tongue is raised as close to the palate as is possible without causing consonantal friction, and "back" implies retraction of the same kind. Intermediate positions are defined as "raised," "lowered," "inner," "outer."

The most original and at the same time the most disputed part of Bell's vowel-scheme is his distinction of "primary" and "wide." All vowels fall under one of these categories. Thus, the primary French (i) and the corresponding English wide (i) are both high front-vowels, and yet they are distinct in sound: the English vowel is a semitone lower in pitch. Bell explained the greater openness of the wide vowels as the result of greater expansion of the pharynx; and he considered the other class to be most nearly allied to the consonants—whence their name "primary"—the voice-passages in the formation of primary vowels being expanded only so far as to remove all fricative quality. But alterations in the shape of the pharynx have only a sound-colouring, not a sound-modifying, effect; and Sweet showed that the distinction depends on the shape of the tongue, and accordingly substituted "narrow" for Bell's "primary." He also showed that the distinction applies to consonants as well as vowels: thus the narrow French (w) in *oui* is a consonantization of the narrow French (u) in *sou*, while the English (w) preserves the wide quality of the (u) in *put*.

In forming narrow sounds there is a feeling of tension in that part of the tongue where the sound is formed, the tongue being clenched or bunched up lengthwise, so as to be more convex than in its relaxed or "wide" condition.

The distinction between narrow and wide can often be ignored in practical phonetic writing, for it generally depends on quantity; length and narrowness, shortness and wideness going together. When the distinction is marked, wide vowels may be expressed by italics, as in German (biinə, bin).

Bell's category of "mixed-round" vowels had from the beginning been a source of difficulty to students of *Visible Speech*. But it was not till 1901 that Sweet showed that they are only mixed as regards position: they are really the corresponding back-round vowels moved forward into the middle of the mouth while preserving the slope of back vowels, instead of having the tongue flat as in the (unround) mixed vowels. They are "out-back" vowels: there is an exaggeration of the outer back position of such a back-round vowel as the English (*u*) compared with the full back (*u*) in German *muttre*.

In the same way by moving the tongue backwards while forming a front vowel another series of "infront" vowels is obtained.

The "in-mixed" vowels are obtained by shifting the neutral mixed positions into the full back position, keeping the tongue flat, so that these vowels might also be called "back-flat."

The out-back, in-front and in-mixed vowels are included under the common designation of "shifted," as opposed to "normal" vowels.

There is a large number of other vowel-schemes, of which a survey will be found in W. Vietor's *Elemente der Phonetik*. Many of the older ones are in the form of triangles, with the three chief vowels *a*, *i*, *u* at the three corners, the other vowels being inserted between these extremes according to their

acoustic relations. Since the appearance of *Visible Speech* many attempts have been made to fit his new vowels into these older schemes.

Of all the vowel-schemes the one now most generally known is perhaps that of the International Phonetic Association already mentioned. In this scheme the distinction of narrow and wide, though admitted and occasionally marked, is not an integral part of the system, the vowels being classified first as "velar" (back) and "palatal" (front), and then according to openness as "close," "half-close," "medium," "half-open" and "open."

Consonants.—These are the result of audible fiiction or stoppage, which may be accompanied either with breath, voice or whisper. Consonants admit of a two-fold division (1) by form, and (2) by place. Thus (p, b) are by place lip-consonants, while by form they are stopped consonants or "stops."

If the mouth-stoppage is kept, and the nose-passage is opened, the stop becomes the corresponding "nasal"; thus (b) with the soft palate lowered becomes the nasal (m).

In "open" consonants the sound is formed by simply narrowing the passage, as in the back-open-breath (x) in Scotch and German *loch*. In some open consonants, such as the lip-teeth (f), there is slight contact of the organs, but without impeding the flow of breath.

In "divided" consonants there is central stoppage with openings at the sides, as in the familiar point-divided (l). These consonants are sometimes "unilateral"—with the opening on the side only—the character of the sound not being sensibly modified thereby.

When open and divided consonants are formed with the nose passage open they are said to be "nasalized." Thus (m) with complete lip-closure becomes the nasalized lip-open-voice consonant.

"Trills" (or rolled) consonants are a special variety of un-stopped consonants resulting from the vibration of flexible parts against one another, as when the lips are trilled, or against some firm surface, as when the point of the tongue trills against the gums in the Scotch (r), or the uvula against time back of the tongue, as in the Northumbrian burred (r), and the French and German (r), where—especially in German—the trill is often reduced to a minimum or suppressed altogether.

As regards the place of consonants, there is, as already remarked, great diversity among phoneticians, both in mapping out the palate and tongue and in the names given to these divisions. The classification and nomenclature given here is, in the main, that of Bell.

By place then, we distinguish seven main classes of consonants: back, front, point, blade, fan, lip, and lip-teeth.

"Back" (guttural) consonants are formed between the root of the tongue and the soft palate. In most languages the positions of these consonants vary according to those of the accompany in vowels. thus the back-stop and back-nasal in *king* are more forward than in *conquer*.

"Front" (palatal) consonants are formed between the middle of the tongue and the hard palate, the point of the tongue lying passively behind the lower teeth. It is easy to make the front open-voice (j) in you into the corresponding stop (\mathfrak{J}) by narrowing the passage till there is complete closure, as in Hungarian nagy ($n\mathfrak{J}$) "world." In the same way the open breath (\mathfrak{c}) in German ich may be made into the stop (\mathfrak{c}) = Hungarian ty. (\mathfrak{J}) nasalized becomes (\mathfrak{n})—Italian gn, Spanish \mathfrak{n} , French gn in vigne. The front-divided-

voice consonant is the Italian gl and Spanish ll. These are all simple sounds, distinct from the (lj), (nj) in French and English million and English onion.

"Point" consonants when formed against the teeth are called "point-teeth" (dental). English (b) in *thin* is the point-teeth-open-breath consonant, (ð) in *then* the corresponding voice consonant. If (ð) is modified by turning the tip of the tongue back into the inner position—about on the arch-rim—it becomes the untrilled (r) in English *rearing*, in which position the tongue is easily trilled, the trilling becoming more and more difficult the more the tongue is approximated to the point-teeth position. In French and many other languages all the point consonants (t, d, n, l), &c., are formed on the teeth, except (r), which is always more retracted than the other point consonants. If the tip of the tongue is turned so far back as to articulate with its lower edge against the arch of the palate—that is, farther back than for the "inner" position—it is said to be "inverted." Inverted (r) is frequent in the dialects of the south-west of England. The opposite of inversion is "protrusion," in which the tip of the tongue articulates against the upper lip.

"Blade" consonants are formed by the blade or flattened tip of the tongue against the gums, as in English (s, z), or against the teeth, as in the corresponding French sounds. If these consonants are modified by turning the tongue a little back, so as to bring the point more into play, they become the "blade-point" consonants (\int , 3), as in *fish*, *measure*. (\int) is acoustically a dull (s). In some languages, such as German, sounds similar to (\int) and (z) are formed partly by rounding, which lowers the pitch of the hiss in the same way as retraction does, so that the tongue-articulation is only imperfectly carried out. When the rounding is very marked there is only a slight raising of the front of the tongue, as in some Swedish dialects; and if the tongue-articulation is progressively shifted back, and the rounding diminished in the same proportion, (\int) can at last develop into the pure back-open consonant (x), as in the present pronunciation of Spanish x and j.

The English point consonants (t, d, n, l) are formed on the gums just behind the teeth, the point of the tongue being fattened, so that they are almost blade consonants.

"Fan" (spread) consonants—the "emphatic" consonants of Arabic—are modifications of point and blad)e consonants, in which the sides of the tongue are spread out, so that the hiss of such a consonant as (s) is formed partly between the sides of the tongue and the back teeth, which gives a peculiar deep, dull quality to these sounds.

"Lip" consonants, such as (p, m), and "lip-teeth" consonants, such as (f, v), offer no difficulty. The simple li-open-breath consonant does not occur in English; it is the sound produced in blowing out a candle. The corresponding voice sound is frequent in German—especially in Middle Germany—in such words as *quelle*.

If the lip-open consonants are modified by raising the back of the tongue, they become the "lip-back" consonants (wh, w) in English *what*, *we*, which may also be regarded as consonantized (*u*). In them the lip articulation predominates. In the "back-lip" consonants, as in German *auch*, the reverse is the case.

This last is one of a large number of "lip-modified" consonants, of which the already-mentioned German *sch* is a further example.

In a similar way consonants may be "front-modified." (i) is peculiarly susceptible to such modifications. In French and other languages it is formed with the tongue more convex than in English, and

consequently with a tendency to front-modification. Front-modified (s) and point (r) may be heard in Russian in such words as *gust* "goose," *tsart* "emperor," where the final vowels are silent.

Some consonants are formed below the mouth.

When the glottis is sharply opened or closed on a passage of breath or voice an effect is produced similar to that of a stop in the mouth, such as (k). This "glottal stop" is the sound produced in hiccuping; and is an independent sound in some languages, such as Arabic, where it is called "hamza." In German all words beginning with a stressed (accented) vowel have a more or less distinct glottal stop before the vowel.

Of the passages below the glottis, the bronchial and the windpipe are both susceptible of contraction.

Spasmodic contraction of the bronchial passages is the main factor in producing what is known as "the asthmatic wheeze." If this contraction is regulated and made voluntary it results in the deep hiss of the Arabic $h\bar{a}$. If this sound is voiced, it causes a peculiar intermittent vibration of voice, which is habitual with some speakers, especially in Germany. If this effect is softened by slightly expanding the bronchial passages, an (r)-like sound is produced, which is that of the Arabic 'ain.

Contraction of the windpipe produces a sound similar to the Arabic $h\bar{a}$, but weaker, which when followed by a vowel has the effect of a strong aspirate. When voiced it becomes a mere colourer of the accompanying voice-murmur, or vowel, to which it imparts a deep timbre.

Non-expiratory Sounds.—All the sounds hitherto described imply out-breathing or expiration. Many of them can also be formed with in-breathing or inspiration. In English it is a not uncommon trick of speech to pronounce *no* in this manner, to express emphatic denial.

Some consonants are formed without either in- or out-breathing, but solely with the air in the throat or mouth. In forming "suction stops" or "clicks" the tongue or lips are put in the position for a stop, and the air is sucked out from between the organs in contact, so that when the stop is loosened, a smacking sound is produced by the air rushing in to fill the vacuum. Thus the point-click is the interjection of impatience commonly written *tut!* In many savage languages clicks are a part of ordinary speech.

Synthesis.—Besides analysing each sound separately, phonetics has to deal with the phenomena which accompany synthesis or the combination of sounds. Although a sentence may consist of a single word, and that word of a single vowel, sounds mostly occur only in combination with one another. The ordinary division into sentences and words is logical, not phonetic: we cannot mark off sentences and cut them up into words until we know what they mean and are able to analyse them grammatically. But the logical division into sentences corresponds to some extent with the phonetic division into "breath-groups," marked off by our inability to utter more than a certain number of syllables in succession without pausing to take breath. Within each of these breath-groups there is no necessary pause between the words, except when we pause for emphasis. The only necessary phonetic divisions within the breath-group are those into syllables, sounds and intervening "glides." But before considering these last it will be necessary to say something about the general factors of synthesis: quantity, stress and intonation.

As regards *quantity*, it is enough for ordinary purposes to distinguish three degrees long, half-long or medium and short. In English what are called long vowels keep their full length when stressed and before final voice consonants, as in *see*, *broad*; and become half-long before voiceless consonants, as in *cease*, *brought*. In most other languages full length is preserved alike before all classes of consonants. The

Romance lan uages have short final stressed vowels, as in French *si*. Unstressed vowels tend to become short in most languages. The distinctions of quantity apply to consonants as well as vowels. Thus English tends to lengthen final consonants after short stressed vowels, as in *man* compared with German *mann*, where the final consonant is quite short. Consonants, like vowels, tend to become short when unstressed. But in some languages, such as Finnish and Hungarian, stress has no effect on quantity, so that in these languages long vowels and double consonants occur as frequently in unstressed as in stressed syllables. Even in English we often lengthen final unstressed vowels in exclamations, as in *what a pity!* Some languages, such as the Romance languages and Russian, tend to level the distinctions of vowel quantity. most of their vowels are half-long.

Stress is, organically the result of the force with which the breath is expelled from the lungs; while acoustically it produces the effect of loudness, which is dependent on the size of the sound vibrations: the bigger the waves, the louder the sound, and the greater the stress, of which we may distinguish infinite degrees. If we distinguish only three, they are called weak, medium and strong. The use of stress in different languages shows the same variety as quantity. Some languages, such as French, make comparatively little use of its distinctions, uttering all the syllables of words and sentences with a more or less even degree of force. English, on the other hand, makes great use of minute distinctions of stress both to distinguish the meanings of words and to mark their relations in sentences.

With stress is closely connected the question of *syllable-division*. A syllable is a group of sounds containing a "syllabic" or syllable-former, which is, of course, able to constitute a syllable by itself. The distinction between syllabic and non-syllabic depends on sonority, the more sonorous sounds being the voiced ones, while of these again, the most open are the most sonorous, the most sonorous of all being the vowels, among which, again, the openest are the most sonorous. But these differences are only relative. When a vowel and a consonant come together the sonorousness of the vowel always overpowers that of the consonant, so that the two together only constitute one syllable. But in such a word as *little* the second (l) is so much more sonorous than the accompanying voiceless stop that it assumes syllabic function, and the whole group becomes dissyllabic to the ear. The beginning of a syllable corresponds with the beginning of the stress-impulse with which it is uttered. Thus in *atone* the strong stress and the second syllable be in on the (t), and in *bookcase* on the second (k), the first (k) belonging to the first syllable, so that the (kk) is here double, not merely long, as in *book* (bukk) by itself.

Intonation or variation of tone (pitch) depends on the rapidity of the sound-vibrations the more rapid the vibrations, the higher the pitch. Intonation is heard only in voiced sounds, as being the only ones capable of variations of pitch.

In singing the voice generally dwells on each note without change of pitch, and then leaps up or down to the next note as quickly as possible, so that the intervening "glide" is not noticed—except in what is called portamento. In speaking, on the other hand, the voice hardly ever dwells on any one note, but is constantly gliding upwards or downwards, so that an absolutely level tone hardly ever occurs in speech. But in the rising and falling inflections of speech we can distinguish between "voice-glides" (portamentos or slurs) and "voice-leaps," although the distinction is not so definite as in singing.

Of the three primary forms of intonation the level tone () can be approximately heard in *well* as an expression of musing—although it really ends with a slight rise, the rising (') in the question *well?*; the falling (') in the answer *yes*. There are besides compound tones formed by uniting the two last in one syllable. The compound rising tone (') may be heard in *take care!* the compound falling tone (') in the sarcastic *oh!* All these tones may be varied according to the intervals through which they pass. The greater the interval, the more emphatic the tone. Thus a high rise, which begins high, and consequently can only rise a little higher, expresses simple question, while the same word, if uttered with a low rise extending over an interval of between a fifth and an octave—or even more—expresses various degrees of surprise or indignation, as in the emphatic *what!* compared with the simply interrogative *what?*

In English and most European languages, intonation serves to modify the general meaning and character of sentences. This is *sentence-intonation*. But some languages, such as Swedish and Norwegian, and Chinese, have *word-intonation*, by which words which would otherwise be identical in sound are distinguished. The distinction between Gr. *oikoi* and *oîkoi* was no doubt one of intonation.

Glides.—Such a word as *cat* consists not only of the vowel and the two consonants of which it is made up, but also of "glides" or transitions between these sounds. The glide from the initial consonant to the vowel consists of all the intermediate positions through which the tongue passes on its way from the (k)-position to the (ae)-position. The number of these positions is infinite, but they are all implied by the mere juxtaposition of the symbols, for it is assumed that in all transitions from one position to another the shortest way is taken. Although the direction of a glide is dependent on the positions of the two fixed points between which it lies, its character may be varied both by the shape of the configurative passages—especially the glottis—and by stress and quantity.

In the word given above the "off-glides" from the consonants are both breath-glides, the glottis being kept open during the transition from the voiceless consonant to the following vowel, or, as in the case of the final consonant, to silence. The "on-glide" from the vowel to the (t) is, on the other hand, a voice glide, the closure of the glottis being maintained till the stop is made.

In French and most of the languages of the south of Europe voiceless consonants are followed by voice-glides. Thus in French *qui* there is no escape of breath after the (k), as there is in English Key. Other languages again have breath on-glides before voiceless stops.

If an independent strong stress is put on the breath-glide of English *key*, it is heard almost as a full independent consonant, and becomes an "aspirate." Aspirated steps may be heard in the Irish-English pronunciation of such words as *tell*, and also in Danish, and in Sanskrit as pronounced in India. If the voice-glide after a voice stop is emphasized in a similar way the "sonant aspirates" of Sanskrit and its modern descendants are produced, as in Sanskrit *dhanu*.

Glides are especially important from an acoustic point of view. Acoustically speaking, indeed, voiceless stops are pure glide sounds, the stop itself being inaudible. In voice-stops, on the other hand, the stop itself can be made audible as well as the intervening glides. In English these latter are fully voiced when they come between voice sounds, as in ago; but when preceded by voiceless sounds or by a pause, as in go! they are formed with imperfect vocality, full voice being heard only just before the stop is loosened. So also initial English (z) as in zeal is formed with imperfect vocality under the same conditions, so that it

sounds like (sz). In French and other languages which have voice-glides after voiceless consonants initial (g, z) &c. are fully voiced.

Consonant-glides may be further modified in various ways. In the formation of "implosive" stops, such as occur in Saxon German, Armenian and other languages, voiceless stops followed by voice-glides are modified by simultaneous closure of the glottis, the larynx being raised by means of its muscles, so that it acts like a plug, compressing the air between the closed glottis and the mouth-stop, so that when the latter is released a peculiar choky effect is given to the off-glide.

Rounded glides may be heard in Russian in such words as *komnata*, where the rounding of the (o) is anticipated in the preceding consonant, being heard, of course, only in the off-glide of the consonant. The acoustic effect is between that of (kwo) and ordinary (ko).

Glideless consonant-combinations remain to be considered. The general articulative principle of taking the shortest way between sounds in juxtaposition necessarily results in certain transitions being effected without any glide at all. This is regularly the case when the consonants have the same place, and differ only in form, as in (nd, dlt), where the point of the tongue remains unmoved through the whole sound-group. In such combinations as (mf) the very slight glide is often got rid of entirely by assimilating the place of the first consonant to that of the second, so that the (m) becomes a lip teeth consonant, as in English *nymph*.

Even when consonants are formed in different parts of the mouth it is often possible to join them without any glide. In English such combinations as (kt, pt) are glide less, the point of the tongue being brought into position before the preceding stop is loosened. In French and most other languages such consonants are separated by a breath-glide.

Combinations of stops and vowel-like consonants (tr, gl, kw) are glideless in English and most other languages. In English the breath-glide after a voiceless stop unvoices the beginning of the following vowel-like consonant; thus *try* is almost (trhrai).

Vowel-glides.—Vowels are begun and ended in various ways. In the "gradual beginning," which is the usual one in English and French, the glottis is gradually narrowed while breath is being emitted. In the "clear" beginning the breath is kept back till the glottis is closed for voice, which begins without any "breathiness." German favours the clear beginning, generally exaggerating it into a glottal stop.

In the gradual as well as the clear beginning the stress begins on the vowel. If in the former it is thrown back on the breath glide, the latter is felt as an independent element and becomes the "aspirate" or (h), which in English and most other languages is a glide not only in the throat but in the mouth as well, the tongue and lips gradually moving up into the position for the following vowel while the glottis is being closed.

There is also a "strong" aspirate, which occurs in Finnish and other languages, in the formation of which the full vowel position is assumed from the beginning of the aspiration, which is therefore a voiceless vowel.

In most languages, when an aspirate comes between voiced sounds it is formed with imperfect vocality, the contrast of which with the full vocality of the other sounds is enough to produce the effect of breath Thus in Enlglish *behold* the voice runs on without any actual break, the glottal closure being simply

relaxed, not fully opened for breath, as in the emphatic *aha!* In some languages, such as Bohemian, this "voice-aspirate" is used everywhere, initially as well as medially.

Vowels are finished analogously, either by a gradual opening of the glottis, or by a cessation of aspiration while the glottis is still closed for voice. If stress is put on the gradual ending it becomes a distinct aspirate, as in the Sanskrit "visarga" in such a word as *manah*.

Organic Basis.—Every language has certain general tendencies which control the formation of its sounds, constituting its "organic basis" or basis of articulation. The tendency of the present English is to flatten and lower the tongue and draw it back from the teeth, while the lips are kept as much as possible in a neutral position. The flattening of the tongue makes our vowels wide and favours the development of mixed vowels, and gives the dull quality which is especially noticeable in our (1); and its retraction is unfavourable to the development of teeth sounds; while the neutrality of the lips eliminates front-round vowels. In such a language as French everything is reversed. The tongue is arched, and raised, and advanced, and the lips articulate with energy. Hence French sounds tend to narrowness, mentality and distinct rounding.

National Sound-systems.—Each language uses only a part of the general phonetic material. Each one has only a limited number of sounds; and each one makes only a limited use of the synthetic distinctions of quantity, stress and intonation. As we have seen, many of these differences between individual languages are the result of, or may be referred to, differences in their organic basis.

