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**Measuring Party Nationalization Using Spatiotemporal Data in the Republic of Georgia**

*(Statement of Intent)*

The suggested proposal explores party nationalization in the Republic of Georgia, based on the results of three legislative elections held between 2008 and 2016. Party nationalization or the 'nationalization thesis' (Agnew, 1987) refers to the gradual disappearance of territorial patterns in voting. As the result, political parties poll similarly in all territorial areas on elections (Golosov, 2016). The phenomenon has been studied generally on the examples of Western Europe (Caramani, 2004) and Latin America (Jones & Mainwaring, 2003) or elections in selected post-Communist countries (Bochsler, 2010). Despite a relatively short history of free and fair elections, Georgia represents an interesting yet typical case of a post-Communist polity where cleavage and policy-based voting is relatively rare (Tavits, 2005).

Methods of studying party nationalization generally utilize regression-based approaches, measurements of inequality (e.g. Gini-based indexes) and even simple descriptive statistics (for a comprehensive survey see Bochsler, 2010). Political scientists rarely resort to spatial methods, however, the rationale behind the usage of spatial measures lies in the very definition of the nationalization thesis. Based on this logic, Tapiador and Mezo (2009) successfully utilize global spatial autocorrelation measures, namely Moran's I and Geary’s C, to account for the geographic (de)concentration of party votes in Spain.

Considering this, I hypothesize that the gradual disappearance of spatial patterns of support for the major political parties in Georgia could be linked to the nationalization hypothesis. To do so, I employ electoral precinct-level election outcomes for three legislative elections held in 2008, 2012 and 2016 and measure global spatial autocorrelation of vote share for the largest political parties. The boundary data was compiled for the National Democratic Institute, an international democracy watchdog, by the Caucasus Research Resource Centers and Tbilisi State University. Precinct-level election results were obtained through the freedom of information request from Georgia’s Central Elections Commission.

Although the dataset is comprehensive and detailed, the boundaries of the smallest electoral units are inconsistent between the elections, especially in the large urban areas. Thus, in order to account for the modifiable areal unit problem (Openshaw & Taylor, 1979), I employ dasymetric refinement (Buttenfield et al, 2015) of the election results.

I envisage the project workflow as follows:

* Writing a computer program for areal interpolation methods, such as AW, TDW or EM. We will select R or Python for this purpose depending on the knowledge (and interest) of the group participants;
* Conducting areal interpolation, by taking 2008 parliamentary elections as baseline;
* Assessing the quality of interpolation methods by aggregating the results on an electoral district level;
* Selecting the appropriate method for compiling final dataset.
* Using refined data, conducting tests for global spatial autocorrelation (Moran’s I and Geary’s C).
* Experimenting with temporal measures of spatial autocorrelation, e.g. temporally detrended global and local spatiotemporal Moran’s indexes (Shen et al, 2016) or spatiotemporal weights matrix (Dubé & Legros, 2013).

All project steps will be documented using an iPython Notebook (Pérez & Granger, 2007) and uploaded to a dedicated Github repository to ease collaborative effort inside the group. As an outcome, we expect to deliver a written report, corresponding replicable R/Python code and final presentation of the results.

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