Schematization for the analysis of geolocated microblog messages

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Abstract

An ample amount of research has been conducted on geolocated information in social media. Many researchers use more or less sophisticated analysis tools, from descriptive statistics to machine learning. While the decidedly geometric analyses have been relatively sparse, many papers field some form of map showing geographic distributions of social media messages from their respective studies. As one of the attractive points of social media analysis lies in the potentially very large number of individual messages, many of these distribution maps fail to convey more than a very rough impression of the geographic patterns involved. Furthermore, in the case of portraying links, visual clutter and overload is a common problem. We start with a short overview of currently employed visualization techniques. This is followed up by our proposal of using techniques from cartographic generalization and schematization to portray patterns and analysis results for geolocated microblogging research. Specifically, we show how network schematization and territorial outline schematization can be used to portray and analyse social links and land-use information generated from microblogging data respectively.

Keywords: Social Media, Data Mining, Schematization, Generalization

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