Just as cognate languages differ from each other in phonetic structure, so also dialects of the same languages differ from each other more or less. Thus the sound-system of Lowland Scotch—which is, historically, a dialect of Northern English—differs considerably from that of standard English. Standard English itself was originally that mixture of the Midland and the Southern dialect which was spoken in London in the middle ages, just as standard French is, historically, the dialect of that district of which Paris is the centre. Standard English, like standard French, is now more a class-dialect than a local dialect: it is the language of the educated all over Great Britain. But it is not yet perfectly uniform. It is still liable to be influenced by the local dialects in grammar and vocabulary, and still more in pronunciation.

Again, English, like all other living languages, changes from generation to generation. Pronunciations which are vulgar in one century may become fashionable in the next. Sounds which are distinct in one generation may be confounded in another, and new distinctions may be made, new sounds may arise. A spoken language is, therefore, necessarily a vague and floating entity, and English is no exception to the rule. The very fixity of its written form gives all the freer play to the influences which cause change.

A standard spoken language is, strictly speaking, an abstraction. No two speakers of standard English pronounce exactly alike. And yet they all have something in common in every sound they utter. There are some divergences, some peculiarities of pronunciation, which pass unnoticed, while others, less considerable perhaps in themselves, are at once felt as archaisms, vulgarisms or provincial isms, as the case may be, by the majority of educated speakers.

Here the vowels are in four rows: (1) normally short, or, more correctly, monophthongic, (2) long, or half-diphthongic, (3) full diphthongs, (4) murmur-diphthongs.

Those under (1) are often lengthened in monosyllables such as *ten*, *good*, but they always remain absolutely monophthongic. The only one in the next row that is always strictly monophthongic is (99): all the others, as we shall see, tend to become more or less diphthongic, especially in the south of England, being often exaggerated into full diphthongs of the (ai) and (au)-type in vulgar speech.

- (a), as in *come up*, is the short vowel corresponding to the (aa) in *calm*. (aa) is the mid-back-wide vowel, and (a) differs from it only in being narrow. Acoustically (a) is a muffled or obscure (aa): an the same effect may be produced by advancing the tongue from the mid-back to the corresponding out-back position, preserving the wide articulation: this ronunciation of u is common in the south of England. Historically, these sounds are the result of unrounding and older (u).
- (a), as in *sofa*, is a mixed vowel, tending to wideness and mid position, which occurs only unstressed. (a) in *turn*, *earth*, is low-mixed-narrow. It is the result of absorption of an older (r), weakened into (a).
 - (æ), as in *man*, is low-front-wide, from older mid-back-wide.
- (i) in *it* is high-front-wide. The long (ii) in *eat* is narrow in the north of England, while in the south it is wide (') followed by (j).
- (e) in *men* is generally mid-front-wide. (ei) in *mane* is the same vowel either narrow or wide, raised in its latter half towards (i).
 - (u) in *good* is high-back-wide-round. Narrow (uu) in *too* becomes (uw) in southern English.
- (o) in *not* is low-back-wide-round. In (ou), as in *no*, the midback-round vowel, either narrow or wide, is over-rounded in its latter half. (a), as in *all*, is low-back-narrow-round.

The full diphthongs (ai, au, oi), as in *eye*, *now*, *oil*, all end in lowered high vowels. Their first elements are only roughly indicated by the transcription, and vary in the mouths of different speakers. That of (ai) is generally the out-mid-back-wide, that of (au) the broader low-mixed-wide, that of (oi) the mid-back-wide-round.

The murmur-diphthongs (ia) as in *here*, (ea) as in *air*, (ua) as in *poor*, all tend to broaden their first elements. That of (ea) is the low-front-narrow vowel. The other two begin with lowered forms of the wide (i) and (u) respectively. In (ua) the lowering is often carried so far as to make *poor* almost, or completely, into pore (poa).

Characteristic features of the English consonant-system are the large number of hisses and buzzes, the sharp distinction of breath and voice, and, negatively, the absence of the open-back consonants, and of the voiceless forms of the vowel-like consonants (l, r) and the nasals, most of which still existed in Old English.

John Wells. Why phonetic transcription is important

1. Introduction

In this talk I want to discuss the usefulness and importance of phonetic transcription for people studying languages. Since most of you here are phoneticians, you are presumably already convinced of this; I may be preaching to the converted. Nevertheless, there are many language

teachers who appear to be far from converted, and I believe that certain arguments do need to be spelled out.

The principal reason for using phonetic transcription is easily stated. When we transcribe a word or an utterance, we give a direct specification of its pronunciation. If ordinary spelling reliably indicated actual pronunciation, phonetic transcription might be unnecessary; but often it does not.

This is obvious when we consider a language such as English, whose spelling is blatantly irregular; or a language such as Chinese, with a non-alphabetic orthography, whose written form generally does not give any direct information about pronunciation (and of course this applies also to Chinese characters used in writing Japanese or Korean). But even in languages with so-called phonetic orthography, such as Swahili, Finnish or Korean han'gŭl, there may be sporadic mismatches between the sound and the spelling of words, while there are almost always phonetic characteristics of continuous speech that are not reflected in the orthography.

For the language learner, a passive acquaintance with phonetic transcription enables him or her to extract precise and explicit information on pronunciation from a dictionary, bilingual or monolingual.

Without this information, a learner risks being misled either by an inadequately trained ear or by the dazzling effect of the ordinary spelling.

Nowadays learners of foreign languages ought to have ample opportunities of hearing the language spoken, and not just by their teacher and their fellow-pupils. Television, video tapes, cassettes and CDs give today's learners an advantage which earlier generations did not have. However, mere exposure to authentic language material, while it will certainly improve a learner's comprehension ability, is not sufficient to ensure a good productive command of the language or a good pronunciation. Almost everyone can benefit from explicit pronunciation teaching, in which the use of phonetic transcription has an important role.

In what follows I shall concentrate on the teaching and learning of English; but many of the points apply to other languages too.

2. The dictionary entry

A good dictionary gives information on a whole range of matters. As well as telling you what a word means (by translation or otherwise), it should at least give relevant information about its grammatical status and about its pronunciation.

There are various ways of giving information about pronunciation: respelling using orthographic conventions of the learner's language, respelling using orthographic conventions of the target language, or phonetic notation. All of these can be regarded as types of phonetic transcription, though they may well vary considerably in quality.

The easiest transcription system for the beginner is arguably a respelling using the orthographic conventions of the first language: for example, showing English pronunciation in a Korean-English bilingual dictionary by transcribing English pronunciation into han'gŭl, in a Japanese-English bilingual dictionary by transcribing it into katakana, or in a Turkish-English bilingual dictionary by writing it in Latin letters with Turkish spelling conventions. In its crudest form, this has the major drawback of treating English as if its sound system were the same as that of the learner's first language. At the very least the transcription system will need to be made more elaborate, and therefore more complicated, by devising ways of symbolizing those sounds of English that are not found in Korean, Japanese, or Turkish respectively. Obvious examples of such sounds are the two th-sounds of English, the voiceless and voiced dental fricatives heard in thin and this respectively; or the vowel sound of the word nurse (no matter whether we take British RP or GenAm as our pronunciation model for English).

Respelling systems using English orthographic conventions are found mainly in monolingual dictionaries aimed at native speakers. Such systems are still generally in use in the United States, though I am gratified to say that in Britain they have quite recently been displaced by transcriptions using the International Phonetic Alphabet. They have to contend with various awkward facts about traditional English spelling: for example, that there is no unambiguous way of spelling the diphthong sound /ao/ (as in mouth, now), because both ou and ow, the obvious candidates, correspond to a different diphthong in soul, own (not to mention still other possibilities for ou exemplified in the words group, thought, could, cough, double, tourist, journey). There is no unambiguous way of showing the diphthongs of price, goat in traditional English spelling; so respelling systems have to resort to special symbols involving the letters i and o with a macron diacritic $(\bar{\imath}, \bar{o})$. We can be proud that EFL dictionaries have led the way in employing IPA notation, which is unambiguous and systematic.

3. How is this word pronounced?

Every beginner needs to learn, for example, that the w in the English word write has to be ignored. This word is pronounced identically with the much less common word rite. We can show this by transcribing them: they are both transcribed phonetically as /raɪt/. Furthermore, there is yet another word pronounced in the same way: right. All three words are homophones.

Strangely enough, there are many native speakers of English to whom facts such as this are not self-evident. English people beginning the study of phonetics sometimes imagine that words such as write and wrong begin with a w-sound. Or they may believe that know ends with one (but not no). They are so dazzled by their knowledge of the spelling that they hold quite mistaken views about pronunciation. And there are learners of English as a foreign language who get equally misled by the spelling.

Learners of English have to contend with the ambiguity inherent in many spelling sequences. As you know, o plus consonant letter plus e usually corresponds to BrE / σ 0/, AmE / σ 0/, as in home, nose, vote. But sometimes, as in love, come the vowel is / Λ /; and in move it is / σ 1. Where the letter o denotes a short vowel, the sound is usually BrE / σ 1/, AmE / σ 2./, as in lot, top. But in many other cases it is / Λ 1/, as in front, monkey. In the case of the combination or the sound is usually / σ 2./ (with or without a following r-sound depending on whether we are taking non-rhotic RP or rhotic GenAm as our model), as in north, short, core. But after the letter w we find a quite different vowel sound — BrE / σ 3./, AmE / σ 3./ — in work, word, world, and in BrE another one again, / Λ 4/, in worry. In unstressed syllables the pronunciation is usually / σ 3, σ 4/), as in minor, tractor and also in information, Oxford (even though many EFL learners wrongly believe these words are pronounced with / σ 3./ in the second syllable).

There are various "reading rules" (spelling-to-sound rules) to help the learner pass from the written form of an English word to the spoken form. (A certain amount of information is available at each letter of the alphabet in my LPD, Wells 1990/2000; for a very thorough survey, see Carney 1994). But these rules are complicated and have many exceptions. In practice it is necessary to learn the pronunciation of many words individually.

4. Ambiguous spelling

Some English spellings are entirely ambiguous. If you see the spelling entrance, you will need the context to decide whether it denotes the way in, pronounced /'entrans/, or the verb meaning to fill with wonder and delight, to /m'trans/. Other homographs (same spelling, different pronunciation and meaning) include bass, bow, buffet, does, gill, lead, live, minute, putting, read, resume, tear, tinged, wind, wound (Carney 1994: 397-399; Cruttenden 1994: 211-212). As soon as we transcribe them, we show the difference in pronunciation.

There are also some tricky verb-noun and verb-adjective pairs. English has nearly a hundred words of the type conduct, digest, incense, object, pervert, where the same spelling is used for a verb, with final stress, and for the related noun, with initial stress. Associated with the stress difference there is often a difference in vowel quality, because of the phenomenon of vowel reduction.

Tiresomely, there are many other English disyllabic verb-noun pairs where both are pronounced alike, with no difference of stress: thus control, promise.

An important group of verb-adjective or verb-noun pairs are those ending in -ate. The verb separate is pronounced /'sepəreɪt/, as in the two friends separated at the crossroads. Here, as you observe, the suffix has a strong vowel, the diphthong /eɪ/. But the corresponding adjective, spelt identically, is usually pronounced /'seprət/, as in we want separate bills, or (as an adverb) in they left separately. Here the suffix has a weak vowel, in RP traditionally /ɪ/ but nowadays more usually

/ə/. One consequence is that the structural description for the process I call compression is now met, so that the basic three syllables readily get reduced to two.

Similar considerations apply to many other words in -ate, including advocate, appropriate, delegate, intimate, moderate, subordinate. Notice that the main word stress remains in the same place in these cases. The same applies to words in which -ment is attached to a bound form, including compliment, document, increment, ornament: thus I paid her a complim/ə/nt; I complim/e/nted her on her excellent work.

Relevant here is the whole question of strong and weak forms of function words (see e.g. Cruttenden 1994: 228-229). Words such as of, can, them have a strong form with a strong vowel, /pv, kæn, ðem/, used mainly when accented, and a weak form with a weak vowel, /pv, kpn, ðem/, used otherwise. This alternation is not shown in spelling, but anyone who fails to apply it in casual speech sounds very un-native-like.

Facts of this kind are not revealed in ordinary spelling, but are immediately evident once we use a phonetic transcription.

5. Transcribing from an orthographic text

Ideally, then, every learner should learn the correct pronunciation of a word at the same time as he incorporates it into his active vocabulary. Experience shows, however, that even advanced students often fail in this task. Fluent speakers of EFL may have an inaccurate impression of what the native-speaker pronunciation of a word is; the inevitable corollary is that their own oral production of it is flawed.

A useful exercise for more advanced learners is "doing transcription", i.e. transcribing an orthographic text, a passage of ordinary English prose, into phonetic symbols (normally, into a phonemic version, perhaps including intonation). In our phonetics classes at University College London we regularly make both our native-speaker and our EFL students of phonetics do this kind of exercise.

For ordinary weekly coursework the student can consult a pronouncing dictionary whenever needed. Under examination conditions, however, the exercise is done unseen, and the student must rely on memory alone. It is both revealing and depressing to see how many errors of transcription are made even by some quite advanced students. I take the following examples from one of our best Spanish-speaking MA Phonetics students, who speaks English fluently and idiomatically, as well as having an excellent grasp of phonetic theory. These are some of her errors in the transcription of English words in a recent examination:

weather	'weəðə	instead of	'weðə
releasing	rıˈliːzɪŋ		rı'li:sıŋ
polluting	pəˈlʊtɪŋ		pəˈluːtɪŋ

nuclear 'nokljə 'njuːkliə 'kemɪkəlz 'kemɪkəlz

The first of these words, in the British Received Pronunciation we teach as standard, ought to be transcribed /'weðə/. The student's use of /eə/ must be a false inference from the spelling. In fact, weather in RP is a homophone of whether. The only position in which orthographic ea sometimes corresponds to phonetic /eə/ is when followed by r, as in bear, swear.

The distinction between /s/ and /z/ is difficult for learners who do not have that phonemic contrast in their mother tongue. Unlike please, which does contain /z/, release has /s/. In pollute and nuclear, the spelling suggests only /u:/, not /v/; perhaps the student was misled by familiarity with the spoken form of these words, in which however the relatively short duration of the vowel is caused by pre-fortis clipping (Wells: 1990: 136), not by inherent shortness.

Even advanced students sometimes forget the phonetic rules for regular plural and past tense formation in English. Although spelt with s, the plural ending is pronounced /z/ if the preceding segment is voiced and non-sibilant.

Clearly someone who thinks they are pronounced as transcribed above (wrongly) is not going to pronounce them correctly, and will have a noticeable foreign accent.

6. Types of transcription

For the last part of this talk I would like to consider phonetic transcription from a more general point of view. Beginners in phonetics often imagine that in transcription we can use one symbol for each "sound", a separate phonetic symbol for each sound-type our ears or our machines can detect.

However this approach is not practical. What might appear to be "the same sound" in two different languages usually turns out, on closer inspection, to exhibit certain differences. Even within a given language, "the same sound" usually comprises a fair number of different variants associated with different positions in the word or different phonetic environments. This is what lies behind the development, over the course of the past hundred years, of the notion of the phoneme (or of more sophisticated phonological units). It also explains why all phonetic transcription depends for its interpretation upon two things: the transcribed text itself, but also the conventions for its interpretation (Abercrombie 1964: 16-24; Jones, 1956: App. A).

The phonemic principle allows us to use the same transcription symbol for all the variants of a given phoneme. We can write the same /t/ in English /tpp, stpp, lpt, rptn, bptl/, despite the clear differences in aspiration and type of release. We can write the same /ao/ in now, louder, mouth, outing, despite differences in the duration of the diphthong. These differences, though real, are a matter of conditioned variation, determined by phonetic context. Every language has its own phoneme system and its own rules for allophonic variation.

The simplicity principle tells us to use the simplest phonetic symbol consistent with the avoidance of ambiguity. Although a few languages distinguish between dental and alveolar plosives, most do not. Although a few distinguish between aspirated and unaspirated plosives, most do not. This means that it is acceptable to use the same symbol /t/ for a range of sound-types in different languages: in English for what is typically an aspirated alveolar, in French for an unaspirated dental, in Swedish for an aspirated dental, and in Dutch for an unaspirated alveolar. The alternative is an explosion of complicated symbols and dictionary entries full of difficult diacritics.

Until we have determined the phonemic structure of a language, we can produce only an impressionistic transcription depending on our familiarity with general-phonetic sound-types. Once we have worked out the phonemics, we can use a systematic transcription, which will be simpler. This is what is appropriate for dictionaries and language textbooks. When considering connected speech, however, we need to take account of the features of connected speech, of the phrase-level and sentence-level phonology: we can produce a "phonotypical" transcription of how we expect a given sentence to sound, or alternatively an impressionistic transcription of what was actually uttered on a given occasion. Each has its uses.

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PRONOUNCIATION VARIETIES

John Wells. Our changing pronunciation

1. Introduction

I begin by thanking the Yorkshire Dialect Society for your kind invitation to address you today. I congratulate you warmly on your anniversary, and find it particularly appropriate that you have chosen to celebrate it here in Saltaire, with its connections with the great nineteenth-century dialectologist Joseph Wright.

As a northerner myself by birth and upbringing, I am always delighted to have an excuse to visit the north of England. I think that in this company I had better keep quiet about which side of the Pennines I hail from; but my late mother was unquestionably a Yorkshirewoman. She was born in Leeds and grew up there, and for the last third of her life she lived in Wensleydale. One of my earliest memories is of visiting relatives in Dent, where as a six-year-old I remember being addressed as the rather than you by my great-aunts and great-uncle.

My topic today is our changing pronunciation. I want to consider briefly a number of respects in which typical northern pronunciation is revealed as more conservative than Received Pronunciation (RP), our polite standard; and then one or two typical southern characteristics that turn out to be less conservative,

more innovative, than RP. Finally I shall present some evidence about ongoing changes in the pronunciation of certain particular words.

2. Conservative northernisms

The first pronunciation characteristic that I want to look at concerns words such as song, hang, ring - words which end in spelling with the letters ng. Now for most of us nowadays these two letters correspond to just a single sound, [ŋ], phonetically classified as a voiced velar nasal. Just as bag comprises three sounds, [bæg], so equally does bang, [bæŋ]. But it was not always so. Until perhaps about 1600, everyone pronounced words of this kind with a plosive, a [g]-sound, after the nasal: [bæŋg]. And of course you can still hear this pronunciation in Birmingham, Stoke, Manchester, Liverpool and even in Sheffield (though not, I think, in Leeds and Bradford).

The innovation of NG coalescence, the change whereby the two letters ng came to correspond to one sound rather than two at the end of a word, was a historical sound change that was resisted in these mostly western parts of the midlands and north, although it caught on everywhere else.

It has interesting consequences from the point of view of the phoneme system of the language, that is to say when we consider how many independent contrastive "sounds" we need to recognize in the language. As long as final postnasal [g] remains, the velar nasal can be considered a positional variant of /n. Once the loss has taken place, /n/ has to be recognized as a separate phoneme.

Note also what happens when a suffix is attached to a stem ending in historical ng. If we take the word singer, one who sings, we see that for most of us the stem-final [g] was lost just as in sing itself. But in finger, on the other hand, where the [g] is in the middle of a stem, it remains. Hence for most speakers singer ['sɪŋə] and finger ['fɪŋgə] do not rhyme. But in the local speech of Liverpool and Manchester they do, because in ['sɪŋgə] we get just the same sequence as in ['fɪŋgə]. The same thing applies if we compare kingly with singly, which rhyme in Manchester but not in London or Los Angeles.

Strangely enough, this matter of the variable [g] has a pretty low social profile. It is not perceived as a crashing local-accent feature which ambitious upwardly-mobile northerners might want to try to modify or eliminate. The next feature I want to look at, though, is generally perceived in exactly that way.

This is the matter of the vowel in words like strut, cup (and saucer), love and so on. As we all know, a typically northern pronunciation of these words is [strot, kop, lov], as opposed to the southern and RP [strat, kap, lav].

Notice, though, that southerners and RP speakers nevertheless have an [σ]-sound in items such as put and full, good and cushion. The historical development behind this is that the short u vowel inherited from Middle English underwent a split, perhaps 300 years or so ago. The mechanism of this split is not, I think, thoroughly understood; but the upshot was that in most kinds of modern English full does not rhyme with dull, nor put with cut. In my book Accents of English (Wells 1982) I called this split the FOOT-STRUT split, since FOOT and STRUT respectively were the keywords I used for the lexical sets affected. In terms of the phonemic system, English acquired an extra vowel contrast, leaving it with six stressable short vowels in place of the earlier five.

In the popular speech of the north of England, of course, this split was resisted, and that is why in these parts full and dull, pull and Hull are perfect rhymes, and so are put and cut, foot and strut. There are

still only five stressable short vowels. This is something we find everywhere north of a line roughly from the Severn to the Wash, up to the Scottish border.

