The Phonetics of Phonology

John J. Ohala
University of California, Berkeley, USA

Phonology seeks to understand the behavior of speech sounds in human languages - the way they pattern. Some of their behavior arises from phonetic factors. Here are some examples.

Emergent stops
Occasionally one finds a stop consonant emerging between a nasal consonant (such as [m]) and a following oral consonant (e.g., [f], [s], [t], [r], [l]): Thompson (from Thom + son), Alhambra (from Arabic al hamra, "the red (edifice)"); humble (related to humility, from Latin humilis), empty < Old English amtig.

To understand how these stops arise, it is necessary to view speech production (in part) as a process controlling the flow of expiratory air using certain anatomical structures as valves. A nasal consonant is made by channeling air through the nasal cavity: there must be a valvular closure in the mouth and a valvular opening into the nasal cavity (by a lowering of the soft palate). The nasal consonant [m], for example, has the lips closed while the passage between the oral and nasal cavities is open (represented schematically in Fig. 1a). An oral consonant like [s] on the other hand, requires a closure of the nasal valve (by an elevation of the soft palate); see Fig. 1c. If the oral consonant's soft palate closure is made prematurely, that is, during the latter part of the nasal consonant, then with both the oral and nasal valves closed (and there are no other outlet channels for the expiratory airflow) a complete stoppage of the air flow is produced; see Fig. 1b. This is an example of a very common process known as "assimilation" (the position of the soft palate during the [m] assimilates to the position of the following oral obstruent).

![Fig. 1. Schematic representation of the vocal tract and the valves which regulated the flow of air; expiratory air symbolized by grey; valves by black triangles. (a) the nasal [m], (b) the transition between [m] and [s], where complete blockage of air occurs, (c) the oral fricative [s].](image)

Such brief stops are common in present-day speech in words such as some[p]thing, warm[p]th, team[p]ster, young[k]ster and so on. Normally these pass unnoticed and are regarded as predictable consequences of the transition between a sequence of nasal consonant + oral consonant. Occasionally, however, listeners may misinterpret these "accidental" stops as purposeful parts of the pronunciation and subsequently incorporate them in their own pronunciation, possibly exaggerating them in the process. Such a misinterpretation by a listener is one of the most common causes of
The Story of "W"

The Czech (in name only) is closely related to the Germanic languages, particularly the Low Germanic languages. Czech has been influenced by several other languages, including Latin, French, Russian, and English. The language has developed over time, and its pronunciation has changed significantly. 

In conclusion, the sounds of the Czech language are complex and varied, and their pronunciation can be challenging for non-native speakers. However, with practice and dedication, it is possible to master the language and its unique sounds.
certain compensating factors

causes assimilating nasals (a given accent rule that I believe to be essentially true which neglects the notion of nasal spreading. For the name of nasal spreading

show the variant pronunciation in [w, ə, æ, ð, sə], English". As in Spanish, some is pronounced [um, b].

acoustic properties. Particularly those determining some of the acoustic characteristics of the nasal release causes assimilating nasals to be

place accentual tones on the boundary of English words. The presence or absence of accentual pronunciation involves nasal consonant assimilation to the

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discussed cases involving the absence or infrequent occurrence of certain

[pl] or simple verbs

Phonology
in the case of the labial nasal [m] but is quite short in the case of the velar nasal [ŋ].
In the case of the labial-velar nasal there are two constrictions, one labial and one
velar, but only the rearmost constriction defines the extent of the branch (measured
from the point where it diverges from the pharyngeal-nasal cavity); the forwardmost
(labial) constriction will be largely irrelevant in determining the characteristic
resonances. Thus labial-velar nasals will tend to sound like simple velar nasals.

Fig. 2. Schematic representation of the air spaces creating the distinctive resonances for nasal
consonants. From left to right: [m], [ŋ], and a labial-velar nasal. Dashed lines show the air spaces
identical in all nasals; the dotted lines show those air spaces whose dimensions may differ between
nasals.

Explanations for sound patterns in language
As mentioned at the start of this article, only some of the behavior or patterning of
speech sounds are amenable to a phonetic explanation. Psychological and historical-
cultural elements will have to be invoked in other cases, e.g., paradigm regularisation
(e.g., the occasional replacement of brought, past tense of bring, by brang, on the
analogy of sing-sang). Nevertheless, those sound patterns that show up in the same or
similar form in diverse, unrelated, languages undoubtedly need to be explained by
the only factors which are universal to all languages: the phonetics of speech
production and perception.

Equally important - or perhaps more important - in contemporary phonology is not
only explaining the behavior of speech sounds but also the establishment of sound
philosophical and scientific criteria for what constitute valid explanations in the first
place, i.e., ones that avoid circularity, that exclude unknown (“ occult”) entities and
forces, and ones subject to empirical evaluation.

A empirically-based understanding of how speech sounds are structured and how
they behave will have payoff in such diverse areas as historical phonology, speech
technology (text-to-speech synthesis and automatic speech recognition), second
language teaching, and clinical phonetics.

References
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155-161.