Adam D. Daniel (MA), University of Calgary

A phonological mirage: the elision of two word-final segments in Welsh

Introduction: This paper uses a phonological feature-based analysis to examine and explain the disappearance of two word-final segments in Welsh, [v] and [ð]. To examine why these two segments are elided and not other similar segments, i.e. fricatives, a phonological analysis compared the features of these two sounds with those of all fricatives of Welsh. This paper proposes that [voice] and possibly [grave] are key features of word-final consonant elision among Welsh fricatives. Finally, the elision of these phonemes word-finally does not indicate that their elision is a solely phonological process, because they reappear at morphological boundaries, causing [v] and [ð] to act as a metaphorical mirage within Welsh phonology.

Issue: In pronunciation guides and phonology sections of Welsh grammar books and dictionaries, [v] is often annotated with a comment informing that the segment is unpronounced word-finally (cf. e.g. Williams 1980: 31-32, King 2003: 12). For example, [arav] 'slow' should be expected to be pronounced [ara] according to these sources. However, these grammars and dictionaries do not provide any reason for why word-final [v] is elided. To date, no research has investigated the elision of [v] nor have any attempts been made to explain it. The lack of explanation of this phenomenon raises questions such as: is [v] the only word-final segment which shows elision? What aspects of the phoneme [v] make it susceptible to elision compared to other consonantal phonemes which are not elided? Is the elision of [v] affected by other aspects of the grammar?

Methodology: To study word-final [v] elision in Welsh, I consulted a large-scale corpus, the Welsh Dialect Survey (Thomas 2000), which collected pronunciations of various Welsh words and phrases in many different dialects throughout Wales. To supplement the corpus, I also conducted a literature review of various Welsh grammars and dictionaries (cf. e.g. Thomas 1992, Hannahs 2013, Geiriadur n.d.), and modern Welsh media (cf. e.g. Business Wales 2014, Whodoiask n.d.) to get a picture of the presence of word-final [v] in Welsh words.

Discussion: My research has revealed that word-final consonant elision in Welsh does not only pertain to [v], but also [ð]. Compared to other Welsh continuant phonemes [f, θ, x], [v] and [ð] are the only two which are voiced. This suggests that [voice] factors in word-final consonant elision as Welsh voiceless fricatives are not elided. Moreover, [v] shows higher rates of elision than [ð]. For example, [divriv] 'serious' and [nesav] 'next' are pronounced by most speakers as [divri] and [nesa], but [forð] 'road' and [baɨð] 'boar' are only pronounced by few speakers as [for] and [baɨ]; thus, word-final elision is not parallel for these phonemes. The feature [grave] may account for the more frequent elision of [v]. Gravity refers to sounds produced in peripheral areas of the oral cavity (e.g. the Welsh fricatives [f, v, θ, ð, x]) which have frequencies below 2.5 kilohertz (Kim 1973: 274, Ladefoged 2006: 195, Flynn and Fulop 2014: 197). Among [v] and [ð], [v] has a lower kilohertz and is more grave than [ð], possibly explaining its more frequent elision. Lastly, elided [v] and [ð] reappear at morphological boundaries, such as [divri(v)] 'serious' becoming [divri**v**a(v)] 'most serious', and [baɨ(ð)] 'boar' becoming [baɨ**ð**od] 'boars'. Therefore, elided [v] and [ð] exhibit sandhi phenomena, suggesting that their elision is ultimately morpho-phonological.

Contributions: The propositions of this paper offer an explanation for a thus far unaccounted for morpho-phonological phenomenon in Welsh. Upon exploring how the features [voice] and [grave] affect [v] and [ð], their word-final elision and reappearance at morphological boundaries constitute a mirage-like effect of these two phonemes. Overall, the implications of this research are able to provide a deeper understanding of the phonetics-phonology-morphology interface in Welsh.

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Works Cited

Business Wales/Busnes Cymru. 2014. *Sut i lunio cynllun busnes* [Video File]. Retrieved from
    https://youtu.be/wkCY81ilwgs

Flynn, D., & Fulop, S. 2014. Acoustic phonetic features in Athabaskan sound change.
        Diachronica 31(2). Amsterdam: John Benjamins. 192-222.

Geiriadur. n.d. University of Wales Trinity Saint David. Retrieved from
        http://www.geiriadur.net

Hannahs, S.J. 2013. *The phonology of Welsh*. Oxford: Oxford University Press.

Kim, C.W. 1973. Gravity in Korean phonology. *Language Research* 9(2). Seoul: Seoul National
        University Press. 274-281.

Ladefoged, P. 2006. *A course in phonetics*. Boston: Thomson-Wadsworth Publishing.

King, G. 2003. *Modern Welsh: a comprehensive grammar*. London: Routledge.

Thomas, A.R. 1992. The Welsh language. *Celtic languages*. Cambridge: Cambridge University
        Press. 251-345.

Thomas, A.R. 2000. The *Welsh dialect survey*. Cardiff: University of Wales Press.

Whodoiask. (2012). *Yr argraff gyntaf* [Video File]. Retrieved from
        https://youtu.be/sSJMmsANY4s

Williams, S. 1980. *A Welsh grammar*. Cardiff: University of Wales Press.