When we come to people of the kind exemplified by William Hague - a man who sounds very definitely northern in his speech, though considerably up-market from the local working-class accent of where he hails from - we usually get a kind of compromise vowel. It's not a [kop] of tea for him, and not a [kap] either, but rather some kind of [kap]. More interesting than the question of the precise shade of vowel used is the question of whether pairs like put and cut rhyme in this kind of speech. Indeed they may well do so, because it's not just cut that has its vowel modified from [o], but put as well. This is the origin of the northernism at which, I'm sorry to say, southerners often laugh: when they hear sugarpronounced as ['ʃʌgə] or butcher as ['bʌtʃə]. This is what results when a northerner who basically has the five-term short-vowel system tries to imitate or acquire the RP/southern six-term system. It is a kind of hypercorrection. Unfortunately, the spelling doesn't help the aspiring northerner, since we find the same vowel letter in cut as in put, and the same letters in flood (RP [flʌd]) as in good [god]. If it impresses people to use [ʌ] in percussion, why does the same adjustment sound ludicrous in cushion? Why are outsiders not impressed when the definitely dialectal [luːk] for look is replaced not by RP-style [lok] but by something they take as luck?

Attitudes are different again when we take another characteristic feature of northern pronunciation, namely the use of a short vowel in words such as bath, staff, glass and answer. This reflects yet another instance of northerners standing out against a sound change that took root in the south of England and in RP, the change I call BATH Broadening. For a thousand years or more in the history of English bath and so on had had a short vowel, just as in words like cat and trap. But by three hundred years or so ago London people were lengthening this vowel in the position before $[f, \theta, s]$, voiceless fricatives. So bath went from $[ba\theta]$ to $[ba:\theta]$. In due course further changes meant that the long and short vowel qualities came to diverge rather noticeably, so that we now get $[ba:\theta]$ with a very different vowel-sound from cat [kæt].

Some words resisted this change. And new words with the short vowel came into the language. As a result, broad-BATH speakers now have non-rhyming pairs such as gl[a:]ss but g[æ]s, c[a:]stle but t[æ]ssel, bath but maths, pass but mass, disaster but aster, answer but cancer. And they still haven't altogether made up their minds about plastic, graph, and substantial.

The short-vowel pronunciation in bath is not stigmatized in the north in the way that $[\Lambda]$ in cup may be. Of course the north is supported here by American and Canadian English: indeed, from a world perspective it is RP and the south of England that are out of line, not the north.

An matter where we clearly see northern conservatism oppposed to southern innovation is in the long mid vowels exemplified respectively in the keywords face and goat. The long monophthongs we get in many parts of the north - as in [fe:s], [go:t], or rather opener versions tending towards [fɛ:s, go:t] etc. - can be compared with the diphthongizing innovation represented by RP [feɪs, gəʊt] and still more as compared with the wide diphthongs [fʌɪs, gʌʊt], etc., resulting from the diphthong shift that has taken place in the speech of London or Australia.

Some northern speakers retain a formerly widespread contrast between monophthong and diphthong, so that, for example, words such as late and eight do not rhyme, being [le:t] and [Eɪt] respectively; or so that there is a difference between toe [to:] and tow [tou].

3. Innovative developments in the south

There are many changes which appear to have arisen in, or spread from, the south of England. In particular, a number of developments that have arisen in the last two decades or so are associated also with the rise of what has been dubbed Estuary English - a term coined by Rosewarne, 1984, after the Thames estuary, and implying influence of the southeastern part of England centred on London. From the phonetic point of view, Estuary English is supposed to comprise the middle ground between traditional RP on the one hand and Cockney (London working-class speech) on the other. It is best seen as a variety of Standard English, though spoken with a regional accent, just as Standard English may be expressed in a northern or Scottish or Irish accent. But since London is, as ever, the main source of new fashions, in pronunciation as in everything else, many of the characteristics of Estuary English are being, or are likely to be, gradually incorporated into RP. Estuary English is well described in the popular though well-informed book Do you speak Estuary? (Coggle 1993), with its subtitle 'The new Standard English-how to spot it and speak it'.

The final vowel in words such as happy, coffee, valley was traditionally identified with the /i/ of bit. But many speakers nowadays identify it with the /i:/ of beat. In many recent works (e.g. Wells 1990, Roach 1991) the phonetic symbol /i/ is used, to denote this variable or intermediate quality, thus /ˈhæpi, ˈkɒfi, ˈvæli/. This notation reflects the fact that there is no actual opposition between /i/ and /i:/ in these weak syllables (happy does not become a different word by switching from one vowel to the other); what has happened is a change in the preferred phonetic quality of the weak vowel. If our phonological theory is sufficiently sophisticated to recognize a distinction between a strong vowel system (used typically but not exclusively in stressed syllables) and a weak vowel system (used only in unstressed syllables), then we can place /i/ in the weak system. It is used not only word-finally, but also before a vowel as in happier /ˈhæpiə/, various /ˈveəriəs/, radiate /ˈreɪdieɪt/.

Increasingly in RP words such as fold, goal are said with a back rounded diphthong with a starting point comparable to the [p] of lot. This new diphthong [pv] is found only before dark /l/, [t], or the vowel that develops from it (see below). Speakers who do this are often quite conscious of the difference between their [pv] and ordinary [əv]. Through a process of morphological regularization, they may extend this to words where /l/ is morpheme-final but followed by a vowel, yielding occasional minimal pairs such as wholly /'hpvli/ vs. holy /'hpvli/.

Traditionally classified as back and rounded, the vowels /u:/ and /v/ are not only losing their lip-rounding but also ceasing to be very back. Thus spoon, conservatively [spu:n], may now range to a loosely rounded [spu:n] or even [spi:n], while good/god/ is often pronounced with a schwa-like quality.

In various environments the consonant /t/ tends to be pronounced as a glottal plosive, [?], rather than as the traditional alveolar [t]. This t-glottalling is by now normal before a following obstruent consonant in a different syllable or word, as in football ['fo?bɔ:l], quite good [ˌkwar? 'god]. It is also frequent before a sonorant consonant in the same environment, as in witness ['wr?nəs], atlas ['æ?ləs], network ['ne?wɜ:k], quite wrong [ˌkwar? 'rɒŋ]. London's second

airport, Gatwick, for me has a careful variant [ˈgætwɪk] and a casual variant [ˈgæʔwɪk]. The phonetic environments for this development now, however, extend to word-final position even when the next word does not begin with a vowel, as in quite easy [ˌkwaɪʔ ˈiːzi], take it off [ˌteɪk ɪʔ ˈɒf], not only [ˌnɒʔ ˈəʊnli], or absolute-final (prepausal) right|| [raɪʔ]. Intervocalically within a word, as in city, water, glottal stops are still regarded as Cockney, thus [ˈsɪʔi, ˈwɔːʔə].

RP is traditionally described as having two main allophones of /l/: clear [l] used before a vowel and dark [t] used elsewhere. It is the dark allophone that is now undergoing a process of l-vocalization (becoming a vowel): $t \to 0$. Thus in a word such as milk, traditionally [mɪtk], the tongue tip may nowadays make no contact at all with the alveolar ridge: instead we have a new kind of diphthong, [mɪok]. Similarly shelf becomes [feof], tables ['teɪboz], apple ['æpo]. The position where this development is most favoured is adjacent to a labial, as in the latter examples; but it is no longer restricted to this position. When it applies to cases such as middle, little a natural consequence is that the lateral release found in conservative speech (['mɪdt, 'lɪtt]) is replaced by an ordinary median release, ['mɪdo, 'lɪto].

English has long had a tendency to convert /tj/ into /tʃ/, /dj/ into /dʒ/. We see this in the history of words such as nature, where the earlier /t/ plus /j/ has long ago been replaced by an affricate, /'neɪtʃə/. During the course of the twentieth century this process has continued apace. Jones pronounced actual as /'æktuəl/, a variant that nowadays would be perceived as mannered or indeed artificial: we say /'æktʃuəl, 'æktʃl/. For me, perpetual and to graduate have formal, extremely careful forms /pə'petjuəl, 'grædjeɪt/, but everyday forms /pə'petʃuəl, 'grædʒueɪt/. These are all words, you will notice, in which the new affricate is followed by a weak (unstressed) vowel. The process of yod coalescence continues to widen its scope, extending now to This makes Tuesday, conservatively /'tju:zdi/, begin /'tſuːz-/, stressed syllables. identical with choose /tfu:z/. Tune and duke become /tfu:n, dʒu:k/, and reduce comes to have a second syllable identical with juice. I like to think of the avoidance of this development as a touchstone of RP (as against EE, which clearly accepts it); but I am not sure that this claim can really be maintained.

4. Specific lexical items

The changes we have been discussing up to this point have all been general ones, applying in an environment that can be specified phonetically. There are other changes, though, that are lexically specific: they involve just a single word that has changed its shape. Thus for example nephew, which at the beginning of the century was usually /'nevju:/, is now mostly pronounced /'nefju:/. This is not part of a general trend affecting /v/ between vowels, but something affecting just this word.

My data comes from the survey of pronunciation preferences that I carried out for the Longman Pronunciation Dictionary (Wells 1990). In the dictionary I reported the polling results relating to close on a hundred words in which speakers were known to disagree about the pronunciation. These results were pooled for all respondents. What I have done now is to analyse the results by respondent's age. In some cases this reveals no difference at all between the old and the young: for example, in chrysanthemum the pronunciation with /s/ is preferred over the form with /z/ by a margin of approximately 60% to 40% by all age groups. In other cases there is sharp age grading, such that one can see a clear trend as a newer pronunciation, preferred by the young, comes to predominate over an older form.

Thus in nephew the /f/ form, preferred by 79% of all respondents, proves to be the choice of a mere 51% of those respondents born before 1923, but of as many as 92% of those born since 1962. There is a clear trend line, showing that the /v/ form (which happens to be the one I prefer myself) is due to disappear entirely before very long.

Similarly, the percentage preferring /su:t/ over /sju:t/ in suit has risen from 47% among the oldest group to 92% among the youngest. In deity /'dei-/ (as against /'di:-/) has risen from 40% to 98%. In zebra /'zebrə/ is preferred over /'zi:brə/ by 65% rising to 96%. In applicable stress on the second syllable is preferred over initial stress by 59% of the oldest, but by 91% of the youngest. In primarily, antepenultimate stress (/prat'merəli/ and the like) is preferred over initial stress (/'pratmərəli/) by 51% of the oldest but 77% of the youngest.

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John Wells. Whatever happened to Received Pronunciation?

The pronunciation model we traditionally adopt for British-oriented learners of English as a foreign language, Received Pronunciation, has been getting a bad press recently. We were recently told, for example, that "the cut-glass accent of home counties Britain is to be banished from the air waves by the BBC in favour of more energetic and vigorous voices from the regions" (Guardian, 27 Jan 1994). Parts of the BBC, claimed the then managing director of BBC network radio, Liz Forgan, were "lagging a little behind the sound of the nation, beginning to sound a bit antique". Ms Forgan, "herself a model of received home counties pronunciation", reportedly said she did not want presenters to sound like her. The subtext here includes the implication that RP is geographically non-regional and socially upper-class, qualities which demographic and social changed in Britain have made no longer as desirable as heretofore.

In this discussion I offer 3 ways of defining RP, 15 ways in which RP has changed or is changing, 7 words that have taken on a new shape.

First, then, lets us consider some issues relating to how we define RP. What criteria can we use?

The first possible criterion is sociolinguistic. If RP is associated with the upper end of the social scale, we can observe and investigate what kind of pronunciation the upper class actually use. The royal family furnish the most easily observed set of subjects, samples of whose speech is often available on television. Beyond this special and sometimes idiosyncratic group, the question arises how far down the social scale we should come in attempting to circumscribe RP. The proportion of the population regarded as upper-class is extremely small, and we clearly need to consider the upper-middle classes as well. Having defined our social group, our phonetic description would then be purely factual. —In former times the label "educated people" might have been used to identify RP-speakers; but demographic changes, particularly over the last forty years, mean that it is no longer the case that all or even most educated people in England speak RP as traditionally described. When I myself was an undergraduate, the proportion of my age-group that went to study at university was 7%. Among today's teenagers it is over 35%.

A second criterion is ideal. We ask, what pronunciation is correct? What is beautiful, what is admired and imitated? Another variant of this approach characterizes the selected accent as widely accepted, or as widely understood. This type of criterion cannot be taken at face value. There is no way of determining what pronunciation is correct other than by asking what people regard as correct. Judgements of beauty are subjective. It would be difficult to demonstrate that RP, although admittedly non-localizable, is truly more readily understood in modern Britain than educated Scottish, Irish, London-flavoured or Manchester-flavoured speech.

The third criterion relates specifically to EFL teaching. What form of pronunciation do we teach our (British-English-oriented) learners? What do we record in dictionaries and textbooks? What model pronunciation do we supply on recorded audio tapes and videos? (Agreed, we need to expose learners to a wide range of different accents for practice in comprehension. The point is, what model do we set before them for imitation?) A great achievement of my illustrious predecessor as Professor of Phonetics at UCL, Daniel Jones, was his codification of RP for teaching purposes. Out of a mass of variability he distilled a coherent model that could be taught and learned. However Jones was born in 1881. His model of RP, based essentially on his own pronunciation, is already over a century old. Jonesian RP is unquestionably obsolete: no-one pronounces quite like that nowadays. If we are to continue to prescribe RP as the model for EFL, as I believe we should — whether we continue to call it that or give it some other name — then we clearly have to redefine it so as to reflect the changes that have taken place in the decades that have passed since Jones's formulation.

The choice of defining criterion may have consequences for what we consider the phonetics of RP to be. Here are three points on which we might have different views according to which criterion we adopt.

Smoothing. This is the process whereby a diphthong may lose its second element when followed by another vowel. Thus for example fire /'faɪə/ may be smoothed to [faə]. Similarly, science /'saɪəns/ may be realized as [saəns], power /paʊə/ as [paə], Howard /'haʊəd/ as [haəd], and throwing /'θrəʊɪŋ/ as [θrɜɪŋ]. Now sociolinguistically this is clearly part of RP, since it is frequently to be observed in the speech of those native speakers in England who are located towards the upper end of the social scale. From the ideal point of view, on the other hand, it is not part of RP: one cannot imagine a school teacher correcting a child who failed to apply smoothing in his pronunciation. For EFL, it is in my view something that the learner should be aware of (so that he knows that [saəns] is to be interpreted as science); but it is not something that needs to be imitated in the learner's own speech production.

R Intrusion. Ordinary linking /r/ is the final consonant sound that comes and goes, appearing when a word is followed by a vowel sound in the next word. It corresponds to a letter r in the spelling: for example better /'betə/, but better off /'betər 'pf/. By analogy speakers of all social classes in almost all parts of England add an /r/-sound under the same circumstances even where there is no letter r in the spelling, as for example comma /'kpmə/, but put a comma in /'pot ə 'kpmər in/. Just as fear /fiə/ gives fear of /'fiər əv/ doing something, so idea /ai'diə/ gives the idea of /ai'diər əv/ doing something. Objectively, therefore, intrusive /r/ is part of RP. Subjectively, though, the speech-conscious often dislike it and disapprove of it, perhaps on the grounds that it involves "pronouncing a letter that isn't there". They would exclude it from

their ideal pronunciation model. For EFL we might again agree that the learner should be aware of it receptively, but can ignore it in production.

Words spelt wh. In words spelt with wh English people of all social classes and in all parts of the country normally pronounce plain /w/, as why /wai/, when /wen/, which /witʃ/, somewhere /'sʌmweə/. The words whine and wine are homophones. However a few speech-conscious people make the effort to pronounce /hw/ in these words, thus /hwai, hwen, hwitʃ, 'sʌmhweə/, and to make a distinction between /hwain/ and /wain/. (In Scotland, Ireland, and much of the United States, matters are different: their native local accent retains /hw/.) Sociolinguistically, /hw/ is so uncommon as to be negligible; ideally, it should perhaps be regarded as part of RP. For EFL, Jones rightly judged that it was an unnecessary complication.

Let us turn now to the time dimension, and consider the changes that on any reckoning have affected RP since Jones's day. We can group them in three chronological categories: those of the early twentieth century, those of the mid-century, and those of the late twentieth century. Subjectively for me, they represent those changes that happened before I learnt my native English; those where I or my contemporaries fluctuate, have variable usage (perhaps stylistically conditioned), or are divided; and those which have come about since my own younger days and do not form part of my own speech.

Changes from the early twentieth century

Transfer of the CLOTH set. In Jones's time, and until around the time of the second world war, words belonging to the standard lexical set CLOTH (Wells 1982) were usually pronounced with the vowel /ɔ:/ (as in thought); but nowadays they are pronounced with /p/ (as in lot). Examples include cough, soft, cross, lost — words in which the vowel is followed by a voiceless fricative.

Merger of /ɔə/ and /ɔ:/. There used to be a distinction in pronunciation in pairs such as floor /flɔə/ vs. flaw /flɔ:/. Even Jones recognized that some speakers in his time pronounced /ɔ:/ in words where he had /ɔə/, and by now the distinction is obsolete. In contemporary RP floor and flaw are homophones, as are four and for, cores and cause, shore and Shaw.

Change in the quality of the GOAT vowel. My predecessor Gimson's decision (1962) to change the transcription of this diphthong from /ov/ to /əv/ reflected the change that had taken place in pronunciation. In over the road /ˈəʊvə ðə ˈrəʊd/, I don't know /aɪ ˈdəʊnt ˈnəʊ/ we now use a diphthong with a mid-central, usually unrounded starting point. A century ago the starting point was back and rounded. A side effect of this change is that the corresponding weakened vowel, written by Jones as [o], thus November /no vembə/, has now become an ordinary /ə/, thus /nə vembə/. If we keep the first vowel strong in profound we have /prəʊ ˈfaʊnd/; if, as is more usual, we weaken it, we get /prə ˈfaʊnd/.

Opening of /æ/. Listening to old film clips or recordings we are often struck by the quality of the vowel /æ/ previously to be heard, as in that bad man /ˈðæt ˈbæd ˈmæn/. It was not only considerably less open than is now customary, but was also tenser and had more pharyngeal constriction. Currently this vowel is more relaxed and may be quite similar to cardinal 4 [a].

Loss of tapped /r/. A further change from this period was the loss of the alveolar tap [r] as a usual realization of /r/ between vowels, as in very sorry, better off. It has been replaced by the ordinary approximant [1].

Changes in the mid twentieth century

Decline and disappearance of /və/. Words formerly containing the diphthong /və/ have come increasingly to be pronounced with /ɔ:/ instead. Thus your is no longer /joə/ but /jɔ:/. Poor, sure, moor, cure, tourist are often /pɔ:, ʃɔ:, mɔ:, kjɔ:, 'tɔ:rɪst/. My survey figures for poor showed that when we group all ages together /pɔ:/ was preferred over the traditional /pvə/ by a margin of 57% to 43% of the respondents; but when we look at different age-groups separately /pɔ:/ was preferred by only 27% of the oldest respondents (born before 1923) as against a massive 81% of the youngest (born since 1962). Words such as jury, rural seem generally to be resistant to this change, and do not rhyme with story, choral. Rather, they seem now typically to be pronounced with a monophthong of the [v:] type, perhaps to be interpreted as a variant of /u:/.

Drift from weak /1/ to /ə/. In various categories of weak syllables /ə/ is increasingly used where /1/ formerly prevailed. Thus possible is now usually /'ppsəbl/ rather than, as previously, /'ppsɪbl/. For private and carelessness my father said /'praɪvɪt, 'keəlɪsnɪs/, but I say /'praɪvət, 'keələsnəs/. While both variants are still to be heard in these endings -ible, -ate, -less, -ness, and likewise in -ity, -ily, the balance of preference has, in my judgement, swung from /ı/ to /ə/. Where weak /ı/ was word-final, as in visibility, once / vɪzɪ'bɪlɪtɪ/, now / vɪzə'bɪləti/, a different change is taking place, as discussed below.

Plosive epenthesis. Between a nasal and a voiceless fricative, in words such as fence /fens/, answer /'a:nsə/, speakers increasingly now insert a plosive, thus /fents, 'a:ntsə/. This development appears to have a physiological origin, since it can be demonstrated to result from a slight adjustment in the relative timing of the movements of the soft palate and the primary articulator (the tongue tip). The result is that pairs such as mince and mints have become homophonous, /mints/. Other examples, shown here with the epenthesized consonant in italics, are emphasis /'empfəsis/, instance /'intstənts/ and conscience /'kpntfənts/.

Yod coalescence. English has long had a tendency to convert /tj/ into /tʃ/, /dj/ into /dʒ/. We see this in the history of words such as nature, where the earlier /t/ plus /j/ has long ago been replaced by an affricate, /'neɪtʃə/. During the course of the twentieth century this process has continued apace. Jones pronounced actual as /'æktʃuəl/, a variant that nowadays would be perceived as mannered or indeed artificial: we say /'æktʃuəl, 'æktʃo/. For me, perpetual and to graduate have formal, extremely careful forms /pə'petʃuəl, 'grædʒueɪt/, but everyday forms /pə'petʃuəl, 'grædʒueɪt/. These are all words, you will notice, in which the new affricate is followed by a weak (unstressed) vowel. Further discussion follows below.

