

**Phonetic transcription** is a record of an event. If someone says ‘ten’ to me, I can represent quite accurately the way he/she said it, so that another linguist can reproduce it. To make it as explicit as possible, I can employ a **narrow** transcription, giving as much detail as possible: [t̪<sup>h</sup>ɛ̃n̪] would tell other linguists that the initial stop in the word had been pronounced apically, with the tongue tip against the alveolar ridge, with the glottis widened for aspiration; that the open-mid front unrounded vowel following the stop had been nasalized; and that the alveolar nasal at the end, unlike the initial stop, had been pronounced laminally, with the blade of the tongue against the alveolar ridge.

This kind of detail serves the valuable purpose of recording exactly what an utterance sounded like, and is necessary in the first steps of analysis of an unfamiliar language. If, after working with the language for a while, I shift my focus to the **differences** among sounds in the language, I might begin leaving out the details which recur regularly. If the language is English, I discover that I can omit the aspiration and the nasalization, so the next time that utterance occurs, I can just write [tɛn]; while analyzing the language further, I may see that apical vs. laminal articulation of alveolars is a matter of individual preference: some speakers have one or the other, and some have both.<sup>1</sup> So I can omit that marking, giving [tɛn]. This is a **broad** phonetic transcription, giving few details. A linguist looking at would not know how to pronounce it, unless he/she knew English. Even then, he/she wouldn’t be able to reproduce the utterance exactly, because the apicality and laminality are not shown. It shows only the sounds which can make a meaningful distinction: it’s ‘ten’, not ‘tan’, ‘tin’ (except in some varieties), ‘ton’, ‘tone’, or ‘teen’. It really is a **phonemic representation**. It shows only what a native speaker needs to know in order to produce the word. It is not a record of an event, but a code for a string of **phonemes**. For that reason we write phonemic representations between slashes rather than brackets: /tɛn/. We use brackets for phonetic representations, in which you can be confident that each symbol stands for something like its IPA description. In a phonemic representation, since each symbol stands for a **range** of sounds (we use /t/ in ‘top’, ‘stop’, and ‘bottle’, even though the three are objectively very different, the /t/ in ‘top’ being [t̪<sup>h</sup>] and the /t/ in ‘stop’ being [t], with no aspiration, and the /t/ in ‘bottle’ being, often, a tap [ɾ] or even a glottal stop [ʔ]).

If we were writing a language such as Hindi or Thai, in which the occurrence of aspiration is unpredictable, we would have to keep the raised *h* in the phonemic as well as the phonetic representation. The Hindi word [p̪<sup>h</sup>əɫ] ‘fruit’ differs from [pəɫ] ‘moment’ only in aspiration, showing that aspiration is **phonemic** or **contrastive** in Hindi, unlike in English. So the phonemic representations would have to be /p̪<sup>h</sup>əɫ/ and /pəɫ/.

**Symbols** used in phonemic representations are *arbitrary*. We often use the IPA symbol corresponding to what the allophones have in common. So the range of sounds [p], [p̪<sup>h</sup>], and [p̪<sup>ʰ</sup>] would be written /p/. Sometimes it is more convenient to use a symbol which is already on the keyboard. A language might have a phoneme whose allophones were [ɑ], [ɒ], and [ɔ̃]. Even if the sound [a] is not part of the language, it is convenient to use /a/ for the phoneme symbol. This is exactly what happens in many textbooks about English phonology. The symbol /a/ is used for the stressed vowel sound in *father*, *cotton*, and (in some varieties) *caught*, even though none of these is normally pronounced with the vowel symbolized by IPA [a]. In principle, any symbol will work, as long as it is different from the symbols used for all the other phonemes of the language. We could use /ɸ/ for the voiced bilabial stops of English, /ɸ̥/ for the voiceless ones, and /ɸ̣\*/ for the low back vowels, so *bop* could be represented /ɸ̣\*ɸ̣\*. But that would be very impractical, if not silly.

<sup>1</sup> But in some languages, e.g. Malayalam, apicality vs. laminality can be a phonemic contrast.