# Why phonetic transcription is important

J. C. Wells
University College London

## 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 ul, 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 learners an advantage which

earlier generations did not have. However, mere exposure to authentic language material, while it will certainly improve a learner 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 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 ul, 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 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 content with various awkward facts about traditional English spelling: for example, that there is no unambiguous way of spelling the diphthong sound /aU/ (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. 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 /raIt/. 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 /@U/, AmE /oU/, as in <home, nose, vote>. But sometimes, as in <love, come> the vowel is /V/; and in <move> it is /u:/. Where the letter <o> denotes a short

vowel, the sound is usually BrE /Q/, AmE /A:/, as in <lot, top>. But in many other cases it is /V/, as in <front, monkey>. In the case of the combination <or> the sound is usually /O:/ (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 /3:/, AmE /3':/ -- in <work, word, world>, and BrE another one again, /V/, in <worry>. In unstressed syllables the pronunciation is usually /@, @'/), as in <minor, tractor> and also in <information, Oxford> (even though many EFL learners wrongly believe these words are pronounced with /O:/ in the second syllable).

There are various eading 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; 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 /"entr@ns/, or the verb meaning to fill with wonder and delight, to /In"trA:ns/. 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 /"sep@reIt/, as in he two friends separated at the crossroads Here, as you observe, the suffix has a strong vowel, the diphthong /eI/. But the corresponding adjective, spelt identically, is usually pronounced /"sepr@t/, as in e want separate bills or (as an adverb) in hey left separately Here the suffix has a weak vowel, in RP traditionally /I/ but nowadays more usually /@/. 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>: paid her a complim/@/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, /Qv, k{n, Dem/, used mainly when accented, and a weak form with a weak vowel, /@v, k@n, D@m/, 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 oing 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 "we@D@ releasing rI"li:zIN polluting p@"lUtIN nuclear "nUklj@ chemicals "kemIk@ls The first of these words, in the British Received Pronunciation we teach as standard, ought to be transcribed /"weD@/. The student use of /e@/ 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 /e@/ 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 /U/; 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 just transcribed is not going to pronounce them correctly, and will have a noticeable foreign accent. The correct transcriptions for these words are /"weD@, rI"li:sIN, p@"lu:tIN, "nju:kli@, "kemIk@lz/.

## 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 ound 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 he same sound in two different languages usually turns out, on closer inspection, to exhibit certain differences when we look closely. Even within a given language, he 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 phonetictranscription 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 /tQp, stQp, lQt, rQtn=, bQtl☒, despite the clear differences in aspiration and type of release. We can write the same /aU/ 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 symbols /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 aspiurated 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 honotypical 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.

## References

Abercrombie, D., 1964. English Phonetic Texts. London: Faber and Faber.

Carney, Edward, 1994. A Survey of English Spelling. London and New York: Routledge.

Cruttenden, A. (ed.), 1994. Gimson Pronunciation of English. London: Edward Arnold.

Jones, D., 1956. Outline of English Phonetics, 8th edn. Cambridge: Heffer.

Wells, J.C., 1990. Longman Pronunciation Dictionary. Harlow: Longman.