T glottalling. In various environments the consonant /t/ tends to be pronounced as a glottal plosive, [?], rather than as the traditional alveolar [t]. This is by now normal before a following obstruent consonant in a different syllable or word, as in football ['fo?bɔ:l], quite good [ˌkwarʔ 'god]. It is also frequent before a sonorant consonant in the same environment, as in witness ['wrʔnəs], atlas ['æʔləs], network ['neʔwɜ:k], quite wrong [ˌkwarʔ 'rɒŋ]. London's second airport, Gatwick, for me has a careful variant ['gætwɪk] and a casual variant ['gæʔwɪk].

Changes in the late twentieth century

The developments that have arisen in the last two decades or so are associated also with the rise of what has been dubbed Estuary English — a term coined by Rosewarne, 1984, after the Thames estuary, and implying influence of the southeastern part of England centred on London. From the phonetic point of view,

Estuary English is supposed to comprise the middle ground between traditional RP on the one hand and Cockney (London working-class speech) on the other. It is best seen as a variety of Standard English, though spoken with a regional accent, just as Standard English may be expressed in a northern or Scottish or Irish accent. But since London is, as ever, the main source of new fashions, in pronunciation as in everything else, many of the characteristics of Estuary English are being, or are likely to be, gradually incorporated into RP. Estuary English is well described in the popular though well-informed book Do you speak Estuary? (Coggle 1993), with its subtitle 'The new Standard English—how to spot it and speak it'.

Tensing of final and prevocalic /i/. The final vowel in words such happy, coffee, valley was traditionally identified with the /i/ of bit. But many speakers nowadays identify it with the /i:/ of beat. In many recent works (e.g. Wells 1990, Roach 1991) the phonetic symbol /i/ is used, to denote this variable or intermediate quality, thus /ˈhæpi, 'kɒfi, 'væli/. This notation reflects the fact that there is no actual opposition between /i/ and /i:/ in these weak syllables (happy does not become a different word by switching from one vowel to the other); what has happened is a change in the preferred phonetic quality of the weak vowel. If our phonological theory is sufficiently sophisticated to recognize a distinction between a strong vowel system (used typically but not exclusively in stressed syllables) and a weak vowel system (used only in unstressed syllables), then we can place /i/ in the weak system. It is used not only word-finally, but also before a vowel as in happier /ˈhæpiə/, various /ˈveəriəs/, radiate /ˈreɪdieɪt/.

Rise of the diphthong [pv]. Increasingly in RP words such as fold, goal are said with a back rounded diphthong with a starting point comparable to the [p] of lot. This diphthong is found only before dark /l/, [t], or the vowel that develops from it (see below). Speakers who do this are often quite conscious of the difference between their [pv] and ordinary [əv]. Through a process of morphological regularization, they may extend this to words where /l/ is morpheme-final but followed by a vowel, yielding occasional minimal pairs such as wholly /'hpvli/ vs. holy /'hpvli/.

Change in the quality of /u:, o/. Traditionally classified as back and rounded, these vowels are not only losing their lip-rounding but also ceasing to be very back. Thus spoon, conservatively [spu:n], may now range to a loosely rounded [spoun] or even [spiin], while good /god/ is often pronounced with a schwa-like quality.

T glottalling. The environments for the glottal stop replacing [t] now extend to word-final position even when the next word does not begin with a vowel, as in quite easy [ˌkwarʔ ˈiːzi], take it off [ˌteɪk ɪʔ ˈɒf], not only [ˌnɒʔ ˈəʊnli], or absolute-final (prepausal) right. [raɪʔ]. Intervocalically within a word, as in city, water, glottal stops are still regarded as Cockney: [ˈsɪʔi, ˈwɔːʔə] belong neither to EE nor, of course, to RP.

L vocalization. RP is traditionally described as having two main allophones of /l/: clear [l] used before a vowel and dark [t] used elsewhere. It is the dark allophone that is now undergoing a process of vocalization (becoming a vowel): $t \to 0$. Thus in a word such as milk, traditionally [mɪtk], the tongue tip may nowadays make no contact at all with the alveolar ridge: instead we have a new kind of diphthong, [mɪok]. Similarly shelf becomes [feof], tables ['teɪboz], apple ['æpo]. The position where this development is most favoured is adjacent to a labial, as in the latter examples; but it is no longer restricted to this position.

When it applies to cases such as middle, little a natural consequence is that the lateral release found in conservative speech (['mɪdł, 'lɪtl]) is replaced by an ordinary median release, ['mɪdo, 'lɪto].

Yod coalescence continues to widen its scope, extending now to stressed syllables. This makes Tuesday, conservatively /'tju:z-/, begin /'tʃu:z-/, identical with choose /tʃu:z/. Tuneand duke become /tʃu:n, dʒu:k/, and reduce comes to have a second syllable identical with juice. I like to think of the avoidance of this development as a touchstone of RP (as against EE, which clearly accepts it); but I am not sure that this claim can really be maintained.

One further development that perhaps deserves mention is the rise of so-called uptalk or upspeak, the use of a rising nuclear tone on a statement, where a fall might be expected. The (presumably unintended) effect may be one of reluctance to commit oneself or of diffidence. This use of the rise may well have started in Australia or California, but is observably spreading to Britain.

Specific lexical items

The changes we have been discussing up to this point have all been general ones, applying in an environment that can be specified phonetically. There are other changes, though, that are lexically specific: they involve just a single word that has changed its shape. Thus for example nephew, which at the beginning of the century was usually /'nevju:/, is now mostly pronounced /'nefju:/. This is not part of a general trend affecting /v/ between vowels, but something affecting just this word.

My data comes from the survey of pronunciation preferences that I carried out for the Longman Pronunciation Dictionary (Wells 1990). In the dictionary I reported the polling results relating to close on a hundred words in which speakers were known to disagree about the pronunciation. These results were pooled for all respondents. What I have done now is to analyse the results by respondent's age. In some cases this reveals no difference at all between the old and the young: for example, in chrysanthemum the pronunciation with /s/ is preferred over the form with /z/ by a margin of approximately 60% to 40% by all age groups. In other cases there is sharp age grading, such that one can see a clear trend as a newer pronunciation, preferred by the young, comes to predominate over an older form.

Thus in nephew the f/ form, preferred by 79% of all respondents, proves to be the choice of a mere 51% of those respondents born before 1923, but of as many as 92% of those born since 1962. There is a clear trend line, showing that the v/ form (which happens to be the one I prefer myself) is due to disappear entirely before very long.

Similarly, the percentage preferring /su:t/ over /sju:t/ in suit has risen from 47% among the oldest group to 92% among the youngest. In deity /'dei-/ (as against /'di:-/) has risen from 40% to 98%. In zebra /'zebrə/ is preferred over /'zi:brə/ by 65% rising to 96%. In applicable stress on the second syllable is preferred over initial stress by 59% of the oldest, but by 91% of the youngest. In primarily, antepenultimate stress (/prar'merəli/ and the like) is preferred over initial stress (/'prarmərəli/) by 51% of the oldest but 77% of the youngest.

Conclusion

EFL teachers working within a British English-oriented environment should continue to use RP (though not necessarily under that name) as their pronunciation model. But this model must be revised and updated from time to time.

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Peter Trudgill. The sociolinguistics of modern RP

RP as a minority accent

An often cited statistic has it that in Britain RP speakers constitute only 3% of the population. When this statistic first became commonplace in the sociolinguistics literature, it was not unusual for people to dispute it. Certainly, at least in the 1970s, it seemed as if there were many more RP speakers around than that. However, a little reflection showed that this impression was due to the fact that it was much easier to hear speakers of the RP accent in the media than their proportion in the population would indicate. If people disputed the 3% figure, it was only necessary to ask them how many RP speakers they had had face-to-face contact with recently. Since most readers of sociolinguistic literature were not members of the Royal Family, the point was, in the end, well taken.

Perhaps, therefore, it will be as well to discuss where this statistic came from. The guilty party was myself. I popularised the 3% figure in Trudgill (1974). (Incidentally, I also suggested that only 12% of the population were speakers of Standard English, implying that 9% of the population normally speak Standard English with a regional accent, as mentioned in Chapter 15.) I did not, however, pick this figure out of thin air. It was, on the contrary, rather carefully considered, and was arrived at in the following way. My sociolinguistic urban dialect study of the city of Norwich, some of the findings of which were presented in Trudgill (1974), was based for the most part on interviews with a random sample of 50 people taken from the population of the city. This was a genuine random sample in which the entire voting-age population, at that time people aged 21 and over, had an equal chance of selection. As is normal with such samples, a small number of people refused to help, and one person had died. These were replaced in the normal way by others also selected randomly. I also rejected from my sample people who had not been brought up in Norwich and its vicinity - there was no point in investigating the phonology of Norwich English by talking to Lancastrians. The number of people rejected in this way was also very small - it would certainly have been much larger today. Out of this sample of 50 people, only one was an RP speaker. (None of the rejected outof-towners was an RP-speaker either). In other words, the evidence from my random sample was that the population of Norwich contained only 2% of RP speakers.

In considering to what extent I could generalise from this finding to Britain as a whole, I had to bear in mind a number of factors: sampling error could have meant that the true proportion of RP speakers in Norwich might actually have been as high as, say, 5%; then I had to consider the probability that there were more RP speakers in some places, such as Cheltenham or Bath, say, than there were in Norwich; equally I also had to take into account that there were yet other places, such as Glasgow or Hull, where the proportion might have been lower. In the end, I decided that 3% was approximately correct, but if anybody wishes to say that we should raise the figure to, say, 5%, I would have no objection. The point is that RP speakers have always represented a very small proportion of the population of native speakers of English in Britain.

This raises the interesting question: if RP is so very much a minority accent, why do we spend so much effort teaching it to non-native speakers RP, especially since, as David Abercrombie (1956:55) pointed out, it would make much more sense on purely phonetic grounds to teach, for example, Scottish pronunciation? My own response to the of question "why teach RP" is "why not?". After all, we have to teach something.

The sociolinguistic origins of RP

It is widely agreed that from a sociolinguistic point of view, this minority accent is rather unusual, and indeed it is perhaps unique. In many languages in the world that have been heavily standardised, the standardisation extends from lexis, orthography and grammar into phonology to a certain extent, and it is not at all unusual to find a particular regional accent that has higher status than others. What is unusual about RP, as discussed in the previous chapter, is that it is the accent of English English with the highest status and that it is totally non-regional. It is a defining characteristic of the RP accent that, while it is clearly a variety that is associated with England, and to a certain extent also with the rest of the United Kingdom, it otherwise contains no regional features whatsoever. Of course, typologically it has its origins in the southeast of England. Unlike accents from the southwest of England, for example, it is a non-rhotic accent. And unlike the accents of the north of England, it has /A:/ rather than /æ/ in the lexical sets of bath and dance. The point is, however, that it is not possible to ascribe any geographical origins to a genuine native RP speaker other than that they are almost certainly British, and probably English. This peculiar lack of regionality must be due to a peculiar set of sociolinguistic preconditions, and has in fact often been ascribed to its origin in British residential, and therefore also non-regional, schools for the children of the upper-classes, the so-called Public Schools.

Regional and social variation

The relationship between social and regional accent variation in Britain has often been modelled as having the form of an equilateral triangle (following Daniel Jones, as reported in Ward (1929) where, however, the diagram takes the form of a cone). The base of the triangle is broad, implying considerable amounts of phonological variation between the different regional accents spoken by the lower social classes. Going upwards from the base, the increasing narrowness of the triangle implies decreasing regional variation between the accents of speakers higher up the social scale. Similarly, the point at the top of the triangle indicates the total lack of regional variation we have already noted as characteristic of the RP accent, spoken as it is by people at the top of the social scale. There is no doubt that this model is an effective one. It is impossible, as we have said, to tell where an RP speaker comes from. It is usually possible to tell which broad region of the country middle-class speakers come from. And working-class speakers can usually be pinpointed even more accurately as to their geographical origins. Thus, an unskilled manual worker might be recognisable by anybody having the appropriate sort of linguistic knowledge as coming from Bristol, a nonmanual worker as coming from the West Country, a middle-class professional person as coming from somewhere in the south of England, and an upper-middle class RP speaker as coming simply from England, even if all of them had their origins in Bristol. Equally, a typical middle-class person from Birmingham will obviously have an accent which is phonetically and phonologically different from that of middle-class person

from Bristol, but the differences between the accents of two working-class speakers from the same places will be even greater.

There is a further interesting complication which we can add to the model, which has to do with a number of varieties of English spoken outside Britain, notably in Ireland and in the southern hemisphere -South Africa, New Zealand and Australia. In Australia, it is usual for linguists to claim that Australian English phonology demonstrates no, or very little, regional variation, but some considerable social variation. It has also become usual to refer to Australian accents as falling into one of three social accent types: cultivated, general, and broad. These terms are rather unfortunate since they suggest that there are three discrete varieties rather than the continuum of varieties which obviously exists, but the status-ordering is clear from the terminology: cultivated Australian consists of the accents with the highest status, while broad Australian consists of those with the lowest status, and general Australian comes in between. How does one recognise these accents linguistically? The answer is quite straightforward. Until relatively recently, RP had a role to play in Australian society as the accent with the highest status, and RP speakers were the people who were employed in broadcasting. Now, RP as such has more or less disappeared from Australia. It is associated in the minds of Australians with upper-class Britain, and increasing Australian national selfconfidence and cultural independence vis-à-vis the 'mother country' has meant that there are now very few, if any, native speakers of RP left in the country. However, the influence of the legacy of RP in Australia is still vitally important: cultivated Australian is precisely the accent type which most closely resembles RP, while broad Australian is the one which resembles it least. We should, that is, make a place in our triangle for regional varieties from beyond Britain as well.

The triangle model is also accurate in that it implies, correctly, that the situation is one which involves continua - both a social accent continuum, from high status to low status accents, and a geographical accent continuum, from one end of the country to another. Accurate, that is, with one exception: like standard dialects, RP is a standard accent which has undergone, albeit implicitly rather than explicitly, codification. The point is that speakers either have an RP accent or they do not. There are many people who have a so-called "near-RP" accent, but this is by definition not an RP accent. When it comes to employing a codified language variety, a miss is as good as a mile. Just as someone who otherwise uses only grammatical forms associated with Standard English but habitually says *I seen it* cannot be said to be a speaker of Standard English, it takes only one non-RP feature for a speaker not to be a speaker of RP.

Innovations in RP

This raises the interesting quasi-philosophical question of what is and is not an RP feature. RP, like all accents and dialects of all languages, is subject to changes, some of which are certainly internally generated. Descriptions of some of these can be found in Gimson (1962) and Wells (1982), and probably include the fronting of the GOAT vowel, and lowering of the TRAP vowel. Other changes, however, clearly make their way into RP over time by diffusion upwards from lower-status accents. Features which used not to be RP and now are RP probably include:

- a. the employment of intrusive /r/;
- b. the replacement of /O:/ by /O/ in the lexical set of *lost*, *cloth*, *off*;
- c. glottaling of syllable-final /t/ before another consonant;

- d. the merger of /U@/, /O@/ and /O:/;
- e. the fronting of /u:/.

As the discussion above suggested, the criterion for the inclusion of any feature in RP must be that it is not a regional feature. This implies that there will be features that for a period of time, while a change is taking place, may have an indeterminate status. One good example is provided by the case of what Wells (1982) has called HAPPY-tensing. This involves the replacement through time of word-final unstressed /I/ by /i:/, so that /hæpI/ becomes /hæpi:/. At the level of regional accents, this innovation appears to be one which is most characteristic of southern accents but which has been spreading northwards for many decades. For example, the Survey of English Dialects records show that many counties in the south of England which now have -/i:/ had -/I/ in the speech of rural Traditional Dialect speakers in the 1950s and 1960s.

RP has always had /l/ in such items. This was the one respect in which it resembled north of England rather than south of England accents. It was also the case that there were many people who had near-RP accents in that they had RP accents except that they had HAPPY-tensing. We could define such people as non-RP speakers because HAPPY-tensing was a regional feature - they were obviously from somewhere in the south of England. However, there is now some evidence that HAPPY-tensing is, or at least is going to be, a feature of RP. The conclusive evidence would be if we could show that younger speakers who otherwise have only RP features and who come from areas of the north of England which do not have HAPPY-tensing nevertheless do have it, unlike their - we could now say - regionally accented colleagues. HAPPY-tensing will now no longer be a regional feature, though absence of HAPPY-tensing will be. Note that this will force us into the position of having to say either that certain people aged, say, 50 who have HAPPY-tensing are not RP speakers, while certain people aged, say, 20 who have HAPPY-tensing are RP speakers; or, perhaps alternatively, that 50-year-old people who used not to be RP-speakers have now become RP speakers without changing the way they speak at all. I would personally not find either of these solutions ridiculous.

Changes in the sociolinguistic situation of RP

Phonetic and phonological changes are not the only changes which have been taking place involving RP. In the last few decades there have also been a number of changes in the sociolinguistic situation of RP, and in its relationship to other accents. Much of this appears to stem from a change in attitudes towards RP and other accents of British English on the part of the British population as a whole. Most of what we know about attitudes to English accents derives from a whole series of research programmes carried out by the social psychologist Howard Giles and his associates, particularly in the 1970s. Giles (see, for example, 1987), very skilfully using a whole range of research techniques, most notably matched-guise experiments, showed that it was a reasonably straightforward matter to gain access to peoples' attitudes to different accents of English without asking them directly - something which would naturally have produced a series of skewed results.

It was apparent from Giles' work that RP was perceived as being an accent associated, in the absence of information to the contrary, with speakers who were competent, reliable, educated, and confident. It was also perceived as being the most aesthetically pleasing of all British English accents. On the other hand, RP speakers scored low on traits like friendliness, companionability, and sincerity, and messages couched in RP also proved to be less persuasive than the same messages in local accents. (Notice also that there is a long

history in American science-fiction and horror films for sinister, menacing characters to be given RP accents.)

As far as changes in the last twenty years are concerned, we lack reliable research on most of these issues, but it is a matter of common - and not necessarily unreliable - observation that the RP accent is no longer the necessary passport to employment of certain sorts that it once was. Non-RP accents are very much more common on the BBC, for example, than they were forty years ago. And telephone sales companies, as I know from frequent requests from such companies for advice, now think about which regional accents will be most effective rather than automatically employing non-regional RP.

Discrimination on the grounds of accent still, unfortunately, occurs in British society. But this discrimination is no longer against all regional accents but only against those from, as it were, lower down the triangle. And it is also no longer permitted in British society to be seen to discriminate against someone on the basis of their accent - it has to masquerade as something else. This hypocrisy is a sign of progress, of an increase in democratic and egalitarian ideals. This has also, probably, though again we lack the research, had the consequence that an RP accent can be even more of a disadvantage in certain social situations than was formerly the case. In many sections of British society, some of the strongest sanctions are exercised against people who are perceived as being 'posh' and 'snobbish'. These factors also mean that many fewer people than before are now speakers of what Wells (1982: 283-5) has called adoptive RP: that is, many fewer people than before who are not native speakers of RP attempt, as adolescents or adults, to acquire and use this accent. Even Conservative Party politicians no longer have to strive for RP accents, as a recent Conservative Prime Minister once did.

The death of RP?

In spite of these observations, it is necessary to be sceptical about reports of two different types that appear to be rather common anecdotally, especially on the part of journalists in need of something to write about. The first is that RP is disappearing. The second is that RP is being replaced by a new, potentially non-regional accent. I will now discuss these two scenarios, which are largely myths, in turn.

There seem to be a number of reasons for the erroneous but understandable misperception that RP is disappearing. First, non-RP accents are now found, as we have already noted, in situations from which they would have been excluded only a few decades ago. It is therefore easy to gain an impression that there are fewer RP speakers than formerly. Secondly, the kind of people who in earlier generations would have been speakers of adoptive RP no longer are, as we have already observed. So there actually are fewer RP speakers, though not necessarily fewer native speakers. Thirdly, RP itself, again as we have already seen, has changed. It has acquired - as it always has over the generations - forms that before were part of local, notably southeast of England accents. This is what leads journalists to report that Public School pupils now 'speak Cockney'. It is true that RP now admits certain types of /t/-glottaling which were formerly associated with local accents only - but that most certainly does not mean that it is Cockney. This perception resembles the belief now current in my own home city, Norwich, where older people frequently complain that the youngsters 'talk like Londoners'. When asked why they say this, they invariably reply: 'Young people say fing instead of thing'. This is quite true (see Chapter 6) but otherwise they still sound as Norwich people have sounded for decades. One salient phonological feature can lead to utterly inaccurate stereotypical reports.

As far as RP is concerned, the ongoing work of Fabricius (2000) shows that the younger generations of those sections of the community one would expect to be RP speakers still are RP speakers. Pupils at Eton, and undergraduates at Cambridge University who are former pupils at the big Public Schools, are still for the most part RP speakers. Their RP has some new features, but these features are all, including /t/-glottaling, non-regional features and therefore must still be considered as being RP. (Non-regionality is a necessary but not sufficient condition for a feature to be considered RP. For instance, if all regions of England were to acquire /h/-dropping, something which will actually happen if, as seems possible, this phenomenon eventually reaches the northeast of England, that would not make it an RP feature!)

A competitor for RP?

