Beyond the Isogloss: The Isograph in Dialect Topography

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Isoglosses do not accurately reflect the patterns of linguistic use in a geographical region, because the isolated conservative forms they are based on fail to represent the actual variants extant in the population. I have developed a new dialect atlas tool, the isograph, that will enable researchers to quickly find dialect trends in more representative data sets. Using Canadian and American data from the Dialect Topography database, I show how isographs can illuminate our understanding of linguistic boundaries at the provincial, national, and cross-border levels.

Unlike dialect geography, dialect topography collects data from people of all ages and backgrounds, and provides a multidimensional picture of how variants are used in a community (Chambers 1994, 1998). Because variants occur in different proportions in each community, analysis is necessarily quantitative, which necessitates abandoning the traditional isogloss, as discrete datum points common to dialect geography are no longer available.

The isograph maps similarities between regions by comparing adjacent regions and plotting potential channels for language spread between the regions (Figure 1). For each region, percentage differences from its neighbours are calculated, and a line is drawn between it and its neighbour(s) with the least difference. When all lines of minimum distance have been drawn for all regions, the result is a constellation-like pattern that clearly groups together the most similar regions (e.g., zee/zed, Figure 2). While statistical analyses remain the most reliable way to group together similar regions, the isograph method will provide a rapid picture of gross linguistic differences.

I analyze the isographs of 29 phonological and pronunciation variables from the Dialect Topography of Canada using the on-line database and atlas and an isograph program. From the 4007 records across six Canadian regions (Golden Horseshoe Canada, Ottawa Valley, Montreal, Quebec City, Eastern Townships, New Brunswick) and three U.S. regions (Golden Horseshoe New York, Vermont, Maine-New Hampshire-Massachussets), I have selected representative patterns of isographic distribution.

Patterns include general types of phonological and pronunciation variations, including provincial, national and cross-border distributions.

Figure 1

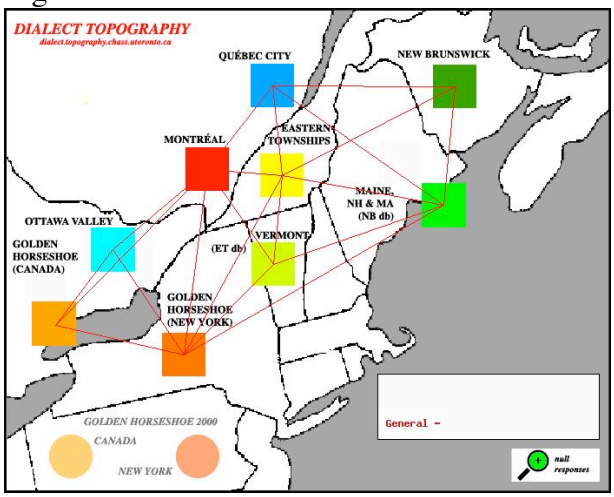
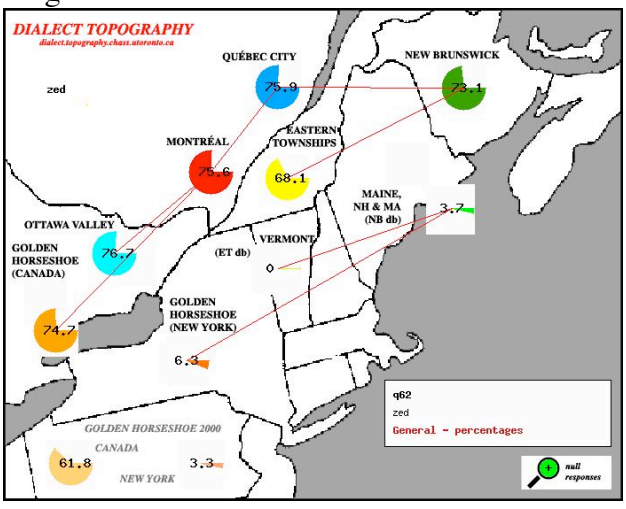


Figure 2



References

Chambers, J.K. (1994) An introduction to Dialect Topography. English World-Wide15: 35-53.

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