

Phonetic Transcriptions

Symbols and their sounds. The current standard of the IPA is published by the International Phonetic Association (1999) in *Handbook of the International Phonetic Association*: see Albright (1958) for a historical survey of the IPA. The main source for comparative information on the use of phonetic symbols, spanning various traditions and periods, is Pullum & Ladusaw (1986). Pike (1947) is an influential source in establishing Americanist transcription practices.

Ladefoged & Maddieson (1996) gives an extensive discussion of the range of phonetically distinct segments found in languages of the world, and of the phonetic parameters involved, based on the authors' decades of firsthand investigation into the phonetic properties of human language. Along with Ladefoged (2001a,b) this will provide the student with an excellent understanding of the range of phonetic variation found in language.

Introductory books in phonetics often explain the production of consonants and vowels, but an explicit articulatory description of how a symbol is produced hardly gives the student much to hang the symbol on. A traditional out-of-print solution to this problem is Smalley (1964) and the accompanying tapes, which give students a recording of the sound that may make the nature of some of these phonetic distinctions more vivid. Digitized examples of various sounds are available on the CD which accompanies Ladefoged (2001a,b), and many of these items are online at <http://hctv.humnet.ucla.edu/departments/linguistics/VowelsandConsonants>. Note that this web page may change, and new examples are added to increase the range of languages illustrating a sound. Other examples of IPA symbols and corresponding sounds may be found at <http://web.uvic.ca/ling/ipa/handbook>. These sources will help students by making the sound-symbol connection more vivid — you can hear actual click sounds such as the lateral click [l̥] and not just think abstractly “[l̥] is a lateral click, whatever that might be”.

Variation in the use of symbols. It might strike the student as peculiar that there is diversity in systems of transcription — you might think that a single uniform scientific system could be agreed on and used by all linguists. There are a number of reasons why this has not been the case. There is simple tradition to contend with: when one has been brought up to use one system of notation, it is very difficult to suddenly switch to another by decree. Neither system is philosophically more sound or scientifically more accurate than the other, and the choice between systems is based on sociological considerations.

The textbook uses standard phonetic symbols following American practice, which I have used for years. The transcription has been normalised so that e.g. Finnish [æ] is represented as [æ] and not [ä], though almost all data sources on the language would use the latter representation. Transcriptional ambiguities and inconsistencies abound in the literature, and one must be careful in taking for granted the phonetic interpretation of given data. Published data on languages, especially grammars and other descriptions of language structure, rarely use systems of standard universal systems of phonetic transcription consistently. For example the symbol <c> may be used to represent a palatal stop [kʲ], an alveopalatal affricate [č], an alveolar affricate [tʃ], an alveopalatal fricative [š], a voiced alveopalatal affricate ([ʝ, in Turkish), a voiced pharyngeal fricative [ʕ] (in Somali), a dental click ([ǀ, in Zulu and Xhosa), not to mention a voiceless velar stop in many European languages and other languages with orthographic traditions influenced by

European languages. The symbol [ɽ] will generally represent a retroflex *t*, but in the description of most Semitic languages — which do not have retroflex consonants — it represents a pharyngeal secondary articulation i.e. [tʕ]; but in some Ethiopian Semitic languages, it is used to represent glottalised [tʰ]. In dealing with original sources (and any linguistic literature based on those sources), it is always essential to check the actual phonetic values of graphemes. The use of a special phonetic symbol such as [ʃ] or [č] is rarely ambiguous, but the use of plain letters such as <y>, <c> and even occasionally <p>¹ may represent the simple practical expedient that it is easier to type ‘c’ than ‘ʃ’. This is why it is important, in looking at language data sources, to carefully check the phonetic descriptions of segments and not just automatically assume that the source is rigorously following a particular linguistic transcription system.