As far as the second myth is concerned, this has to do with the development of so-called 'Estuary English'. This is an inaccurate term which, however, has become widely accepted. It is inaccurate because it suggests that we are talking about a new variety, which we are not; and because it suggests that it is a variety of English confined to the banks of the Thames Estuary, which it is not. The label actually refers to the lower middle-class accents of the Home Counties which surround London: Essex and Kent, which do border on the Thames Estuary, but also parts or all of Surrey, Berkshire, Buckinghamshire, and Hertfordshire, which do not. Early 'descriptions' using this label were by non-linguists. However, as described by John Wells, and by Altendorf (1999), Estuary English has obvious southeast of England features such as diphthong-shift, /l/vocalisation and merger of vowels before /l/, but it does not have features typical of working-class accents only, such as TH-fronting.

It is easy to obtain an impression from reading some of the commentators that 'Estuary English' is advancing on all fronts. I would like to dispute this, in some measure. There are a number of explanatory factors for this perception. First, as we have already seen, many people who in earlier generations would have become speakers of adoptive RP no longer become so. People who are upwardly socially mobile or who come into the public eye may still in fact reduce the number of regional features in their accents - they will move themselves up the triangle, as it were - but they will no longer remove all such features. It is therefore undoubtedly true that many more people than was formerly the case can be heard in public situations, especially in the media, speaking with lower middle-class regional accents. And of course the most prominent of these are from the southeast of England, (a) because this is the largest region of England in terms of population, and (b) because there is a considerable metropolitan bias in the media, with most nationally available media being broadcast from or published in London. Secondly, there has been a certain amount of upward social mobility in the last twenty years which has found people from lower middle-class backgrounds in socially prominent positions in which it would have been unusual to find them previously. Thirdly, at least some of the phonological features associated with 'Estuary English' are currently spreading, as London-based features have done for centuries, outwards into surrounding areas. In East Anglia, for example, /l/-vocalisation has not yet reached Norwich, but, as discussed (with maps) in Trudgill (1986), it reached Cambridge and Colchester some decades ago and is beginning to affect Ipswich. It is therefore undoubtedly the case that lower-middle-class southeastern accents cover a wider geographical area than was formerly the case, and will probably continue to spread for some time to come.

What I would strenuously dispute, however, is that this means that 'Estuary English' is going to be the 'new RP'. It is unlikely that it will ever become anything more than a regional accent, albeit the accent of a rather large region covering, together with its lower-class counterparts, the Home Counties plus, probably, Sussex, Hampshire, Bedfordshire, Cambridgeshire, Suffolk and parts of Northamptonshire. The sociolinguistic conditions are not such that it could turn into the new RP. There is no parallel here to the nationwide network of residential Public Schools which gave rise to RP. What we know about the geographical diffusion of linguistic innovations, moreover, indicates that there is no way in which the influence of London is going to be able to counteract the influence of large centres such as Liverpool and Newcastle which are at some distance from London. And we also know that linguistic innovations are not spread by radio and television (see Trudgill, 1986).

Reports that a few individual features such as TH-fronting are spreading across Britain northwards and westwards from London, though undoubtedly true, do not invalidate this point. This spreading of individual features is something which has always happened, and in any case TH-fronting is not to be considered an 'Estuary English' feature. The fact that young people in Cardiff are now using /t/-glottaling does not mean that they are speaking London English, or RP. And the fact that young people in Sheffield are now using TH-fronting does not mean that they are speaking Cockney. As anyone who has been to Sheffield recently can attest, people there do not sound remotely like Cockneys - or even like 'Estuary English' speakers.

This leads me again to raise the topic of which model to employ for teaching so-called 'British English', in reality English English, to non-native learners. It has been suggested that it would now make more sense to teach learners 'Estuary English' rather than RP. Of course, it must be true that there are more speakers of 'Estuary English' in England than there are of RP. And of course it is a good idea if 24-year-old Poles, say, sound as much as possible like 24-year-old, rather than 94-year-old, English people. I would therefore advocate rather strongly teaching intrusive /r/ and some forms of /t/-glottaling at least to advanced students. But I would not advocate the teaching of 'Estuary English' or of features associated solely with it, such as diphthong-shifted vowels or /l/-vocalisation, since these are specifically regional features.

New dialect and accent regions

The geographical spread of 'Estuary English' is part of a much bigger trend. What is happening in Britain, and probably not only in there, as far as regional linguistic variation is concerned, is rather complicated. On the one hand, much regional variation is being lost as the large number of Traditional Dialects covering small geographical areas gradually disappear from most, though by no means all, parts of the country. These, however, are being replaced by a much smaller number of new Modern Dialect areas covering much larger areas. The dialects and accents associated with these areas are much less different from one another, and much less different from RP and Standard English, than the Traditional Dialects were. However, and this is crucial, in terms of phonology they are for the most part currently diverging, not converging. The work of the European Science Foundation Network on Dialect Divergence and Convergence paints a very similar picture Europe-wide. Work in large urban centres such as Liverpool, Newcastle and Cardiff shows that, although these places are adopting some nationwide features such as labio-dental /r/, /t/-glottaling and th-fronting, they also demonstrate independent divergent developments,

such as voiceless-stop affrication in Liverpool and, from my own work in Norwich, the fronting of the GOAT-vowel from [u:] to [}:], the widespread smoothing of triphthongs as in *doing* /d3:n/, *knowing* /nV:n/, and the merger of the vowels of NEAR and SQUARE (see Trudgill, 1999). This is probably part of a much larger scale world-wide pattern where varieties of English around the world, while they may demonstrate lexical convergence, are diverging phonologically: accents of English from New Zealand to the United States are getting less like on another, not more (see the introduction to this section).

Parallel to the development of a large dialect region centred on London, whose lower middle-class accents have been referred to as 'Estuary English', we are seeing the development of similar areas elsewhere, as yet not much studied by linguists, focussing on centres such as Belfast, Dublin, Cardiff, Glasgow, Newcastle, Nottingham, Leeds, Liverpool, Manchester, Birmingham and Bristol. Mats Thelander (1979) reported similar developments 20 years ago from northern Sweden.

London-based journalists have not noticed this kind of development, but this is no reason for linguists to ignore it. To focus pedagogically on one of the newer, larger regional accents of British English to the detriment of all the others, just because it happens to be spoken in London, would be the worst kind of metropolitan bias, of which there is far too much in Britain already.

Conclusion

I am a non-RP speaker, but I believe that it is convenient that students learning English English still have a non-regional model available to them. The fact is that in spite of the developments just outlined, the triangle model remains an accurate one for a description of social and regional patterns of accent variation in Britain. The development of a network of regional varieties in Britain is taking place, as it were, underneath a non-regional, nationwide layer provided by RP. This layer is thinner than it was - the minority is probably even smaller than it was - but it is likely to remain intact until British society undergoes even more radical changes in its social structure than it has already undergone in the last twenty years.

John Honey. The establishment of the English RP accent: a flawed interpretation?

A standard form of written English, in the sense of a variety whose geographical provenance is undetectable, had its origins in developments in the 1420s in the central government bureaucracy in the capital, and, as Dr Mugglestone confirms in this book, was "clearly in existence" by the late 17th century (M10, i.e. Mugglestone, page 10). But, as with many other European languages, a standard variety of spoken English took much longer to emerge. Nevertheless, "over the course of the 16th and 17th centuries, a clear sense of an emergent standard of spoken as well as written English" became perceptible (M14). This interesting and valuable book, now available in paperback, tells the story of how that perception became widespread, to the point of establishing RP as the hypothetical model of present-day British English, at least as taught to foreign learners. Dr Mugglestone's account, however, also opens up a number of serious and disputable issues which it is the intention of this paper to explore.

Most of the elements of the standard accent were in place by the end of the 18th century, and in the period c. 1760 to 1800 five times as many works on elocution appeared as had done so before those years. Dr Mugglestone suggests that initially the intention of these authors was simply description, or at most consciousness-raising in regard to accent, but that into the 19th century the tide of prescription became ever

stronger. A set of shibboleths was identified, among which h- dropping - for the novelist Gissing, this was the "fiend"; for the commentator Kington-Oliphant "the fatal letter" M211) - was by far the most prominent; indeed, it was to be used by D.H. Lawrence to mark the social distance between Lady Chatterley and her gamekeeper (M107). After a period of uncertainty about the correct pronunciation of the vowel in fast and path, this settled down by the later 19th century in its present form. Other persistent concerns surrounded intrusive r and post-vocalic r, the vowels in cup and bull, and -in for -ing, (though she does not deal with that alternation commonly found, for example, in the second syllable of 'somethink' and 'nothink').

As the D. H. Lawrence example suggests, one of the most important and useful sections of this book deals with the representation of dialect in literature. Dickens is here shown to have deployed accent (and dialect) differences in a masterly way to indicate differences of class and education in various of his characters, significantly distinguishing between the non-standard-speaking ordinary folk and his mature heroes endowed with standard speech; and similar strategies and assumptions are scrupulously documented and analysed in the works of Smollett, Fielding, Gissing (an especially rich source), Mrs Gaskell, Hardy, Thackeray, Meredith, Charles Reade and others. Dr Mugglestone's chapter on the way the model of women's speech, as a key aspect of women's identity, was constructed in 19th century writings is a classic which deserves to be reproduced in anthologies for students of Women's Studies and, even more importantly perhaps, for male readers. A further chapter explores ways in which the newly standardised accent established its hold through the education system and finally (in a more perfunctory section), by the BBC after 1922.

The central theme of the book relates to the development of differential evaluations of spoken English, and there are big problems here. We know that where a society is vertically stratified - i.e. into 'classes' or castes or other levels involving unequal status or wealth, then some form of social stratification of language seems inevitable. A quarter of a century ago the American linguist Gillian Sankoff compared this with the situation of preliterate communities in (e.g.) Papua New Guinea in pre-colonial times, where there appeared to be almost no vertical social stratification, but a great deal of horizontal stratification, with thousands of small communities living alongside each other, keenly aware of particular differences which distinguished their lexis or grammar from those of adjacent communities, and with each community asserting strenuously that its own language was 'best', but aware that all their neighbouring communities asserted the same superiority for their own language or dialect. One of the very few manifestations of 'vertical' linguistic stratification here is in the realm of the language of magic, with its rituals and formulas expressed in esoteric language whose possession made it a 'language of power' for its speakers. Another aspect - not discussed then by Sankoff, nor here by Mugglestone - is the apparently universal tendency in even the technologically simplest societies to regard some forms of language as 'correct', with older members commenting unfavourably on, and attempting to control, the usage of the younger ones. This is reported for aboriginal tribes in Australia and is very apparent even among extremely small language groups in countries like Botswana.

By contrast, modern industrialised societies exhibit (in Sankoff's analysis) an unmistakeable degree of vertical linguistic stratification. Such stratification may simply mirror political and economic stratification, and linguistic elements may - like dress or etiquette - become the arbitrary symbols of rankings

in the social or economic hierarchy. But we need to note, pace Sankoff, that this is not the only form of stratification which is involved, despite the frequent attempts of sociolinguists to claim these ingredients as all-important. In ancient Rome and its dominions, linguistic stratification reflected the primacy of Greek language and culture, despite the political inferiority of the Greeks: what was crucial was respect for Greek culture, and not least its literature. For much of Japan's history, Japanese language and culture were in thrall to Chinese culture, despite the absence of political domination by China.

Among crucial factors in modern industrialised societies, the demand for specialist knowledge and a high regard for literacy have both led to a respect for the forms of language in which modern specialist knowledge is most commonly expressed, which is overwhelmingly the standard variety (cf. Gellner 1983).

There is now widespread recognition that language encodes a value-system, and we can readily see that the set of values and attitudes thus embodied can relate to such factors as nationalism, social class, status, locality or group solidarity. It thus becomes important to try to identify which, in any given manifestation of a 'social' correlate of language use, is the most compelling of all these potential factors.

In this respect, the problems raised by this book are not in its documentation, which is often magnificent, but in its interpretation. Like many sociolinguists (indeed, until recently, perhaps most: see Honey 2000) Dr Mugglestone accepts uncritically (M48) the linguistic equality hypothesis - admittedly more plausible in respect of accent than other aspects of linguistic variation. She then follows the Milroys (1985) in depicting the ideology of standardisation and prescription as essentially social elitism. The model of speech which was at first admired and then enforced was, she claims, that of the social elite. Against this, other varieties were persistently (and, in due course, insistently) denigrated as vulgar, vicious, savage, coarse, gross, barbarous, embarrassing, rude, bad, wrong, negligent, inattentive, depraved, unintelligent, inferior, a matter of disgrace or shame - all these words recur regularly throughout the late 18th and the 19th centuries, and of course into our own.

But a closer inspection of what all these writers whom she quotes actually said, beginning as far back as men like Hart in the 1560s and Puttenham in the 1580s, shows that their specifications of the most admired speech forms were not related to a social elite as such. They, and scores of writers about the more prestigious forms of language in the 17th, 18th and 19th centuries were united in identifying two sets of criteria, the first being educatedness and the second locality. Locality meant metropolitan rather than provincial, reflecting the unique pre-eminence of London, which around 1700 was (though she tells us little of this) the second city of Europe, the nation's thriving political, administrative, economic, legal, commercial and cultural giant, with a population easily ten times that of the two next-biggest cities put together, and more than three hundred times the size of most provincial towns in England. The speech of educated people in London was thus compared favourably with that of provincials on grounds of sophistication and knowledge of the world: as a popular writer wrote in 1774, the most admired speaker is "supposed to have seen too much of the world to retain the peculiarities of the district in which he was born" (M66). A century later, by which date the accent originating in the metropolis had come to be widely perceived as the norm, another such popular writer, this time in Scotland, would confirm that purity of accent consisted in its belonging "to no city or district" [loc. cit]. By contrast, regional speech everywhere in the British Isles was in danger of being stigmatised as 'provincial dross".

London was also a centre of professional education - legal and medical - though it had until the 1820s no university, and Oxford and Cambridge (especially the former) were also named in some definitions of the best speech. London's overwhelming and disproportionate influence as a literary centre is also highly relevant, since the conception of educatedness which gave prestige to the standard was dominated by literary models. It was also the capital for the stage, and the most important centre for those of the 'learned' professions which relied on impressive oral communication. We remember A. J. Ellis's important criterial reference in 1869 to "the educated pronunciation of the metropolis, of the court, the pulpit, and the bar" - by the last of which we should perhaps confirm, lest there be any repetition of the comic misunderstanding in a recent article [Shibles 1995] by an American linguist, that Ellis was referring not to the colloquial speech of "the pub" [sic] but to the characteristic professional speech of English barristers. Of course, to be a gentleman was one of the frequent accompaniments of educatedness, as had to be the case when so small a proportion of the total population had access to education beyond a very basic level. But it was never a defining characteristic: superior social rank was not in itself the guarantee of the right accent, and provincial gentry and aristocrats were often remarked unfavourably upon for not achieving it. Middlemarch specifically compares - unfavourably - the "accent and manner" of the local gentry with that of "a university man". (M254), and for a writer in 1836, residence for "any period in the country" could often lead to an almost ineradicable "coarseness & vulgarity of tone" (M67). Nor, emphatically, was wealth a defining characteristic of the right way of speaking: nouveaux riches were ridiculed throughout the whole period. What was wrong with all these parvenus was the discrepancy between, on the one hand their wealth, status, and power and, on the other, their inability to conceal, in their speech, their lack of educatedness.

So educatedness was more naturally to be expected among ladies and gentleman than among barrow-boys or washerwomen, and certain linguistic forms to be expected "among the established usages of polite life" (1839, M166), but the false correlation of accents with the social elite as such, rather than with people who were perceived as educated, also conceals the way in which individuals who did get access to education could then surmount class barriers. Hence also the enormous popular demand for texts and lectures which offered short-cuts to such access. And, as Dr Mugglestone admits, it was often very ordinary folk - humble teachers and parsons - rather than the obviously privileged, who set out to meet the voracious demand for help with what they, too perceived to be the 'correct' pronunciation.

If you do not understand the respect for educatedness, and the attitude to literacy and specifically to literature which underlay it, then you will find it hard to interpret the attitudes to specific pronunciation shibboleths which, as Dr Mugglestone shows, persisted from the mid-18th century onwards, indeed growing in strength from the mid-19th onwards. In a host of words, spelling-pronunciations overtook centuries-old forms, h was restored in a whole set of words, -ing replaced -in for many, and Dr Johnson and numerous others advised that the most correct pronunciation was that which deviated least from spelling - all in flagrant disregard for the 20th century linguists' strenuous insistence on the primacy of the phoneme over the grapheme. Sparrowgrass (for asparagus) and cowcumber (cucumber) were disparaged not merely for reasons of social snobbery (as this book implies), but because they were perceived as ignorant forms based on false analogy, and characteristic only of the unlettered. In criticising 18th century prescriptivism, Dr Mugglestone belittles (M96) the resistance of our generation to the modern uses of aggravate (cf. annoy) and gay while

she appears to find it difficult to understand that the first not only involves semantic confusion but also advertises ignorance, while the second did raise real problems during the period when the 'primary' sense of the word was still in transition: when a Times obituary tells us that a deceased Lord Chancellor was cultured and gay, what are we to think, unless we happen to know the date when that obituary was lodged in the paper's files? There are opportunities for real impairment of communication here.

"Being in London, I hope, will correct their language," wrote the head of a gentry family in the North East of England when sending his daughters off to school in the capital in 1808 (Collingwood 1957, p. 240). Yet it is of course true that the currency of these 'correct' forms and, more generally, of the educated accent associated with them, was limited so long as their use was confined to educated people in London. Greatly increased access to education was opened up in two ways: by the development of a system of schools attended by increasing numbers of the middle and upper classes, and by the coming of universal, and ultimately compulsory, schooling for the masses. Both of these systems came into being in the second half of the 19th century and both were penetrated by consciousness of the standard accent. The chapter on education in this book was singled out for special praise by one of its reviewers, Prof. David Crystal, but in fact it must be admitted that this section is the least satisfactory part of Dr Mugglestone's book.

She has much to say about the public schools as agencies of the diffusion of this socially prestigious accent, but she has missed a number of features which were crucial to their new role. The first was the widespread acceptance of the experience of boarding, itself greatly facilitated by the new railways: the boarding experience was especially conducive to accent adaptation. Furthermore, it was now an extended experience, since the second feature was the great extension and consolidation of the age range, most notably by the development of a subsystem of preparatory schools, each in many respects a microcosm of the public schools, so that it became the common expectation of parents that their sons should be sent away from home at age seven or eight, for a total of around ten highly impressionable years of their lives. The third was that these schools did not exist as separate entities but that their influence on their pupils' lives, attitudes and even speech forms was increased by the fact that they were part of an interacting system of schools - what has been called the 'pubic school system' in a new sense, after c. 1870, with complex links based on academic competition and, more importantly, on interaction at games, cadet corps and other activities. A fourth was the 'ideology' or propaganda of school life constituted by the vast new literature of boyhood (and later girlhood) - the school story - which centred on this type of institution, and indeed helped to propagate its speech forms.

The book shows how what it rightly identifies as the lack, around 1800, of any 'system' (M265) of mass education was remedied in the 19th century, though the point at which this new system became the vehicle for dissemination of a standard accent is problem we must return to. There is little awareness, however, of the relevant characteristics of the new public school 'system', and it does not help that (for instance) she treats Ackworth School in the 1850s as an example of a 'newer public school' (M287) when it would never have been so regarded as having that status at any time in the 19th century. She emphasises the relevance of age to accent adaptation, yet there is no recognition of the crucial part which the newly elaborated 'prep' school sector of this new system came to play. Other weaknesses in her understanding of this central topic are illustrated by her misinterpretation of one brief case history.

In two places in this book (M128, 177-8) she gives an account of the supposed "desire" of Matthew Boulton, James Watt's famous engineering partner, that his grandson should be sent to Eton in order - as she represents him as stressing - to counteract and avoid the "vicious pronunciation and vulgar dialect" prevalent at his day school in Birmingham. Unfortunately both her references to this are untrue to the facts. The words put into Boulton's mouth by Dr Mugglestone were not his, they were written to him by his son's (clerical) schoolmaster in Winson Green in December 1779, more than fifty years before the first of Boulton's grandsons went off to Eton (Robinson 1969). But it seems that even Matthew junior's transfer to boarding schools - he went to two, in Twickenham and then Colchester - made little impression on what his later teacher described as his "defect in pronunciation". And it was certainly not Boulton himself who had any part in the decision to send his grandsons to Eton, since he had died more than a decade before they were born, and more than a quarter of a century before the first of them entered Eton.

Nor is it at all likely that, even if he had lived that long, he would have encouraged their being sent there. He had a "supreme contempt" for the aristocratic Englishman of the kind his son encountered during his educational spell in France, and whose example (except possibly in certain aspects of dress which could be replicated by his Birmingham factory) he disdained for his own son, though he was indeed anxious that the lad should acquire those "essential embellishments to the Character of a Gentleman", namely Rhetorick and Belles Lettres, which could be studied at Edinburgh.

Moreover, the idea that Eton in the 1830s would have guaranteed the right accent for the grandsons is also questionable, given their own father's "most inveterate provinciality in conversation" (at least at age 15), and specifically his omission of "the aspirate". As we know (cf. Honey 1989/91), many Etonians of the early part of the 19C survived schooling there (and indeed Oxbridge afterwards) with distinct traces of local speech. This was the case even with Gladstone (his accent was described by Disraeli as 'provincial' and for other observers it disqualified him from being regarded as a true gentleman); and if Boulton senior had ever met Sir Robert Walpole he would have encountered a thick Norfolk accent which had survived both Eton and Cambridge. Sir Robert Peel, at Harrow at the very beginning of the 19th century and then at Oxford, retained lifelong Staffordshire vowels, and "guarded his aspirates with extreme care" - and sometimes tripped over them, a situation hard to square with Dr Mugglestone's account.

