

## Phonetic adequacy in descriptive grammars

Even extensive book-length descriptive grammars quite often fail to meet a standard that might be labeled phonetic adequacy in describing the sounds of the target language and the underpinnings of its phonological patterns. This paper analyzes some of the reasons for this fact and proposes an optimal remedy.

Writing a satisfactory grammar requires primary attention to the morphology and syntax of the language, with the proportions demanded by morphology vs syntax varying according to whether there is a great deal of inflectional and derivational variation in word-forms or only a little, as well as how one chooses to make the distinction. For example, Wilbur's (2014) grammar of Pite Saami devotes 136 pages to morphology, but only 48 pages to syntax, as well as a relatively generous 47 pages to phonological topics. Bon's (2014) grammar of Stieng on the other hand devotes around 360 pages to syntax, 49 pages to phonology (of two dialects, somewhat historically oriented), and essentially none to morphology per se, although 30 pages contain descriptions of word classes defined in some cases by "morphosyntactic" traits which are essentially phrasal constructions. Linguists with sufficient background to understand the complexities of morphology and syntax may simply not have enough training in phonetic analysis to deliver a more detailed analysis of the sound system, and may have little interest in doing so. This largely sociological factor is probably the most significant reason why phonetic adequacy is not reached.

However, an important additional factor can be identified in the imprecisions and ambiguities of much of the terminology traditionally used in phonetic and phonological descriptions. Some terms are inherently vague, such as "tense", "vibrant" or "guttural" and require case-by-case explication if used. Others, such as "diphthong", are understood to have specific but different meanings by different users, whereas yet other terms see their application vary across time and location. "Dental" and "alveolar" are an example of the latter: up until the later 20<sup>th</sup> century sounds transcribed as /t, d, n, s/ were more likely to be labeled "dental" regardless of their precise place of articulation whereas more recent descriptions are likely to use the term "alveolar" instead; in French *alvéolaire* is sometimes used for a more posterior place of articulation than the English equivalent. Even when terms have a generally clear meaning they are not infrequently misapplied; e.g. word-final stops may be described as "aspirated" when they merely have an audible release (Maddieson & Smith 2013), and "advanced tongue root" may be used as a diacritic feature to distinguish vowel heights.

The outcome of these factors is frequently a lack of clarity about the typical realizations of segments, syllabic structures, and properties such as tone and stress, if present. A potential test of adequacy is to consider whether a would-be learner of a "sleeping" language (Hinton 2013) could reach a good approximation of the correct pronunciation based on the verbal description given in the grammar (together with appropriate professional guidance). It is easy to find cases where Wilbur's and Bon's grammars, along with many others, would fail that test. For example, Wilbur describes singleton and geminate /r/ both as trills, but spectrograms show approximant pronunciations; Bon places <r> together with <l> in a slot on the consonant chart labeled "alveolar liquid", but gives no further indication if it is ordinarily a trill, flap or approximant, or varies between these.

No documentation of a language can ever be complete, and the spoken form of any language is enormously variable. However, normative targets can usually be established and these should be clear from a descriptive grammar. The suggestion here is that adequate phonetic detail could much more frequently be provided through collaborative consultation with a phonetic expert. Most phoneticians would struggle mightily to make sense of morphology and syntax but as ancillary consultants to a descriptive grammar project they could improve the final product by adding precision to the labeling, providing interpretation of acoustic records, or even suggesting simple perceptual tests. Grammarians, consult your local phonetician!

### **References**

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