Practical issues have played a major role in the symbols which are used to phonetically represent data. Using “funny” symbols such as [ʉ ɣ ɛ ɔ ɥ ɦ ɔ̥ ɽ ɽ̥] can significantly increase the cost of typesetting since such symbols cost money to produce and will not be available at all publishing houses. It can also be a considerable nuisance to an author to have to go to various lengths to insert such symbols in a manuscript, hence there is a natural tendency to reduce the number of special symbols used. Practical issues dictated by the need to develop orthographies for unwritten languages quite often lead a descriptive linguist to pick a particular symbol for transcription. Consider the fact that in the spelling of Somali, the consonant [ʃ] is represented with the letter <c> and [h] is spelled as <x>. It may be inconvenient to have to remember such a parochial orthographic rule for Somali data, but for speakers of Somali this is a tremendous help, because it means that Somali can be written using standard typewriter symbols. Typewriters can be rigged to include these phonetic symbols, but only at great cost. Even when the inclusion of some phonetic symbol is inevitable, the choice of transcriptional system can be influenced by the desire to reduce the number of additional symbols, so in a number of languages spoken in West Africa, the phonetic vowel system [i ɪ e ɛ o ɔ u ʊ] is often transcribed as [i ɪ e ɛ o ɔ u ʊ], by the addition of a single diacritic rather than the introduction of four new vowel symbols.

Since computers have become almost commonplace in academic contexts and software has improved to the point that earlier problems of typesetting are less of an issue, it is to be expected that greater uniformity in symbol usage will result in the academic context. On the other hand, it is highly unlikely that indigenous spelling systems will be supplanted by phonetic transcriptions, and therefore most published language data will nearly always follow traditional spelling conventions that prevail in the language area. It is essential that students in linguistics be able to correctly interpret the wealth of published data that is available.

English vowel transcription and the conflicting goals of transcription. Transcription of English vowels can be confusing, since different sources present an inconsistent picture of “correct” transcription of words. In some cases, this is due to different symbol systems — IPA vs. APA — so the difference [feɪl] vs. [feyl] for “fail” would be exactly of this nature. Another reason for differences in transcriptions is that the dialect represented may differ in how vowels (to a lesser extent, consonants) are pronounced. This is very clear in the difference between British and American English, and even within these two dialect groups there are major differences in pro-

¹ The letter <p> is used in Yoruba to represent the labiovelar [kp].

nunciation so that the vowel of “suit” might be pronounced as [u:], [uw], [ʌ], or [ɪw̃]. The dialect of this author does not distinguish “caught” and “cot”, so naturally these words are transcribed the same in the book. In that dialect, “root” is pronounced [rɒt], and “route” and “rout” are pronounced [ræwt], whereas in other dialects “root” and “route” are pronounced as [ruwt] and “rout” is pronounced [rawt].

A third and little-discussed cause of variation in the transcription of English vowels is different implicit goals and assumptions that authors have in creating a transcription. As discussed in the first chapter, information can be added to a transcription to make it a more accurate rendering of a pronunciation: close resemblance to pronunciation is one common goal. Sometimes, though, certain types of information are not only unimportant, but can obscure the cognitive status of certain sounds, by focusing too much on different physical manifestations and deemphasizing the unity behind the sounds. Chapter 3 discusses a way of removing such information from a transcription, by eliminating properties that can be supplied via automatic rule. Thus another goal of a transcription is to capture and highlight just the *important* information.

No one believes that a totally accurate phonetic transcription is possible (any more than a ‘totally accurate’ measurement of weight is possible). It is generally accepted that the primary goal of transcription is to provide the information which is important, especially information that could not be supplied by applying a general rule (see the discussion of phonemes in the next chapter). Since there are multiple systems of rules which could relate a less-accurate transcription that focuses only on important properties of speech to a highly accurate transcription that closely mimics actual speech, more than one transcription of “important” details is possible since there is more than one theory of which aspects are “important”.

As an example, the word “soy” could be transcribed as [soy] or [sɔy], [sɔy] being somewhat closer to phonetic reality than [soy]. It may not be immediately obvious that [sɔy] is a phonetically more accurate transcription, but there is a simple instrumental way to address this question. By digitally recording sample words containing the relevant vowels and playing back just the center part of the vowel with a speech editing and playback program, one can compare the quality of the vowel [o] in words like “soap”, “soak” with the vowel [ɔ] in “sought”, and the round vowel in question in “soy”. By eliminating distracting consonants, you can concentrate on the differences in vowel quality, and will probably conclude that the vowel in the middle of “soy” is closer to that of “sought” (in an [a ~ ɔ]-preserving dialect) than it is to that of “soak”.