What is problematical here is the extent to which, and the date at which, even the most famous public schools could be depended on as vehicles of the standard accent. A complicating factor is the existence of a hyperlectal or 'advanced' variety of prestige accent. In other contexts Dr Mugglestone uses the term 'hyperlect' in several places but does not make it clear whether this refers to the form thus labelled and described in Honey (1989/91), which implies that Etonians in the second half of the 19C may have had to cope, in effect, with three different systems of word-initial [h-] - (1) the demotic form heard from college servants and tradespeople and also in the traces of regional speech in individual masters; (2) the established form of the standard accent; and (3) the hyperlectal usages which survived into the 20C (at 'ome, an 'otel, sense of 'umour, and also in the royal (and Churchillian) God bless 'er , which exaggerates the normal reduction of aspiration in an unstressed syllable). These are complications to the oversimplified picture given in this book. She quotes (M286) a writer in 1867 as specifying that every public school or grammar school headmaster should have the accent of "a well-educated Englishman, without any trace of local intonation,

London or provincial, Scotch or Irish", but even as those words were being written, there were several prominent headmasters, including the famous Temple of Rugby (the future Archbishop), who had marked provincialisms of speech; and his successor at Rugby, appointed in 1869, was considered by some as exhibiting 'vulgarity and coarseness', despite his Oxford education, since indeed attendance at neither of the ancient universities offered much certainty of a standard accent until around the 1880s onwards (Honey 1977, p.324).

It is true that by the end of the century such nonstandardisms would have become an obvious barrier to high office in the educational system, though it might have depended on which ones were involved. What was happening here was essentially a transition from birth (i.e. family) and/or breeding (i.e. education) to accent as the defining characteristic of a 'gentleman'. Sir Richard Steele wrote in 1713 that 'a finished gentleman is perhaps the most uncommon of all the great characters in life', because in addition ot the 'natural endowments' with which one should be born, 'he must run through a long series of education' (Barrell 1983 p37). The lifelong process of acquiring accomplishments, literary and other, by extensive foreign travel, as specified by Steele, was made necessary by the lack of a school system even for the privileged classes which could be counted on to provide this substance and its attendant polish: in 1798 the Edgeworths could only recommend a tiny number of larger public schools as relevant to this purpose. (M276). But soon after 1870 a well-articulated, new-style public school system was in place which enabled the fact of its own membership to be substituted for birth or ancestry as the crucial criterion of gentleman status. An example will illustrate this change in progress. In 1895 a Rugby School master asked a colleague about the newly-appointed headmaster: "Tell me, is James a gentleman? Understand me, I don't mean, Does he speak the Queen's English? but - had he a grandfather?" (Honey 1977, p. 326). There were thus being substituted for ancestry the two new criteria of gentlemanly status: first, membership of the new caste of 'public school men', and secondly, the ability to speak standard English with the specific accent which that same system was busy making available to an ever wider section of the better-off families in Britain. And because of considerable imprecisions (especially before 1914) about which schools actually counted as public schools, the second criterion came to be more effective, in practice, than the first: a man who acted as though he were a public school man, especially in the way he spoke, was readily admitted to membership of the informal caste of public school men, with attendant privileges of access in the jobs and marriage market, in admission to clubs and appointment to commissions in the army, the latter especially during World War I.

It is also true that the schools were overtly socially exclusive, but there are qualifications to be made even here, for the system was porous in several respects. Cheek-by-jowl with the great, exclusively boarding, schools like Eton - and indeed interacting regularly with them - there were still c. 1900 schools admitting day-boys from much humbler backgrounds at around £4 a year, and the figures cited by Dr Mugglestone for the limited admission of sons of lower-class parents conceal at least a further proportion of fathers who disguised their real origins behind pretended gentlemanly status or occupations.

What happened in schools outside the public school system proper is less clear. The broad range of endowed grammar schools were under informal pressure to imitate the prestige forms, though this book does not document this explicitly, and the new 'state' secondary schools beginning to be established around the turn of the century showed from their very inception similar pressures. It is in the mass of elementary schools

which grew up from the 1840s and were integrated with the new established Board schools into a coherent system of 'state' and voluntary schools from 1870 onwards that the conflict between standard and non-standard speech forms was most stark, though the dating of this process is still problematical. My own analysis (Honey 1988, in a piece with the same title as Dr Mugglestone uses for this book) challenged as premature a 1970 account which represented the newly appointed school inspectors as "waging war" as early as the 1840s on "coarse provincial accents" and "faults and vulgarities of expression", and did so essentially on two grounds. First, the unlikelihood that inspectors would themselves, in that early period, have been brought up on any expectation of a standard accent, given the unevenness of its spread by that date among public schools and the ancient universities; and secondly, a lack of documentation of such waging of war, by way of widespread comments in inspectors' published reports for that period. By my account, it was not until the 1880s onwards that we could expect to find these pressures in full force.

I must state at once that Dr Mugglestone's book convinces me that the first of these arguments may have to be modified. She has established, more clearly I think than any previous authority, that the essentials of what would later be labelled as RP accent existed by around 1800 and that the kinds of education, at grammar or public school and at Oxbridge, likely to have been experienced by an inspector even in the 1840s would have conditioned him to regard this as the norm to be aimed at, though with varying degrees of tolerance of various different non-standardisms. How far they were imposing the full range of these norms, however, in the early period - as we know they were doing after c.1880 - remains much more questionable.

On the second criterion, the documentation of inspectors' comments, she does not acknowledge my distinction between the two periods, and it might appear that she discounts it entirely by her references to critical comments on pupils' accents by various educational authors in the earlier period. It is almost impossible, however, to distinguish at this distance of time between a number of different variables. Were the critics commenting on the pupils' generalised accent, which they were implicitly attempting to standardise, or were they criticising one or two specific features, such as the system of transposed word-initial h-, which they felt bound to challenge as leading to communication difficulties? Given the central curricular emphasis on the teaching of reading, examined by reading aloud, how could teachers, even in the earlier period, have avoided being prescriptive on specific points of pronunciation? (The issue must be: which points, and we do not have enough evidence on this.) One of the bugbears of critics was the children's reading without understanding, leading to false stress and to garbled forms like the version of the Lord's Prayer beginning 'Our father charter heaven', and calls for "clarity of articulation" in the earlier period might mean no more than this, with no implications about accent at all - though by the end of the century that implication would almost certainly have been there.

But what needs also to be stressed is the relative lack of any resentment among pupils or parents at the access to a standard accent which the developing provision of formal education provided. In 1969 A. J. Ellis wrote (Honey 1988, p. 221) of how "anxious and willing" the "social inferior [was] to adopt the pronunciation of the superiorly educated", yet at that date it was still possible for him to deny - to despair, even - that here was any general means whereby those 'inferiors' could learn it. But within a year of his writing this, a state-organised system of universal (and soon compulsory) elementary education would come into being which within a further decade would help to 'steamroller' (as a future historian of Cockney put it)

local accents and dialects into decline (ibid., 224), a process further assisted by the public school colonisation of senior posts in training colleges. Furthermore, attempts fostered by well-meaning inspectors to incorporate local dialect into elementary school teaching were vulnerable to opposition from parents ambitious that their children should "talk smart when they're grown up" (ibid.).

Dr Mugglestone does not appear to understand motivations such as these, and her book is written in a tone of constant - pained - amazement that a standard accent should have been used as a criterion of either social or educational standing. Yet an ounce of the comparative approach might have suggested that what was happening in England had parallels in many other countries. As we know, 'educatedness' criteria were crucial in the evolution of a concept of 'standard' French; which extended also to accent, and the social history of both French and Italian are full of exactly comparable references to provincial forms as 'barbaric'. Neglect of comparisons with (say) France robs her of the opportunity to discuss possible reasons for the relative absence of those low-prestige forms of lower-class urban and suburban French accent which might correspond with the most disparaged forms of British accent (Cockney, Brum, Liverpool etc.) Indeed, she has no account of the development of the hierarchy of accents - central to the notion of accent as social symbol - which Howard Giles and colleagues have confirmed as prevailing in late 20th century Britain, with (unmarked) RP at its head, and these despised urban accents at the bottom (cf. Honey 1989/91). Her story is entirely one of a binary divide between proto-RP and the rest.

She implies that the comments in her sources that drew attention to the elisions of lower-class speech were silly because all levels of speech involve elision, but she fails to notice that there are elisions and elisions: that a whole range of instances of elision or contraction are accepted as 'standard' because they are common amongst those perceived as educated speakers; and moreover that the authority of the speaker, especially if she is regarded as being educated, will cause certain forms of elision, if spoken clearly and confidently, to be acceptable, whereas there is a different evaluation for those regarded as slurred or negligent in the mouths of the least educated users of the language. Steven Pinker, in his well-known account of the 'language instinct', falls into this same trap of maintaining, by a false analogy with bird-song, that no speaker can ever be judged to speak his own dialect slurringly or negligently.

Dr Mugglestone ridicules the literary conventions by which novelists represented the pronunciation of working-class speakers, using forms like 'wot' for a word that when pronounced identically by higher-status speakers was written as 'what' - a convention incidentally repeated by many later writers like Richmal Crompton and Penelope Lively - and supplying apostrophes for phonemes that would also have been present in standard English. But she fails to tell us that many 19th century dialect writers themselves followed the same convention in order to help their readers to interpret forms for which there was no established spelling system. And though she readily cites disparaging judgments by standard speakers on those who used non-standard forms, she fails to mention that (for example) northern dialect writers voiced similar derogatory assumptions about the speakers of other dialects, e.g. Cockneys.

She follows Lesley Milroy (1987) in identifying speech differences with status rather than (economic) class, but I cannot be the only reader who would want to query whether models which follow the ascribed (and arbitrary) status of membership of geographical communities, and mark off the boundaries of their exclusiveness, are necessarily more admirable than the achieved status indicated by 'educatedness'. But

having rejected class as the crucial variable, like a recidivist she keeps falling back on it: literate norms were 'located primarily in the middle and upper classes' (M238) and comparisons between literate and illiterate use served to 'encode prevalent stereotypes about the nature of class..." (M239); shibboleths established in the 18th/19th centuries served as markers of different social groups (M70: my emphasis)- without any reference to educatedness. Her frequent references to 'cultural hegemony' and to e.g. the "social hegemony of one social group above others" (M143/49) appear to embody a crude notion of the values deployed by accent. She says (M88) that cultured or cultivated speech was a synonym for the privileged and elite. But it was not an exact synonym, because it only covered those members of the elite who had had an appropriate education, and it also embraced those people not from an elite background who had managed to acquire this accent. As the schools inspector Robinson wrote in 1863, "In every neighbourhood there is a difference of pronunciation which distinguishes the educated from the uneducated."

Indeed, the process whereby a standard accent evolved in England may have been a more subtle one than Dr Mugglestone suggests. Far from being a long and disreputable story of the imposition of a social snobbery based on exclusion, the development of what we can now call RP was driven by a process of democratisation involving codification (mainly by texts) and finally by incorporation in a national system of mass education. Meanwhile the most privileged classes mounted a rearguard action, with a limited degree of success, which involved the elaboration, together with a limited number of items of grammar and lexis, of an alternative form of accent (the hyperlect, 'marked RP') which was available only in upper-class households or in a few of the newly developed prep schools and a small number of the socially most exclusive public schools. Significantly, it was not codified and not consciously taught, and the fact that this upper-class sociolect incorporated several despised lower-class forms (its own system of word-initial h-, -in for -ing, Cockney-like awf and cawst, grammatical forms it ain't, it don't) constituted cunning traps serving to identify and exclude the unwary outsider (Honey 1989/91). At the same time, the 'mainstream' RP which became widely available through the universities, through secondary education in the wider public school system and the grammar schools and through a proportion, at least, of elementary schools, itself became an important mechanism for social mobility.

As is the fashion with many sociolinguists, Dr Mugglestone exaggerates the scale of uniformity required by the standardisation of English, and its supposed intolerance of optional variability. As with variation of grammar and lexis, there is a range of pronunciations which are compatible with educatedness, and others which are not. Cobbett's son, who in 1866 amended his father's famous 1818 Grammar to introduce a prescriptive section on pronunciation, is represented by Dr Mugglestone as concurring with "notions of inherent value and aesthetic demerit which are ... staples of the standard ideology", which makes him "merely a product of his age" (M89). But in any age, and not least our own - despite all the efforts of linguists to ridicule notions of correctness and acceptability - ideas of inherent value and aesthetic demerit abound, in close proximity to ideas of educatedness. This points up the unreality of the distinction between inherent and imposed norms. We may formulate the following proposition: that in any society (or subculture) in which educatedness is an admired attribute, prestige will attach to those linguistic forms which are perceived as characteristic of educatedness. Is this attribution of prestige an 'inherent' property of

language in such societies or subcultures, or an imposed value? A similar proposition may be formulated to indicate the generality of norms reflecting the influence of a metropolis rather than the provinces.

This latter hypothesis is well illustrated by a source from which I have already quoted, and which would have repaid Dr Mugglestone's attention, and might indeed have persuaded her to adjust her emphasis. Vice-Admiral Cuthbert (Lord) Collingwood, one of Nelson's colleagues, was born on Tyneside around 1748 and despite schooling at Newcastle Royal Grammar School as a classmate of future Lord Chancellor Eldon, his speech and writing contained numerous non-standardisms: has been broke [sc. broken], have stole [stolen], always have wrote, and get wrong for 'be scolded' (still widely heard in the North East). Yet a constant preoccupation of his private correspondence was for the education of his two young daughters is ways which would enable them to "improve in sense and manner and be fit for the society of people with brains and having intelligence", without at the same time risking their acquiring what he had "a horrible dread of" - "the education of a fine lady - filling their poor little heads with Tiffany and Gew Gaws". Raising his daughters in the North, he could not be "insensible of the great disadvantage of an uncouth provincial dialect and corrupt pronunciation, and would be glad to take any means to correct it in my darlings". "And the only means, no doubt, is to associate them with some person whose language is good", i.e. a teacher who can "speak good language free from vulgar words, and with correct pronunciation ... If she does, they will insensibly improve and lose that dialect which is certainly not very harmonious". Yet she must also be "a lady whose character stands so high, as being qualified to improve their minds and to teach them enough of what they call necessary accomplishments as to prevent their being awkward and unknowing in any society their lot may fall amongst." These 'accomplishments' were not necessarily social frills, but included practical abilities like swimming; above all, they were part of his concern for "that sort of education that will fit them to live in the world without being dependent on the head of another". (Collingwood, letters between 1799-1808, pp 108, 194, 205, 213, 240.) So it was education as a symbol of a genuine and practical kind of educatedness and 'knowledge of the world' that he sought for them, and with it would inevitably go an adaptation to the emergent metropolitan standard accent.

In general, however, the wide range of Dr Mugglestone's scholarship is impressive, and her bibliography will be a boon to other scholars, despite omissions such as Ian Michael on English pre-1870 textbooks, Raymond Williams's Long Revolution, and Philp's Enquire Within, with its section on dialect (and on h-) whose influence extended to every street in the kingdom in the 1860s. Besides Collingwood, other apparently untapped earlier sources are Verney, Wentworth and Swift. Joan Beal's valuable new (1999) book on Thomas Spence and 18th century English pronunciation appeared too late for her consideration.

Oxford's Clarendon Press has published her in a handsomely produced volume at a fairly stiff price. Given the general value to students of this work, despite - and equally because of - the fundamental queries which I think this book raises, we must give qualified praise to her publishers for having recently brought out a paperback version, but it must be a matter of serious criticism that they failed to take the opportunity to attend to a mass of corrigenda. Authors Wardhaugh and Okely are consistently misspelled; historian D. C. Coleman is repeatedly given the wrong initials (so is the poet Hopkins in the index); Colin Shrosbree appears three times in the text as 'Shrewsbury'; a crucial symbol in a passage from Fielding seems to have been

misprinted; nearly all of the many footnote references to Felix Holt cite the wrong volume or page, as does also a reference to Richard Hudson. Her skimpy index is patently inadequate. Coming from a long-respected academic publisher, these blemishes, compounded by being repeated in the reprint, are an unwelcome surprise.

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John Wells. What is Estuary English?

There's a new buzzword going the rounds in England - Estuary English (EE). It's supposed to be a new kind of English that's due to take over as the new standard English. We're told it's going to replace fuddy-duddy old Received Pronunciation as the standard accent. Not only are all sorts of politicians, sportsmen, and media personalities claimed as typical speakers of it, but even people as eminent as Queen Elizabeth's youngest son, Prince Edward.

But at the 1995 Conservative party conference the Minister of Education, Gillian Shephard, launched into a denunciation of EE, condemning it as slovenly, mumbling, bastardized Cockney. She claimed that teachers have a duty to do their utmost to eradicate it.

As often happens in language matters, the English have got into a muddle.

The term 'Estuary English' was coined as long ago as 1984 by David Rosewarne, an EFL teacher. He characterized it as 'a variety of modified regional speech [...] a mixture of non-regional and local south-eastern English pronunciation and intonation. If one imagines a continuum with RP and London speech at either end, "Estuary English" speakers are to be found grouped in the middle ground.'

Rosewarne claims that Estuary English, named after the 'banks of the Thames and its estuary', is to be heard in the House of Commons, the City, the Civil Service, local government, the media, advertising, and the medical and teaching professions in the south-east.

What are the phonetic characteristics of Estuary English (EE)? Many of the features that distinguish it from RP are features it shares with Cockney: things that may mark it as being distinctively south-eastern (as against RP, which is non-localizable within England). But these features are spreading geographically and socially, thus losing their localizability and thus to some extent justifying the claim that EE is 'tomorrow's RP'.

Unlike Cockney, EE is associated with standard grammar and usage. But like Cockney it shows tendencies towards such phonetic characteristics as the following: 1-vocalization, pronouncing the 1-sound in certain positions almost like [w]. The 1-sounds that are affected are those that are 'dark' [5] in classical RP, namely those which are not immediately followed by a vowel-sound, but rather by a consonant-sound or a potential pause.

glottalling, using a glottal stop [?] (a catch in the throat) instead of a t-sound in certain positions. This is not the same as omitting the t-sound altogether, since plate [pleI?] still sounds different from play [pleI]. Nevertheless, authors who want to show a non-standard pronunciation by manipulating the spelling tend to write it with an apostrophe: take i' off, qui'e nice. The positions in which this happens are most typically syllable-final -- at the end of a word or before another consonant sound. London's second airport, Gatwick, is very commonly called ("Ga'wick").

happY-tensing, using a sound more similar to the [i:] of beat than to the [I] of bit at the end of words like happy, coffee, valley. Many recent works on English phonetics transcribe this weak vowel as [i], which can then be interpreted in various ways according to the speaker's accent. In strong syllables (stressed, or potentially stressed) it is crucial to distinguish tense long [i:] from lax short [I], since green must be distinct from grin and sleep from slip. But in weak syllables this distinction does not apply -- the precise quality of the final vowel in happy is not so important.

yod coalescence, using [tS] (a ch-sound) rather than [tj] (a t-sound plus a y-sound) in words like Tuesday, tune, attitude. This makes the first part of Tuesday sound identical to choose, [tSu:z]. The same happens with the corresponding voiced sounds: the RP [dj] of words such as duke, reduce becomes Estuary [dZ], making the second part of reduce identical to juice, [dZu:s].

However, unlike Cockney, EE does not involve, for example, h-dropping, omitting [h].

Phoneticians at University College London have recently been attempting to fix a standard phonetic transcription for EE. This would open up the possibility of teaching it in the EFL classroom, if that were thought desirable. The main problems in standardizing a transcription relate to the notation of certain sequences of vowel plus the residue of vocalized /l/: in standardizing EE, for example, do we retain the RP distinctions fool vs full vs fall ([fu:l, fUl, fO:l]), or do we merge them all into [fOo] as many Londoners do?

Estuary English is a new name. But it is not a new phenomenon. It is the continuation of a trend that has been going on for five hundred years or more - the tendency for features of popular London speech to spread out geographically (to other parts of the country) and socially (to higher social classes). The erosion of the English class system and the greater social mobility in Britain today means that this trend is more clearly noticeable than was once the case.

Rather than try to adopt EE, perhaps a more realistic aim for EFL teachers and learners would be to make sure that our description of Received Pronunciation keeps up to date. It must not remain fossilized in the form codified by Daniel Jones almost a century ago. We must modernize it by gradually incorporating one or two of the changes typical of EE. To star' with, we migh' le' people use a few glottal stops. Or would tha' not mee' with everyone's approval?

John Wells. Transcribing Estuary English: a discussion document

Introduction

Many of our native-speaker undergraduates use a variety of English that I suppose we have to call Estuary English, following Rosewarne 1984, 1994, Coggle 1993, and many recent reports on press and television. So do many of the patients our BSc students will have to deal with. That is, they use the popular speech of the southeast of England (based on that of London, and thus supposedly centred on the Thames estuary). This means that their accent is located somewhere in the continuum between RP and broad Cockney (= the broadest London working-class variety).

