

John Kirk (University of Vienna), Hans Christian Breuer (Pöttmes), Ludwig Maximilian Breuer (Austrian Academy of Sciences), Christian Hesse (University of Vienna), and Markus Pluschkovits (University of Vienna)

***THE DIGITAL LEXICAL ATLAS OF SCOTLAND:
AN INTRODUCTION AND SOME FIRST RESULTS***

By the time of this paper (October 2021), the digitisation of the lexical material of the *Linguistic Atlas of Scotland* (LAS), vols. 1 and 2 (Mather & Speitel 1975, 1977) will be well advanced. From a specially constructed relational database, and appropriate development, new interactive maps of different sorts can be derived, and various lists drawn up, on a scale hitherto unprecedented for the traditional vocabulary of Scots.

The goal of the project is to digitize the data and maps which the atlas made available, thereby securing those data for future use and providing fresh access to them; to provide the resources for new analyses of this large amount of data on a strictly lexical basis; and to present those data on interactive maps for fresh areal analyses and interpretations of the lexical composition of Scots. The project makes use of various digital tools, which enable not only new results of the data, but also easy and interactive access to those data for various analytical and presentational purposes.

The new atlas is based on various open-source base-maps, onto which the data can be interactively projected, including displays for age and gender. In addition to an electronic version of the original atlas, the major innovation is a recategorization of the data in terms of purely lexical (i.e. etymologically-lexical) types – ‘lexemes’ – regardless of spelling. The results show that, for each onomasiological concept (or ‘lexical variable’), lexemes can be divided between major, minor and oncer types, and between denotans and non-denotans types, with the last comprising a broad range of descriptions, metaphorisations or unexpected or seemingly inappropriate responses.

In this way, nothing short of a re-evaluation of the distribution of lexemes per lexical variable across the whole of Scotland becomes available, including a fresh interpretation of areal patternings of those lexemes. Thereby, using lexical criteria, it will be possible to re-assess the dialect structure of Scots (cf. Tulloch 1997).

In the present paper, we will present full analyses of several lexical variables, developing the preliminary work reported in Hesse & Kirk 2020 and Kirk & Hesse 2020.

References

Hesse, Christian, and John Kirk. 2020. “Digitising Collections of Historical Linguistic Data: The Example of the Linguistic Atlas of Scotland”. In: Bettelou Los, Benjamin Molineaux and Marti Mäkinen (eds.). *Visualisations in Historical Linguistics. Special Issue of Journal of Data Mining and Digital Humanities*. [available from <https://jdmdh.episciences.org/page/special-issue-on-visualisations-in-historical-linguistics>].

- Kirk, John and Christian Hesse. 2020. "Towards a Digital Lexical Atlas of Scotland". *Scottish Language* 39: 1–39.
- Mather, James Y. and Hans-Henning Speitel. 1975. *The Linguistic Atlas of Scotland: Scots Section*. Volume 1. London: Croom Helm.
- Mather, James Y. and Hans-Henning Speitel. 1977. *The Linguistic Atlas of Scotland: Scots Section*. Volume 2. London: Croom Helm.
- Tulloch, Graham. 1997. "Lexis". In: Charles Jones (ed.). 1997. *The Edinburgh History of the Scots Language*. Edinburgh: Edinburgh University Press. 378–432.