

**Workshop proposal** for the 50th Annual Meeting of the Societas Linguistica Europaea  
Zürich, 10-13 September, 2017

Workshop title: **Vowel reduction and loss and its phonological consequences**

Workshop organizers:

**Cormac Anderson** (Department of Linguistic and Cultural Evolution, Max Planck Institute for the Science of Human History, Jena),

e-mail: cormacanderson@gmail.com;

**Natalia Kuznetsova** (Institute for Linguistic Research, Russian Academy of Sciences, St. Petersburg),

e-mail: nkuzn@yandex.ru.

Vowel reduction and loss is a cross-linguistically frequent phenomenon, but its full typological properties are yet to be discovered. In many language descriptions, this phenomenon is simply stated as a fact, with little further interrogation of its causes, phonetic mechanisms or consequences. However, ongoing reduction can be a challenge for the synchronic phonological description of a language, especially a non-standardized one without a literary tradition. For some major language groups (Slavic, Romance, Germanic, Greek, Finno-Ugric) there exists a long and active tradition of phonetic and phonological research on reduced vowels, within which their phonotactic properties, acoustic features and relation to stress and full vowels have been studied.

Works taking a cross-linguistic and general theoretical approach to vowel reduction and loss are scarce. There are few comparative phonetic studies in this field (but see Delattre 1969, Loporcaro 2015). Existing phonological surveys (Crosswhite 2001, 2004, Barnes 2006) mostly tackle qualitative, but not quantitative reduction. Vowel reduction is typically defined as the positional neutralization of a vowel contrast in unstressed positions. However, reduction does not necessarily result in neutralization. For example, a contrast of long and short vowels can be transformed into a contrast of reduced and short vowels. Not yet enough is known about the exact changes in the structure of a phonetic pool of variation during ongoing reduction, as well as the correlation between production and perception/categorization of reduced vowels (cf. van Bergem 1995, Verkhodanova and Kuznetsova 2016 exploring this topic). How exactly does shrinkage of the overall vowel space typically take place (cf. Padgett and Tabain 2005)?

Much work remains to be done on the typology of the consequences for phonology and morphology of vowel reduction and loss. It is not yet fully understood what types of vocalic systems are likely to emerge in languages which have undergone strong reduction and/or widespread loss of vowels (see for example the survey of minimal vowel systems in Anderson 2016). Which types of consonantal systems can emerge as a result of this? For example, what effects might this have in terms of the development of secondary localisation or changes in laryngeal features? One can also ask why, under the same phonetic conditions, we often observe asymmetries in the outcomes of the loss of vowels of different quality (as in Russian or Irish).

There is also still no consensus about the physiological origins and phonetic mechanisms of vowel reduction. Is formant undershoot always a function of decrease in vowel duration (as suggested in Lindblom 1963)? Is there a conflict between the need to reduce prominence and the need to enhance contrast or not (Crosswhite 2001, Harris 2005)? One could also

discuss the balance between the speaker, who wants to communicate quickly and with little effort, and the listener, who needs enough information to process the message, during the course of reduction (cf. Trudgill 2009).

The workshop aims to address these issues. We especially invite papers which interrogate the phenomena of vowel reduction and loss in a cross-linguistic and/or general theoretical perspective. The topics include, but are not limited to:

- the phonetic causes and mechanisms of vowel reduction and loss;
- the phonological contexts in which it is most likely to occur;
- the typical and atypical trajectories of vowel reduction and systematic constraints which favour reduction or prevent it from occurring;
- typological, areal, or diachronic explanations for the cross-linguistic distribution of reduction;
- asymmetries in the reduction and loss of vowels of different quality;
- perception and categorisation of reduced vowels by L1 and L2 speakers;
- challenges for the description of languages with ongoing vowel reduction;
- the consequences of vowel reduction and loss for phonology and morphology (the gain and loss of phonemic contrasts, innovative phonotactic patterns and morphological alternations).

The workshop is planned for 1.5 days. It will open with a joint introductory talk by the convenors, outlining the main trends and challenges in ongoing research on the theme, followed by 13 papers on various topics, and a final discussion.

#### **References**

- Anderson, C. 2016. Consonant colour and vocalism in the history of Irish. PhD thesis, ms. Poznań: Adam Mickiewicz University in Poznań.
- Barnes, J. 2006. Strength and weakness at the interface. Berlin: Mouton de Gruyter.
- van Bergem, D. R. 1995. Perceptual and acoustic aspects of lexical vowel reduction, a sound change in progress. In: *Speech Communication* 16, 329-358.
- Crosswhite, K. 2001. *Vowel reduction in Optimality Theory*. New York & London: Routledge.
- Crosswhite, K. 2004. Vowel reduction. In: B. Hayes, R. Kirchner, and D. Steriade (eds.). *Phonetically based Phonology*. Cambridge: Cambridge University Press, 191–231.
- Delattre, P. 1969. An acoustic and articulatory study of vowel reduction in four languages. In: *International Review of Applied Linguistics in Language Teaching*, 7(4), 295-325.
- Harris, J. 2005. Vowel reduction as information loss. In: Ph. Carr, J. Durand and C. J. Ewen (eds.). *Headhood, elements, specification and contrastivity*. Amsterdam: Benjamins. 119–132.
- Lindblom, B. 1963. Spectrographic study of vowel duration. In: *The Journal of the Acoustical Society of America* 35 (11), 1773-1781.
- Loporcaro, M. 2015. *Vowel length: From Latin to Romance*. Oxford: Oxford University Press.
- Padgett, J. and M. Tabain. 2005. Adaptive dispersion theory and phonological vowel reduction in Russian. In: *Phonetica* 62, 14-54.
- Trudgill, P. 2009. Greek dialect vowel systems, vowel dispersion theory, and sociolinguistic typology. In: *Journal of Greek Linguistics* 9, 80-97.
- Verkhodanova V. and N. Kuznetsova. 2016. Difference in development of consonantal palatalization and labialization: Evidence from the Finnic varieties of Ingria. In: 49<sup>th</sup> Annual Meeting of the Societas Linguistica Europaea: Book of Abstracts. Napoli, 445-446.