

Urban Interactions and the Spread of Written Standards

This paper presents results of a project to adapt the gravity model of linguistic diffusion, a modeling technique used in dialectology and sociolinguistics, for use in historical sociolinguistic research. The gravity model (Trudgill 1974, see also Trudgill 1986 and Chambers and Trudgill 1998) assumes that the spread of linguistic features from one community to another is a result of cumulative, direct interactions between individuals from those communities. The intensity of these interactions can be calculated using a formula that incorporates data on the population size of the respective urban centers, the geographic distance between them, and the degree of linguistic similarity between varieties used in the two cities. The model assumes that larger cities have greater influence on smaller cities than vice versa, that influence decreases with geographic distance, and that linguistic similarity is conducive to the adoption of linguistic features. By employing the gravity model, it is possible to calculate interaction index scores for pairs of cities, which can then be ordered according to relative degrees of influence and employed to identify the most likely trajectory of forms spreading from a given point of origin.

The project uses historical population data to create a model of urban interactions for early modern Germany in the period from 1400 to 1700, adapting the model to account large shifts in the size and distribution of population that occur in this time period. The resulting model of urban interactions is correlated with data on the rise of regional written standards and the spread of the emerging standard language, with an emphasis on the spread of the emerging standard in northern Germany. The paper demonstrates the value of the gravity model for investigations in historical sociolinguistics and argues for greater attention to the development of regional written varieties in the historical process of standardization.

References

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