I would really prefer to call this variety simply London English, although obviously its ambit is much wider than the GLC area, covering at least most of the urban south-east. Other names we could refer to it by might include General London (GL), McArthur's New London Voice, and Tebbitt-Livingstone-speak. (Note that Rosewarne seems to use the term 'London speech' to refer to what I call Cockney, since he refers to 'a continuum with RP and London speech at either end', with his Estuary English speakers 'grouped in the middle ground'.) Nevertheless, it has to be acknowledged that the term 'Estuary English' has already achieved some degree of public recognition. As with the equally unsatisfactory term 'Received Pronunciation', we are forced to go along.

Phonetics of Estuary English

Estuary English (EE) is like RP, but unlike Cockney, in being associated with standard grammar and usage; it is like Cockney, but unlike RP (as traditionally described), in being characterized by tendencies towards, for example,

vocalization of preconsonantal/final /l/, perhaps with various vowel mergers before it (miwk-bottoo 'milk-bottle')

striking allophony in GOAT, leading perhaps to a phonemic split (wholly holy)

use of [?] for traditional [t] in many non-initial positions (take i' off)

diphthong shift, particularly of the FACE, PRICE and GOAT vowels

yod coalescence even before a stressed /u:/ (Chooseday)

Phonetically EE differs from Cockney in usually not being characterized by, for example,

h-dropping ('and on 'eart)

TH fronting (I fink)

monophthongal realization of the MOUTH vowel.

It is not entirely clear whether EE is to be regarded as a variety (lect, dialect) in its own right, or whether it is simply the formal style/register for which Cockney is the informal one. A decision depends on two empirical issues:

Is there a casual style of EE that is unquestionably distinct from Cockney? Tentatively, yes: there may well be speakers who avoid stigmatized h-dropping even in their most casual style (as RP speakers do; NB we are not dealing here with /h/ in unstressed pronouns.).

Is there a formal style of Cockney that is distinct from EE? Tentatively, yes: Cockney is arguably the speech of the uneducated, who are unable to achieve standard grammar even where it might be called for; while EE speakers are those who can consistently use standard grammar with ease and fluency.

The boundary between EE and RP is also hard to establish. Presumably it rests on the degree of localizability: EE is localizable as belonging to the southeast of England (see Coggle's impressionistic sketch-map, 1993:28), whereas RP is not. (Many of Rosewarne's comments surely relate to style or to change over time, rather than to the decline of RP, to localizability or to the Thames estuary area. Things like cheers for thank you/goodbyeare surely part of contemporary casual RP/StdEng -- at least I use them, and no-one has ever suggested that I am a speaker of EE! Some commentators seem not to appreciate that RP can be spoken in informal situations.)

Principles of transcribing EE

We need a standardized phonetic transcription for the EE accent. Although Rosewarne and Coggle have arguably done a public service by drawing attention to it, neither they nor anyone else (as far as I am aware) has attempted a serious phonetic description of it; nor indeed have they ever transcribed more than the odd sound in isolation. Once we have standardized and codified EE, we could teach it to students, ask them to do transcription exercises using it, and give phonetic dictation in it. Quite apart from its importance for EE's own native speakers and their imitators, it would furthermore attract great interest and attention among EFL teachers disenchanted with RP. Some might wish to teach it to their EFL pupils. ('Because it obscures sociolinguistic origins, "Estuary English" is attractive to many' - Rosewarne 1984.) The present document aims to highlight some of the decisions we would need to make in arriving at a standardized transcription.

One basic question we must face is: how comparative should the EE transcription system be? Should we use phonetically explicit symbols, often different from those we use for RP (with the resultant risk of confusing the beginner)? Or is it more sensible to use the same symbols as for RP wherever possible, but with different conventions of interpretation?

My view is that for the time being, at any rate, we should take a minimalist position. We should aim to make the notation as similar as possible to that used for RP. So we would continue to transcribe the above words in the usual way. Just as the symbol /{/ in cat can already in RP cover a range of possibilities from around cardinal [E] to cardinal [a], so /eI/ in face can be permitted to cover a range of possible first elements for the diphthong, from conservative RP [e] .Exceptions to this principle might perhaps be made, though, for

the diphthongs of price and mouth (RP /praIs, maUT/), for which it seems most intuitive to write EE; explicit notation of the glottal stop as a realization of /t/.

Competing solutions

This means that the most important remaining decision is how to symbolize the product of l vocalization. For RP /l/ in non-prevocalic positions, EE uses a vocoid in the area [o, U, u]. This may be non-syllabic, typically forming the second element of a new diphthong in milk, shell etc.; or it may be syllabic, as in middle. Let us consider a selection of possible solutions, looking at the pros and cons of each.

first solution: write U, thus mIUk, SeU, "mIdU

pro: familiar symbol;

con: implies phonetic (and for the syllabic vocoid, phonemic) identity with the vowel of put, which is wrong. Articulatorily, the l-vocalization product is considerably further back than the /U/ of put, which can nowadays be very central.

second solution: write w, thus mIwk, Sew

pro: reasonably intuitive for the non-syllabic vocoid; but we should need something else for the syllabic;

con: implies phonemic identification with prevocalic /w/, which is questionable; violates the general English phonotactic constraint against final semivowels. (To overcome the objection to syllabic w, John Maidment suggests using an omega, . But I find this unacceptable on general ☐ transcriptional and typographic grounds.)

third solution: write o, thus mIok, Seo

pro: phonetically reasonable, visually distinctive. On balance my preferred solution;

con: in various other accents (Scottish, GenAm) this symbol is associated with the vowel of goat.

I therefore suggest that we adopt o as the symbol for the vocalized-l vocoid, whether as the second element of a diphthong or as an independent weak vowel. Phonologically, a case can be made for regarding [o] as still a member of the /l/ phoneme; but clearly in this regard our standard notation must allowed to be allophonic. (In view of the phonological indeterminacy here, though, I think we should permit people to write "/o/", and for that matter "/?/".)

Vowel problems

The minimalist assumption is that all vowel contrasts are preserved before /o/. So, unless there are reasons not to, we could expect to be able to write: field fi:od, build bIod. This assumption appears to be incorrect, though, with at least those items that are asterisked in the list: we must now explore them.

Words like roll. As we know, EE speakers (and many others) intuitively reject the identification of the vowel of goal, told with the phoneme /@U/. For some time we have been offering them the symbol QU. It is clear to them, furthermore, that goalie does not rhyme with slowly, nor roller with polar.

Words like cool. The same question arises with cool, and perhaps with pull and call. The vowel of EE cool [kou, ku:] is phonetically very different from that of coo. In cool the quality is back, in coo central; both vowels may be somewhat diphthongal. If we continue to write /u:/ in coo /ku:/ (rather than, say, the phonetically more explicit, we need something else for cool.

Some speakers may be happy with the notation ku:o, which implies the phonemic identification of this vowel with that of coo. Others will not be, but it may be the case that none of them preserve the distinction between fool and full, so that they would accept the notation kUo. Actually, for some EE speakers kO:o might be appropriate, namely those who have a cockney-style three-way homophony pool-pull-Paul.

Note, though, that EE pooling is distinct from pulling. So cooling would presumably have to be "ku:IIN. Does this give rise to a problem in the light of words such as truly "tru:lis? (Compare the goalie-slowly contrast discussed above) If it does, we shall have to think of something else.

Words like call. Then there is the question of words with RP /O:l/. Is the product of 1 vocalization absorbed into a preceding /O:/? If it is absorbed, board and bald come out homophonous, as do pause and Paul's; if it is not fully absorbed, they remain distinct. We should be prepared to write bald as bO:d or bO:od respectively.

There is, however, another issue. Although Paul's and pause may be homophonous, Paul and paw are certainly not. Nor are board and bored, in spite of their homophony in RP. For which of these vowels should we reserve the familiar notation /O:/?

If we write /O:/ for paw-pour-pore /pO:/ and bored /bO:d/, we need some other symbol for pause and Paul's. A possibility would be /o:/ in pause, thought, board; Paul's would have the same notation if homophonous, otherwise /Oo/.

If on the other hand we reserve the notation /O:/ for pause, thought, board, we could recognize the tendency towards a centring-diphthong quality in paw-pour-pore by writing /O@/, thus paws /pO@z/, bored/bO@d/. The notation /Oo/ would still be available for Paul's if distinct from pause.

Thus in any case the best notation for the vowel of EE call may be /Oo/. Therefore some EE speakers can write cool, too, as /kOo/. Others will have call /kOo/ but cool /kUo/.

Words like real. EE real is a homophone of reel and should accordingly be written ri:o. (In Cockney real and reel are homophones of rill and can all be written rIo.) Presumably really can acceptably be written "ri:li, implying a rhyme with freely -- or should it perhaps be "ri:oli?

The glottal stop

To revert to the question of the glottal stop: although it is surely no more than an allophone of /t/, I think we could well consider writing glottal stop for /t/ in certain positions. I would suggest that we prescribe "/?/" for traditional /t/ in the following environment:

when BOTH preceded by a vowel (including /o/ from /l/), or /n/;

AND followed by the end of a word or by a consonant other than /r/.

With a preceding obstruent, however, [?] is not possible: compare best best (never *bes?). Glottal replacement does not happen in EE mattress "m{tr@s (cf. possible Cockney "m{?r@s). And glottalling word-internally before a vowel is well-known as a 'rough' pronunciation variant: thus EE water "wO:t@, but Cockney "wOU?@.

Other points

We have already decided to adopt the symbols /i, u/ for RP in happy, influence. They can be applied to EE, too, where they will tend definitely to imply tense vowels more similar to /i:, u:/ than to /I, U/. The relationship between EE /O:/ and /o/ (normal /"nO:mo/) is comparable to that between /i:/ and /i/ (weedy /"wi:di/), namely that the first in each pair belongs to the strong vowel system, the second to the weak.

If these ideas are accepted we end up with a standardized systematic transcription system for EE. (It is 'systematic' rather than 'phonemic', because of the use of /o, ?, i, u/.) Once we have agreed it, I intend to prepare some classroom materials using it. Before that, though, -- colleagues (particularly native speakers of EE), do let me know your views.

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David Rosewarne. Estuary English

The British are well-known for being extremely sensitive about how they and others speak the English language. Accent differences seem to receive more attention here than is general anywhere in the world, including other English-speaking countries. It may be for this reason that native and non-native teachers of English view the matter with considerable interest. Additionally, their own pronunciation is important because it is the model for their students to imitate. The teacher of British English as a foreign language typically chooses Received Pronunciation as the model (or BBC English, Standard English, Queen's English or Oxford English as it is sometimes called). RP (for short) is the most widely understood pronunciation of those in the world who use British English as their reference accent. It is also the type of British English pronunciation that Americans find easiest to understand. It seems, however, that the pronunciation of British English is changing quite rapidly. What I have chosen to term Estuary English may now and for the foreseeable future, be the strongest native influence upon RP.

"Estuary English" is a variety of modified regional speech. It is a mixture of non-regional and local south-eastern English pronunciation and intonation. If one imagines a continuum with RP and London speech at either end, "Estuary English" speakers are to be found grouped in the middle ground.

The heartland of this variety lies by the banks of the Thames and its estuary, but it seems to be the most influential accent in the south-east of England. It is to be heard on the front and back benches of the House of Commons and is used by some members of the Lords, whether life or hereditary peers. It is well established in the City, business circles, the Civil Service, local government, the media, advertising as well as the medical and teaching professions in the southeast. "Estuary English" is in a strong position to exert influence on the pronunciation of the future.

It appears to be a continuation of the long process by which London pronunciation has made itself felt. This started in the later Middle Ages when the speech of the capital started to influence the Court and from there changed the Received Pronunciation of the day.

On the level of individual sounds, or phonemes, "Estuary English" is a mixture of "London" and General RP forms. Although there are individual differences resulting from the speech background and choices of pronunciation made by the speaker, there is a general pattern. An example of this is the use of w where RP uses 1 in the final position or in a final consonant cluster. An "Estuary English" speaker might use an articulation like a w instead of the RP 1 as many as four times in the utterance: 'Bill will build the wall.'

Non-Londoners often comment on what they see as the jerkiness of the speech of the capital. This is because of the use of a glottal stop in the place of the t or d found in RP, as in the stage Cockney phrase: "A li'le bi' of breab wiv a bi' of bu'er on i'." This process seems to be analogous to

the loss of the t in such words as "Sco'land", "ga'eway", "Ga'wick", "sta'ement", "sea'-belt", "trea'ment", and "ne'work". Not all RP speakers would sound these ts. As would be expected, an "Estuary English" speaker uses fewer glottal stops for t or d than a "London" speaker, but more than an RP speaker.

Similarly the proverbial "Cockney" would be unlikely to pronounce the phonetic /j/ which is found in RP after the first consonant in such words as "news" or "tune". The process of shedding /j/s is now established in RP. Many speakers of current General RP do not pronounce a /j/ after the l of "absolute", "lute", "revolution", or "salute". They would say "time off in loo" rather than "time off in lieu". For many speakers "lieu" and "loo" are now homophones. Similarly it is common not to pronounce the /j/ after the /s/ of "assume", "consume", "presume", "pursuit" or "suit(able)". It could be argued that these are now the established form of current General RP and that thse who pronounce the /j/s in these environments are what Professor Gimson would term "Conservative RP speakers". It was he who drew attention to this change in RP. It seems unnecessary to look across the Atlantic for the origin of this change when this pronunciation is so well entrenched in London speech. The likeliest explanation is maybe that of imitation of an "Estuary" pronunciation reinforced by exposure of RP speakers to American English through films and television.

A feature of "Estuary English" which seems to have received no attention to date is the r. This feature is to be found neither in RP nor "London" pronunciation. It can sound somewhat similar to a general American r, but it does not have retroflection. For the r of General RP, the tip of the tongue is held close to the rear part of the upper teeth ridge and the central part of the tongue is lowered. My own observations suggest that in the typical "Estuary" realization the tip of the tongue is lowered and the central part raised to a position close to, but not touching, the soft palate.

Vowel qualities in "Estuary English" are a compromise between unmodified regional forms and those of General RP. For example, vowels in final position in "Estuary English" such as the /i:/ in "me" and the second /I/ in city, are longer than normally found in RP and may tend towards the quality of a diphthong.

The intonation of "Estuary English" is characterized by frequent prominence being given to prepositions and auxiliary verbs which are not normally stressed in General RP. This prominence is often marked to the extent that the nuclear tone (the syllable highlighted by pitch movement) can fall on prepositions. An example of this would be: "Let us get TO the point". There is a rise fall intonation which is characteristic of 'Estuary English" as is a greater use of question tags such is "isn't it?" and "don't I?" than in RP. The pitch of intonation patterns in "Estuary English" appears to be in a narrower frequency band than RP. In particular, rises often do not reach as high a pitch as they would in RP. The overall effect might be interpreted as one of deliberateness and even an apparent lack of enthusiasm.

The term "Estuary English" comprises some general changes which have hitherto received little attention. In what is perhaps the most famous work in this area: An Introduction to the Pronunciation of English, Professor Gimson suggested that Advanced RP "may well indicate the way in which the RP system is developing and be adopted in the future as General RP". He described Advanced RP forms as "mainly used by young people of exclusive social groups - mostly of the upper classes, but also for prestige value in certain professional circles". He continues by saying that in the most extreme variety Advanced RP "would usually be judged 'affected' by other RP speakers". An Advanced speaker might say something which sounded as follows: "So tarred darling; ar harred car's been in the mar for an ar." ("So tired darling; our hired car's been in the mire for an hour.") Whereas General RP has three vowel sounds in "hour", for example, Advanced would have one long /a:/. It could be argued that just as this group has long ceased to be the model for general imitation in clothes fashion, it has lost its role in linguistic trend setting. This observation aside, Professor Gimson's view of the role of advanced RP seems to have remained orthodoxy for over two decades.

Over these two decades, Professor Gimson's description of general RP as "typified by the pronunciation adopted by the BBC," even appears to have become debatable. More and more the General RP of the BBC has been under pressure from modified versions of RP, and perhaps now predominates only in enclaves in Radio 3 and possibly Radio 4, and of more importance internationally, in the World Service of the BBC. In addition to this, the children of parents who speak Advanced or General RP are likely to speak rather differently from their elders. This is truest of those in state schools, but it is also commonly found in public schools.

In the circles of those privileged young people who are likeliest to be influential in the future, the accepted pattern is very often set by the children of the upwardly mobile socially. For these groups the standard pronunciation is often "Estuary English". My contention is that "Estuary English" describes the speech of a far larger and currently more linguistically influential group than "Advanced" RP speakers. The popularity of "Estuary English" among the young is significant for the future.

Speculation as to the reasons for the development and present growth of "Estuary English" is necessarily somewhat impressionist at this stage. Sociolinguistically it gives a middle ground between all types of RP on one side and regional varieties on the other. "Estuary English" speakers can cause their original accents to converge until they meet in the middle ground.

Because it obscures sociolinguistic origins, "Estuary English" is attractive to many. The motivation, often unconscious, of those who are rising and falling socio-economically is to fit into their new environments by compromising but not losing their original linguistic identity. Again, often unconsciously, those RP speakers who wish to hold on to what they have got are often aware

that General RP is no longer perceived as a neutral accent in many circles. They are also aware that "Conservative" and more so "Advanced" RP can arouse hostility. What for many starts as an adaptation first to school and then working life, can lead to progressive adoption of "Estuary English" into private life as well. Complicated as this may sound to a foreign user of English, these developments may be seen as a linguistic reflection of the changes in class barriers in Britain.

It is interesting to speculate on the future of "Estuary English". In the long run it may influence the speech of all but the linguistically most isolated, among the highest and lowest socioeconomic groups. Both could become linguistically conservative minorities. The highest may endeavour to retain their chosen variety of speech and the lowest their unmodified regional accents. The majority may be composed of speakers of "Estuary English" and those for whom it may form part of their pronunciation. The latter group might use certain features of "Estuary English" in combination with elements of whatever their regional speech might be.

For many, RP has long served to disguise origins. "Estuary English" may now be taking over this function. For large and influential sections of the young, the new model for general imitation may already be "Estuary English", which may become the RP of the future.

Ulrike Altendorf. Estuary English: Is English Going Cockney?

1. The concept of 'Estuary English' (EE) according to its 'founder' David Rosewarne

The term 'Estuary English' was coined by David Rosewarne in 1984. In his locus classicus article published in the Times Educational Supplement he defines EE as [...] a variety of modified regional speech. It is a mixture of non-regional and local south-eastern English pronunciation and intonation. If one imagines a continuum with RP and London speech at either end, 'Estuary English' speakers are to be found grouped in the middle ground. (Rosewarne 1984, 29; Rosewarne 1994, 5, my emphasis)

From a geographical point of view, EE is said to have been first spoken "by the banks of the Thames and its estuary" (Rosewarne 1984, 29), then became "the most influential accent in the south-east of England" (Rosewarne 1984, 29) and is now spreading "northwards to Norwich and westwards to Cornwall" (Rosewarne 1994, 4). From a sociological point of view, EE is reported to be used by speakers who constitute the social "middle ground" (Rosewarne 1984, 29). This definition includes

speakers who want to conform to (linguistic) middle class norms either by moving up or down the social scale. The first group aims at EE in order to sound more 'posh', the second to sound less 'posh' both avoiding the elitist character of RP. This social compromise is also reflected in the linguistic makeup of EE. It comprises features of RP as well as non-standard London English thus borrowing the positive prestige from both accents without committing itself to either. This vagueness makes it extremely difficult to pin EE down linguistically. As major phonological markers of EE, Rosewarne (1984, 29) names · /t/-glottalling, · /l/-vocalization, /j/-dropping, the diphthongal realisation of /i:/ and final /I/.

However, all of these variants also occur in other social accents in London and the southeast and beyond this area. The whole set of markers is furthermore involved in contemporary sound changes affecting the neighbouring varieties of EE including RP. This lack of 'exclusiveness' becomes even more striking when it comes to the lexical and grammatical features of EE. Rosewarne names for example cheers for thank you/good bye and a more frequent use of question tags.

