

The juxtaposition of word-final and word-initial vowels occurs frequently in Spanish, making hiatus at the word boundary very common (e.g., *la escuela* ‘the school’). Like many languages however, Spanish favors a regular vowel-consonant-vowel alternation, and thus, hiatus is commonly resolved in some way in speech. Possible resolution types include deletion of one of the vowels (e.g., /a+/e/ > [e]), creation of a diphthong (e.g., /a+/e/ > [aj]), coalescence into a different vowel (e.g., /a+/e/ > [ɛ]), and insertion of a consonant (e.g., /a+/o/ > [aʎo]). While adjacent vowels most often result in one of these outcomes, hiatus may also be maintained. Rule- and constraint-based accounts, limited mainly to consideration of structural factors such as stress and vowel quality, have sought to specify precisely what type of resolution will occur in any given case in which two vowels are juxtaposed. However, such treatments have fallen short of arriving at an adequate explanation of this phenomenon as it occurs in real language use, largely because they have failed to sufficiently acknowledge and account for the variability encountered therein.

The current study is the first to deal with the issue of hiatus resolution within the theoretical framework of Usage-Based Phonology (Bybee 2001), which proposes that patterns of use play a crucial role in creating and shaping the form and content of the sound systems of languages. Unlike previous accounts, it takes as its object of investigation the variability found in the pronunciation of vowel sequences in real discourse, and assesses various ways in which frequency of use, in addition to structural and other factors, contribute to this variability. The study focuses specifically on hiatus resolution between words in New Mexican Spanish. 1,912 tokens were extracted from a large corpus of guided sociolinguistic-style interviews conducted as part of the *New Mexico–Colorado Spanish Survey (NMCROSS)* (Bills 1997). The data were coded for a variety of structural and usage factors, including stress, vowel quality, syllable structure, lexical content, previous mention, and three measures of frequency: (a) word frequency, (b) string frequency, and (c) ratio frequency, which is a measure of the frequency with which a particular string is used in discourse in proportion to the frequency with which one of the words in that string is used overall. Variable-rule analysis was performed to evaluate the relative contribution of each of the factors tested as they operated simultaneously, revealing that frequency (particularly patterns of lexical co-occurrence, i.e., string and ratio frequency) as well as structural factors (especially vowel quality and stress) played a significant role in determining how hiatus was resolved. These results enhance our understanding of hiatus resolution by shedding light on important factors which have previously gone unexplored. In addition, they provide compelling evidence for the storage and processing of frequent two-word strings as single units or “chunks” in memory. By assessing the effects of several different frequency measures on hiatus resolution, this study also adds to our knowledge about the various ways in which language structure can be affected by patterns of use.

References:

- Bills, Garland D. 1997. New Mexican Spanish: Demise of the earliest European variety in the United States. *American speech*, 72. 154–71.
- Bybee, Joan. 2001. *Phonology and language use*. Cambridge, UK: Cambridge University Press.