Brief Exploration of Nasal Assimilation Phenomenon in Negative Prefixes—Comparison Between Chinese Dialect & English

GONG Yi-pu
Chengdu College of University of Electronic Science and Technology of China, Chengdu, China

Nasals and assimilation are basic terminologies in phonology, nasal assimilation is a kind of common phonological phenomenon in addition. As is known to all, in English, assimilation mainly happens between consonants and consonants, which is one of the important constitutes of English mutation, for the sake of labor-saving convenience and better fluency. From an applied linguistic view, nasal assimilation in negative prefixes (e.g. un-, ab-, ir-, im- & non-, etc.) is seemingly another interesting phenomenon for an innovative exploration. This paper focuses on some specific enumeration and comparison between Chinese dialect (specifically, Sichuan dialect) as well as English. This brief exploration and analysis might contribute to relative study in years to come.

Keywords: nasal assimilation, negative prefixes, comparison, Chinese dialect, English

I. Introduction

English nasals consist of 3 in the following places of articulation: bilabial /m/, alveolar /n/, and velar /ŋ/. The first 2 can occur in all word and syllable positions but the last one can only occur in syllable-final position. When it comes to nasals, we should pay attention to a terminology—nasalization, which is the process whereby an oral segment acquires nasality from a neighboring segment. The articulatory motivation for this is self-evident. Any leakage of air past the velum will cause some nasalization. Sometimes, for the sake of an absolute distinction between oral and nasal consonants, some articulatory parameters such as phonation, places of articulation and manners of articulation should be in a high, even perfect degree of adaptability with perfect synchronization of velic closure. Assimilation is the movement of one sound to the place or manner of articulation of an adjacent sound. In “regressive” assimilation, a following sound influences a preceding one, e.g. in bad_boys. In “progressive” assimilation, a preceding sound influences a following one, e.g. in this_day (/d/ becomes devoiced). Furthermore, there are some basic as well as common regulation for nasal assimilation (both aggressive and regressive assimilation could be followed): Bilabial and alveolar nasals become labio-dentals when they are followed by a labio-dental sound, e.g. comfort. This assimilation is not restricted to the adjacent sounds in the same word and still occurs when the labio-dental fricative is at the beginning of the next word, e.g. on_fire. Both the two conditions previously are regressive nasal assimilation.
In this paper, there is another key word, “prefix”, which is an element placed at the beginning of a word to adjust or qualify its meaning (e.g. ex-, re-, non-, etc.) or as an inflection. It is obvious that negative prefixes have been the contexts of nasal assimilation due to the title of the paper.

2. Some Specific Enumeration of English Nasal Assimilation Phenomenon in Negative Prefixes

In English, some words which are with negative prefixes, such as (1) “intolerant”, “intractable”; “indefinite”, “indistinct”; (2) “impossible”, “impure”; “imbalance”, “imbue” could be generalized and categorized by rules of homorganic stop consonants. Group (2) contains the prefix im-, also being negative. There is a question, “is im- simply a different prefix from in-?” What are the principles governing their distribution? Why don’t English get intolerant and inbalance? Linguistic intuition indicates that in- and im- are the same prefix. In particular, both forms convey the same meaning (negative connotation), and are remarkably similar in phonetic composition, even in the diverging segments /n/ and /m/, only differentiated by their place of articulation: they are both sonorants, continuants, voiced and nasals.

The alternation between /m/ and /n/ in the prefix in question is not difficult to be realized that it can be attributed to assimilation: the labial /m/ shows up before a labial (/b/ in imbalance), and the alveolar /n/ shows up before an alveolar (/t/ in intolerant).

Some other special “opposite” cases for nasal assimilation in negative prefixes: there is little reason to believe the prefix-final nasal will assimilate to a following vowel: inability; inevitable; inoperable.

3. Some Other Enumeration of Chinese Dialect Nasal Assimilation in Negative Prefixes

In Sichuan dialect of Chinese, negative word “没有” means “There’s no…” or “non-” (Negative response which can be separately used in daily verbal communication). But There’re still many branches of Sichuan dialect, which are with different pronunciation but sharing the same negative meaning. Sometimes, Sichuan dialect “没得”, which pronounced as /mei/ /dei/ (not mandarin of Chinese PinYin) could be preceded by some antecedent, which indicates this antecedent will be qualified by this negative word “没得” (its prefix of Chinese is nasal /m/ and is with negative meaning). Several antecedents can precede this negative prefix, such as “名堂” /miŋ taŋ/, which means “matter”; “something makes sense”. So when they come together and compose a very vivid Chinese Sichuan dialect “名堂没得” occasionally, there could be some other adverbs of degree which could precede “名堂”, e.g. (“求名堂没得”) The Velar nasal /ŋ/ precedes bilabial one /m/, which leads to progressive assimilation.

Another case of this pattern of constitution is “嗯是没得” (another usage of Sichuan dialect which means “It’s really inexistent”). Here the sample indicates that the /s/ could be omitted in real articulatory condition, which means the bilabial nasal negative prefix, /m/ is subject to progressive assimilation in case of partial devoicing after the voiceless obstruent /s/, as in /sptei/ /dei/ finally.

There are also some other cases in similar patterns of Sichuan dialect, and then the enumeration will be in ellipsis.
4. Conclusion and Discussions

Actually, nasal assimilation in negative prefixes can both occur in English words and Chinese dialects (here the focus is on Sichuan dialect), although the views and definitions of negative prefixes are different or need to be in consistency. After comparison of this phenomenon between Chinese dialect and English, we can know it might be in a broader perspective. There are also some questions. How can people manage the problems on nasal dissimilation of negative prefixes in different languages? Can nasal dissimilation occur in English or dialects in other languages result into ambiguity? Might it be a good view to investigate.

References