2. Attempts at further precision

Despite all the problems of definition, the term and concept of EE have caught on. In 1993 Paul Coggle publishes a guide on how to speak EE. Coggle is also more aware of the 'demarcation problem' than his predecessor and therefore defines EE as a 'continuum' variety on a continuum between Cockney and RP: It should now be clear that Estuary English cannot be pinned down to a rigid set of rules regarding specific features of pronunciation, grammar and special phrases. A speaker at the Cockney end of the spectrum is not so different from a Cockney speaker. And similarly, a speaker at the RP end of the spectrum will not be very different from an RP speaker. Between the two extremes is quite a range of possibilities, many of which, in isolation, would not enable us to identify a person as an Estuary speaker, but which when several are present together mark out Estuary English distinctively. (Coggle 1993, 70)

On the basis of such a wide definition he allows for more Estuary markers than Rosewarne including for example TH fronting, as in ['fINk] for think, for those at the Cockney end of the spectrum. Although it is certainly true that linguistic varieties cannot be defined with the same 'rigidity' as legal or scientific terms, it is, however, hardly satisfying to wait for several London or southeastern speakers to "be present together" to "enable us to identify a person as an Estuary speaker". There should be at least some categories on the basis of which EE can be more firmly approached (though perhaps not 'pinned down'). John Wells' work on EE makes an important step in this direction. Wells agrees with Rosewarne and Coggle on the middle-ground character of EE and also admits to a certain vagueness of the term: Many of our native-speaker undergraduates use a variety of English that I suppose we have to call

Estuary English, following Rosewarne 1884, 1994, Coggle 1993, and many recent reports on press and television [...] This means that their accent is located somewhere in the continuum between RP and broad Cockney [...] As with the equally unsatisfactory term 'Received Pronunciation', we are forced to go along. (Wells 1995, 261)

He has, however, proposed categories for establishing a boundary between EE and its end-of-the spectrum varieties. According to Wells, the major difference between EE and RP is localizability with EE being localizable as belonging to the southeast of England and RP being regionally neutral. The major difference between EE and Cockney is grammatical correctness with Cockney speakers using non-standard grammar whereas EE speakers don't (Wells 1995, 262). In addition to this distinction, he proposes a set of phonological variables which are either typical of Cockney but not of EE or typical of both.

3. A closer look at three markers of EE

The following discussion is part of a larger project on EE in which the phonological as well as 'attitudinal' variables of EE are studied on an empirical basis. It focuses on a selection of three key linguistic variables, /t/-glottalling, /l/-vocalisation and TH fronting (cf. table 1), and a limited corpus of six female speakers who display linguistic patterns representative of those of other speakers in the same locality. The results obtained in this analysis will later be compared to results obtained on a broader corpus base in follow-up studies which are presently being conducted.

The discussion addresses the following questions:

- (a) What are the linguistic and social patterns of diffusion of /t/-glottalling, /l/-vocalisation and TH fronting on the continuum between Cockney and RP?
- (b) Can any of them serve as 'boundary markers' between EE and its neighbouring varieties as proposed by Wells?
- (c) Are they creeping into the 'realm of RP' which according to Rosewarne is already under attack from EE?

This discussion will not propose a final definition of EE. It can only approach a more detailed description of the concept in question by shedding more light on three of its presumed features.

- 3.1 Methodology
- 3.1.1 Extra-linguistic variables

'Accent classification': Cockney, EE and RP

A major methodological problem of this study lies in the definition of the 'varieties' in question. They manifest certain similarities with respect to the dimensions normally used in order to define them.

Geographical factors cannot play a major role as Cockney and EE belong roughly to the same region.

Phonetic factors cannot be made use of at all as it is the phonetic make-up of the these accents that this study has set out to establish. Social factors are therefore the only dimension left according to which speakers can be categorised. The regional aspect will, however, be taken into consideration as well.

Regional background

In accordance with Rosewarne's definition of EE (cf. page 1), the present investigation was carried out in London as part of the "heartland of this variety". All speakers were born and brought up in Central or Greater London. For Cockney2, speakers in the East End of London as the traditional home of Cockney speakers were interviewed. For EE, speakers in a South London middle class suburb were interviewed. For RP, a 'neutral' Central London school was chosen since RP is defined as regionally 'neutral'.

Social background

The underlying notion of 'social stratification' as the "product of social differentiation and social evaluation" (Labov 1972, 44) is taken from Labov's study in New York City. In the present study it is not the prestige of department stores but the prestige of schools by which the speakers are stratified. This stratification is based on the social prestige attributed to the schools they attend. This in return is measured by the amount of money which parents are able and prepared to pay for their children's education.

The term 'Cockney' is used as a cover-term for broad working-class London accents including traditional Cockney and popular London (cf. Wells 1982, 302). Furthermore, it is only the accent aspect of Cockney that is studied in this investigation.

Styles

The classification of styles is based on Labov's notion of contextual styles. The interview style (IS) was obtained when the students were asked about school life and free-time activities. The reading style (RS) and the word list style (WLS) are the result of elicitation tasks which were intended to elicit the target linguistic variables.

The use of a vocalised variant for 'dark /l/' started off as a well-known feature of Cockney about a century ago. It used to be "overtly stigmatized being disapproved of by the speech-conscious" (Wells 1982, 314). Nevertheless, it has found its way into RP where it is currently making rapid progress. Wells is so bold as to predict that "it seems likely that it will become entirely standard in English over the course of the next century" (Wells 1982, 259). The question to be studied is whether there is still a

difference of frequency in the use of the vocalised variant in Cockney, EE and RP.

/t/-glottalling

The history of /t/-glottalling, i.e. glottal replacement of post-vocalic /t/, is very similar to that of /l/vocalisation. The glottal stop started off as a stigmatised stereotype of Cockney3 and is now very much on the increase (cf. Milroy 1994, 4). It has also entered RP although its social acceptability still depends on the phonetic context. When comparing EE to Cockney and RP, the most central questions in this respect are:

- 1. What is the difference between these accents with regard to the relative frequency of the glottal variant?
- 2. What is the difference with regard to the distribution of the glottal variant in different phonetic contexts. The touchstone will be /t/ in intervocalic position (cf. table 1) and perhaps also in prelateral position as these contexts are still regarded as "sharply stigmatized" (Wells 1982, 261). Coggle gives the following graphic account:

Using the glottal stop between vowels is a bit like wearing a tattoo: whether you realise it or not, certain doors will be closed to you. (Coggle 1993, 41) It is, however, not confined to Cockney.

TH fronting

The use of the labio-dental fricatives /f/ and /v/ for the dental fricatives /T/ and /D/ is another wellknown feature of the proverbial Cockney4. It has recently been noted as spreading through nonstandard accents in England (cf. Trudgill 1988, 43). In contrast to /t/-glottalling and /l/-vocalisation, it has, however, not 'officially' entered RP yet. The question to study is whether TH fronting can also serve as a 'boundary marker' between EE and Cockney. The difference between the working class speakers and the middle class speakers is still quite noticeable in formal styles. The difference between the middle and upper (middle) class speakers, however, is less marked. The relative frequency of /t/-glottalling can therefore at best serve as a 'boundary marker' between Cockney and EE in formal styles.

As /t/-glottalling and /l/-vocalisation it is nevertheless not confined to Cockney.

The main research interest lies in the frequency of the glottal stop in the two last positions, preceding /l/ as bottle and between two vowels as in butter. For the working-class speakers, the glottal stop is still frequent in these positions. For the middle and upper (middle) class speakers, it is almost non-existent in the most casual of the three styles and ruled out in the most formal style. It can therefore serve as a 'boundary marker' between Cockney and EE.

Although TH fronting 'pops up' occasionally in the middle and upper (middle) class accents as well, there is still a marked social difference between working and middle class speakers. TH fronting can therefore serve as a 'boundary marker' between Cockney and EE.

4. Conclusion

In reply to the questions formulated under 3, the findings quoted above suggest the following answers:

- (a) /l/-vocalisation and /t/-glottalling are widespread in all social accents on the continuum between Cockney and RP. In the case of /t/-glottalling, there are, however, clear linguistic constraints (still) blocking the use of the glottal stop in prelateral and intervocalic position in formal styles by EE and RP speakers. TH fronting is still a feature of Cockney which is extremely rare in the other social accents.
- (b) The glottal stop in intervocalic (and to a certain extent prelateral) position as well as TH fronting can (still) serve as 'boundary markers' between EE and Cockney.
- (c) /l/-vocalisation as well as /t/-glottalling have already intruded into the 'realm of RP'. Furthermore, /t/-glottalling in prelateral position and TH fronting are currently making their way into the middle class accent and thus into EE. Whether they will creep into RP from there remains to be seen. One public school II speaker has already been caught producing the labio-dental instead of the dental fricative. Whether this is an embryonic variant hailing a future sound change or a mere slip of the tongue, only the future can tell.

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PART II

ENGLISH PHONETICIANS

Robert Robinson was an English phonetician living in London in the early 17th century who created his



own phonetic alphabet and wrote The Art of Pronuntiation. His only known published work is The Art of Pronuntiation, a handbook of English phonetics, published in 1617, and apparently a poor seller, as only one copy survives, in Oxford's Bodleian library.

The Art of Pronuntiation contains two parts. The first Vox Audienda, attempts in a very elementary and far from satisfactory way to give an account of the sounds of English in articulatory terms. The second, Vox Videnda is more interesting, as it sets forth an ingenious, if occasionally defective, alphabet to represent these

sounds. Unlike other attempts at a phonetic English character (such as that of Alexander Gil), Robinson's alphabet breaks entirely free from the basis of the Roman alphabet, using characters that bear only an accidental resemblance to Roman letters, while having a systematic relation to each other.

Robinson's alphabet is not only phonetic but to some extent featural, as voicing is not represented on the letters themselves, but by means of diacritics, in a mode that takes some account of assimilative voicing and devoicing of consonant clusters; English stress accent is also indicated by diacritics. Nasal stops are marked by a modification of the letters representing oral stops.

Included in The Art of Pronuntiation is Robinson's transcription of a Latin poem (presumably of his own composition), which exemplifies the idiosyncratic pronunciation used in English Latin schools of his time — and also, with sound-changes concurrent with those taking place in English, down to the 19th century, and thus provides valuable evidence as to the traditional adaptation of Latin to English phonology.

Henry Sweet (15 September 1845 – 30 April 1912) was an English philologist, phonetician and grammarian. As a philologist, he specialized in the Germanic languages, particularly Old English and Old



Norse. In addition, Sweet published works on larger issues of phonetics and grammar in language and the teaching of languages. Many of his ideas have remained influential, and a number of his works continue to be in print, being used as course texts at colleges and universities. In 1877, Sweet published A Handbook of Phonetics, which attracted international attention among scholars and teachers of English in Europe. He followed up with the Elementarbuch des gesprochenen Englisch (1885), which was subsequently adapted as A Primer of Spoken English (1890). This included the first scientific description of

educated London speech, later known as received pronunciation, with specimens of connected speech represented in phonetic script. In addition, he developed a version of shorthand called Current Shorthand, which had both orthographic and phonetic modes. His emphasis on spoken language and phonetics made him a pioneer in language teaching, a subject which he covered in detail in The Practical Study of

Languages (1899). In 1901, Sweet was made reader in phonetics at Oxford. The Sounds of English (1908) was his last book on English pronunciation.

Despite the recognition he received for his scholarly work, Sweet never received a university professorship, a fact that disturbed him greatly; his relationship with the Oxford University Press was often strained.

Daniel Jones (12 September 1881 – 4 December 1967) was a London-born British phonetician, professor of phonetics at the École des Hautes Études at the Sorbonne (University of Paris). A point of interest is that it is



probably Daniel Jones (and not as is often thought Henry Sweet) who provided George Bernard Shaw with the basis for his fictional character Henry Higgins in "Pygmalion".

In 1912, he became the head of the Department of Phonetics and was appointed to a chair in 1921, a post he held until his retirement in 1949. From 1906 onwards, Jones was an active member of the International Phonetic Association. In 1909, Jones wrote the short Pronunciation of English, a book he later radically revised. The resulting work, An Outline of English Phonetics, followed in 1918 and is the first truly comprehensive

description of British Received Pronunciation, and indeed the first such description of the standard pronunciation of any language.

The year 1917 was a landmark for Jones in many ways. He became the first linguist in the western world to use the term phoneme in its current sense, employing the word in his article "The phonetic structure of the Sechuana Language". Jones had made an earlier notable attempt at a pronunciation dictionary but it was now that he produced the first edition of his famous English Pronouncing Dictionary, a work which in revised form is still in print.

In the original form of the Cardinal Vowels, Jones employed a dual-parameter system of description based on the supposed height of the tongue arch together with the shape of the lips. Jones thus arrived at a set of eight "primary Cardinal Vowels", and recorded these on gramophone disc for HMV in 1917. Later modifications to his theory allowed for an additional set of eight "secondary Cardinal Vowels" with reverse lip shapes, permitting the representation of eight secondary cardinal vowels (front rounded and back unrounded). Eventually Jones also devised symbols for central vowels and positioned these on the vowel diagram.

Although Jones is especially remembered for his work on the phonetics and phonology of English, he ranged far more widely. He produced phonetic/phonolological treatments which were masterly for their time on the sound systems of Cantonese, Tswana (Sechuana as it was then known), Sinhalese, and Russian. Apart from his own vast array of published work, Jones will be remembered for having acted as mentor to numerous scholars who later went on to become famous linguists in their own right. These included such names as Lilias Armstrong, Harold Palmer, Ida Ward, Hélène Coustenoble, Arthur Lloyd James, Dennis Fry, A.C. Gimson, Gordon Arnold, J.D. O'Connor, Clive Sansom, and many more.

David Abercrombie (19 December 1909 – 4 July 1992) was a British phonetician who established the Department of Phonetics at the University of Edinburgh. He was a student of J. R. Firth and Daniel Jones.



David Abercrombie was appointed in 1947 to a lectureship in phonetics within the School of English at the University of Leeds. A year later he was invited to set up at Edinburgh what was then the only Department of Phonetics in the British Isles outside London. There he remained for 32 years, making Edinburgh justly famous for the high quality of phoneticians it produced. His Elements of General Phonetics (1967) was the most stylishly written of all introductions to the subject.

His other books were mainly collections of essays, notably on English rhythm. Not all his ideas received general acceptance but he always commanded the highest respect amongst his colleagues for the breadth of his interests, the balanced humanity of his outlook and the inspirational quality of his teaching.

Alfred Charles Gimson (7 June 1917 – 22 April 1985) was an English phonetician. Gimson was educated at Emanuel School London, and University College London, where later in 1966 he became Professor of Phonetics, and in 1971 head of the Department of Phonetics and Linguistics. He was a pupil and



colleague of Daniel Jones, and is known for having updated and extended Jones's description of standard British English pronunciation (Received Pronunciation, or RP). Through his Introduction to the Pronunciation of English, first published in 1962, Gimson became an authority on Received Pronunciation. He succeeded Jones as editor of the English Pronouncing Dictionary, making significant changes to its content and presentation. Gimson was a popular lecturer and broadcaster, and in the sixties became familiar to the British public through a series of brief talks on pronunciation he gave as

part of the breakfast-time Today programme on the BBC

His English Pronunciation Practice (1965, with G.F.Arnold) and A Practical Course of English Pronunciation: a perceptual approach (1975) reflect his concern with the teaching of pronunciation in this context. Although Jones had experimented with a number of different types of transcription for English (all within an IPA framework), his English Pronouncing Dictionary and other EFL-oriented works used a notation in which vowel length was symbolized explicitly, but length-related quality differences only implicitly (bead bi:d, bid bid, caught ko:t, cot kot). By the sixties this notation had a serious competitor in a system used Abercrombie and others, in which quality differences were explicitly shown and length marks not used (bead bid, bid bid, caughtkot, cot kot). Gimson succeeded in achieving a synthesis of the two types, such that both quantity and quality were made explicit, even at the price of added redundancy (bead bi:d, bid bid, caught kot, cot kot). He popularized this notation first in his Introduction and then, crucially, in the fourteenth edition of Jones's EPD (1977; Gimson had taken over the editorship in 1964).

For some reason, Gimson did not like people to call him by his first name: indeed, its identity was something of a mystery, since as a writer, broadcaster or lecturer he was always just "A. C. Gimson". His

friends and colleagues knew him as "Gim" /gim/. He died unexpectedly of heart attack shortly after his retirement, by which time he was President of the International Phonetic Association.

John Christopher Wells (born 11 March 1939 in Bootle, Lancashire) is a British phonetician and Esperantist. Wells is a professor emeritus at University College London, where until his retirement in 2006 he held the departmental chair in phonetics.



Wells is known for his book and cassette Accents of English, the book and CD The Sounds of the IPA, Lingvistikaj Aspektoj de Esperanto, and the Longman Pronunciation Dictionary. Before writing Accents of English, Wells had written a very critical review of the Linguistic Atlas of England, which was the principal output of the Survey of English Dialects. A considerable part of Wells's research focuses on the phonetic description of varieties of English. From 2003 to 2007 he was president of the International Phonetic Association. He is

also a member of the six-man Academic Advisory Committee at Linguaphone.

Wells was appointed by Longman to write its pronunciation dictionary, the first edition of which was published in 1990. There had not been a pronunciation dictionary published in the United Kingdom since 1977, when Alfred C. Gimson published his last (the 14th) edition of English Pronouncing Dictionary. The book by Wells had a much greater scope, including American pronunciations as well as RP pronunciations and including non-RP pronunciations widespread in Great Britain (such as use of a short vowel in the words bath, chance, last, etc. and of a long vowel in book, look, etc.). His book also included transcriptions of foreign words in their native languages and local pronunciations of place names in the English-speaking world.

Peter John Roach (born 30 June 1943) is a British retired phonetician. He taught at the Universities of Leeds and Reading, and is best known for his work on the pronunciation of British EnglishFrom 1968 to



1978 he was lecturer in Phonetics at the University of Reading, UK, and for the academic year 1975-6 was Profesor Encargado de Curso in the Department of English at the University of Seville, Spain, on leave from Reading University. He moved to the University of Leeds in 1978, initially as Senior Lecturer in Phonetics. Subsequently, after moving to the Department of Psychology, he was appointed Professor of Cognitive Psychology. He returned to the University of Reading in 1994 as Professor of Phonetics, later becoming head of the School of Linguistics and Applied Language Studies. He retired in 2004 with the title of Emeritus

Professor of Phonetics. His best-known publication is English Phonetics and Phonology (C.U.P.). The book was first published in 1983 and is now in its 4th edition (2009). An enhanced e-book edition was published in 2013. He has been the principal editor of the Cambridge English Pronouncing Dictionary for all editions from the 15th (1997) to the current 18th (2011) which is also published in CD-ROM format and an Apple app. Other books include Phonetics (OUP, 2001), in the series 'Oxford Introductions to Language Study',

and Introducing Phonetics (Penguin, 1992). Since the latter became out of print, Roach has made it available in PDF format on the internet as A Little Encyclopaedia of Phonetics.

GLOSSARY

Accent is a unified entity of pronunciation patterns used for communicative interaction by the members of the same speech community sharing a relevant social or geographical attribute and maintaining a uniform set of phonological characteristics. The word "accent" is used for varieties, which differ from each other only in pronunciation.

Alliteration is a deliberate repetition of similar or the same consonants in close connection to achieve a certain acoustic effect.

Allophones/variants of a phoneme are the realizations of one and the same phoneme in definite positions in words.

Assonance is a deliberate repetition of similar or the same vowels in close succession to achieve acoustic effect.

Codification is the fixing (reflection) of actual pronunciation forms in pronunciation dictionaries and other references.

Dialect is a variety of a language that includes differences in grammar, vocabulary and pronunciation.

Intonation is a complex unity of speech melody, sentence stress, rhythm, tempo, pausation, loudness and voice timbre, which enables the speaker to express his thoughts, emotions and attitudes towards the content of the utterance and the hearer. Intonation may be defined as a complex unity of prosodic features: 1) speech melody or pitch of the voice, 2) sentence stress, 3) temporal characteristics (duration, pausation, tempo and rhythm) and 4) timbre.

Intonation style can be defined as a system of interrelated intonation means which is used in a certain social sphere and serves a definite purpose in communication.

Norm is regarded as the invariant of the phonetic patterns circulating in language at a given period of time.

Phonetics as a branch of linguistics studies speech sounds (phonemes), word stress and intonation. **Phonetics** studies how speech sounds are made, transmitted and received, i.e. phonetics studies all possible speech sounds that the human vocal apparatus can produce.

The **phonetic system** of the language is a set of phonetic units arranged in an orderly way to replace each other in a given framework

Phoneme is a minimal abstract linguistic unit realized in speech in the form of speech sounds opposable to other phonemes of the same language to distinguish the meaning of morphemes and words.

Prosodic units are syllables, accentual (rhythmic) units, intonation groups, utterances, which form the subsystems of pitch, stress, rhythm, tempo and pauses).

Prosody or **prosodic features** refer to variations in pitch, loudness, tempo and rhythm.

Rhyme is the repetition of identical or similar terminal sounds, sound combinations or words. Rhythm is a regular recurrence of stressed syllables. In English stressed syllables occur at equal periods of time in connected speech.

Regional dialects are language varieties associated with speakers' living in a particular location, while social dialects are varieties associated with speakers' belonging to a particular social group or class.

RP is a non localized accent within Britain, i.e. it is not associated with any particular city or region. Idiolect is the individual speech of members of the same language community.

Segmental units are elementary sounds, vowels and consonants that form the vocalic and consonantal subsystems

Sentence stress/utterance-level stress/accent is the greater prominence of one or more words among other words in the sentence. It makes the force component of intonation. **Speech melody** is perceived as variations of pitch.

Sociolect is the accent of a certain social group of people. It reflects the speaker's cultural and educational background.

Speech melody is the changes in the pitch of the voice in connected speech. It makes the pitch component of intonation (the melodic component).

Speech tempo is the relative speed of utterance which is measured by the rate of syllable succession and the number and duration of pauses in a sentence.

Temporal component of intonation manifests itself in (1) pauses; (2) duration (rate or tempo in speech) and (3) rhythm (in close combination with sentence stress).

Timbre (or voice quality) is the auditory impression made by a certain mechanical setting (of the speech organs over stretches of speech.