Dative Subjects: Historical Change Visualized

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Crosslinguistically, languages tend to mark grammatical relations either via case and/or agreement or word order (cf. Kiparsky 1987, 1988, 1997). Icelandic is known to have both a relatively fixed word order and a rich case morphology (see, e.g., Thráinsson 2007) and thus constitutes an interesting object of study. Furthermore, Icelandic is famous for having non-nominative subjects, with in particular the synchronic existence of dative subjects being well-established (Zaenen et al. 1985, Andrews 1976). The historical origin of dative subjects however has attracted a good deal of research in recent years. A major point of debate concerns whether dative subjects are a common Proto Indo-European feature or are in fact a more recent innovation. The so-called 'Oblique Subject Hypothesis' (e.g., Barðdal and Eythórsson 2003, Barðdal et al. 2012) argues for the Proto Indo-European inheritance of dative subjects. This hypothesis challenges the more traditional 'Object-to-Subject Hypothesis' (cf. Cole et al. 1980, Haspelmath 2001) which generally takes dative subjects to be the result of the gradual reanalysis of former objects. With respect to the 'Oblique Subject Hypothesis', evidence has been adduced for the continuous existence of a monolithic dative subject construction in Icelandic (e.g., Barðdal and Eythórsson 2012) using raw as well as linguistically annotated corpora such as the Icelandic Parsed Historical Corpus (IcePaHC: Wallenberg et al. 2011) which is annotated in the Penn Treebank-style (Marcus et al. 1993).

In my talk, I present HistoBankVis (Schätzle et al. 2017), a novel visualization system which facilitates the analysis of historical linguistic data by integrating methods coming from the field of Visual Analytics (Keim et al. 2008). HistoBankVis allows a researcher to interact with the data directly and efficiently while exploring correlations between linguistic features and structures. The system in effect consigns to history the painstaking work of finding patterns of language change across various different tables of features, numbers and statistical significances. I illustrate the visualization's efficacy and power by means of a concrete case study which investigates the diachronic interaction of word order and subject case in IcePaHC. By visualizing the corpus data, I uncovered a previously unknown interrelation between word order changes and dative subjects in the history of Icelandic. The visualization shows that while subjects in general are increasingly realized in the prefinite position, dative subjects lag behind with respect to this development in IcePaHC. I postulate that the observed changes point towards the overall development of structure and positional licensing in the history of Icelandic. Moreover, as datives lag behind in conforming to the overall positional licensing constraints developed for subjects, I argue that the development of dative subjects crucially follows the prior identification of a general subject position. This in turn is against the idea of dative subjects as a stable, common Proto-Indo European inheritance.

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