There is no *contrast* (see the discussion in the next chapter) between [oy] and [ɔy] in English — no words are distinguished by having [oy] versus [ɔy] — so it is possible to transcribe this diphthong either way and relate that transcription to actual pronunciation by rule. In terms of satisfying the minimal criterion of accuracy — including all information which cannot be predicted — either transcription is as good as the other.

Since the transcription [sɔy] is closer to the phonetic output, that might decide the matter in favor of [sɔy]. Some countervailing considerations legitimize the transcription [soy]. First, [sɔy] is a somewhat closer-to-accurate transcription, but the quality of the vowel in this diphthong is still not the same as the quality of the vowel of “sought”, “law”, so to be fully faithful to the idea of representing pronunciations accurately, the transcription of “soy” should indicate that the vowel is somewhat tenser, something like [ɔ̟] (using the IPA diacritic for a raised vowel variant): but this is a vowel with no independent existence in English. Thus the choice between [soy]

and [sɔy] is not a choice between a phonetically accurate and a phonetically inaccurate transcription insofar as neither transcription accurately captures the nature of the round vowel in this diphthong. Once we grant the legitimacy of relating the phonetic form [sɔy] to a transcription [sɔy] which is not the same as the phonetic form, there is no reason in terms of phonetic accuracy to reject [soy] as an *equally* good transcription.

Second, the preference for [ɔ] in the transcription is predicated on the independent necessity of using both [a] and [ɔ] in transcriptions. But as we know, some dialects do not distinguish those vowels — “sot” and “sought” are pronounced the same in that dialect. The choice of writing [a] vs. [ɔ] for the vowel of these words is relatively arbitrary.² While the phonetic quality of “oy” in this dialect is also closer to [ɔy], there is no vowel [ɔ]. But we cannot write “oy” as [ay], since in this dialect [ɔy] is clearly different from [ay] (“buy” ≠ “boy”).

Similar problems surround the transcription of “o” before “r”: is the vowel in “core” better transcribed as [ɔ] or [o]. This question becomes particularly pertinent in dialects which do not have a difference between [ɔ] and [a]. Should the first vowel in the diphthong “ay” be transcribed with the same vowel as in “hot”? Close inspection of pronunciation reveals that the vowel portion of the diphthong is closer to (IPA) [ɐ] in contrast to the vowel of “hot” which is closer to (IPA) [ɑ]. Similarly, there is no absolute necessity of distinguishing the vowels [ɔ] and [ʌ] in English: [ɔ] appears in unstressed syllables and [ʌ] appears in stressed syllables. While it would suffice to use a single vowel symbol to represent the vowels of “abutt”, the transcription [əbʌt] more accurately reflects actual pronunciation, since the actual vowel quality is significantly affected by whether the vowel is stressed. Whether that fact is sufficient to warrant use of an additional symbolic distinction must rest on decisions about one’s goal in transcription.

Readings

- Albright, R. W. 1958. *The International Phonetic Alphabet: its backgrounds and development*. IJAL 24, Research Center in Anthropology, Folklore and Linguistics, Publication 7. Indiana University: Bloomington.
- International Phonetic Association. 1999. *Handbook of the International Phonetic Association*. Cambridge University Press: Cambridge.
- Ladefoged, P. & I. Maddieson. 1996. *The sounds of the World’s Languages*. Blackwells: Oxford.
- Ladefoged, P. 2001 a. *A Course in Phonetics*. Harcourt: Orlando.
- Ladefoged, P. 2001 b. *Vowels and Consonants*. Blackwells: Oxford.
- Pike, K. 1947. *Phonemics*. University of Michigan Press: Ann Arbor.
- Pullum, G. & W. Ladusaw. 1986. *Phonetic Symbol Guide*. University of Chicago Press: Chicago.
- Smalley, W. 1963. *Manual of Articulatory Phonetics*. Practical Anthropology: Tarrytown, NJ.

² The vowel which the author uses in speaking English is phonetically distinct from both of the vowels [a] (more accurately the low central vowel [ɐ]) and [ɔ] used by speakers of dialects making the contrast, and is closer to — but still distinct from — the low back vowel [ɑ], found in Norwegian.