Title: Uses and limits of EU-SILC for a spatial analysis of poverty at the regional level in Europe

Abstract: We can find in the agenda of the European construction the question of European models. Indeed, the political construction of the EU works in a normative way and imposes a common framework of action to heterogeneous spaces. Aiming for cohesion reflects this ideal that geographers can explore through analysis of territorial gridding. We will focus more specifically on social cohesion policies and their territorialisation.

The aim of the “Mapping and gridding European cohesion” (MAILLE) project is to explore the spatial dimension of structural poverty by engaging with the functions, uses, limits of spatial gridding within European social and territorial cohesion processes. The project encompasses all 27 states of the European Union. The Lisbon European Council of March 2000 declared that poverty and social exclusion have a “multi-dimensional and structural nature”. This complexity mirrors social and spatial categorisation. Our hypothesis is that gridding as form, function and construction is a relevant entry, both substantively and methodologically, into the complexity of poverty and social exclusion. Social and spatial categorisation shape spatial forms such as concentration, diffusion, isolation, fragmentation. Gridding refers also to a framework of territorialized action. European demands, national practices and local situations produce complexity and multiple dimensions. For instance, does gridding display the spatial forms of exclusion? Can it produce social cohesion?

In comparative social research, different national development models are generally presented as the main factor accounting for the diversity of poverty in Europe. Most of the research also concentrates on specific populations (like single-parent families or children). As geographers, we want to cast aside both the “national model” and the “vulnerable populations” hypothesis and examine more generally (and comparatively) the expression of infra-national poverty in the UE, in order to make out other, less apparent, modes of spatial and social differentiation (for example between Western and Eastern Europe, or between urban and rural spaces).

This research program has a strong methodological component: mapping exclusion calls for deconstructing existing statistical and cartographical categories. Tools such as GIS will be used to produce maps more realistic in their approaches of social dynamics and structures.

Firstly, we used the Eurostat datasets to conduct our program. We built a database containing the socio-economic indicators available for most countries at the infra-national NUTS 2 level (nearly 300 spatial units). We selected a set of 16 relevant indicators (e.g age dependency rates, life expectancy, infant mortality, unemployment rates, income) and we processed them to create poverty and social exclusion typologies for European regions. The method involved using multivariate statistics, spatial analysis and a synthesis of selected indicators. The output was mapped or drawn into diagrams that express the spatial pattern of poverty in its complexity.
However, the common indicators of social inclusion in Eurostat are not available at a lower level than the national one. Since our project requires detailed, high spatial resolution poverty indicators (in particular indicators on living conditions and welfare in the EU), we used the EU-SILC databases (which provide such indicators) to sharpen our initial, Eurostat data-based analysis.

We worked with the Cross sectional UDB SILC 2007 and the Longitudinal UDB SILC 2007 datasets, at the household level.

At least 4 characteristics of the EU-SILC database are valuable for our purpose:
- We could complete our database with infra-national data (notably about housing and living conditions) that were missing in Eurostat.
- We could use the variable “degree of urbanisation” as important spatial information. Combined with housing and living conditions indicators, it can indicate if the spatial context has a bearing on the spatial distribution of poverty at the European scale and at the regional level.
- The availability of the longitudinal UDB SILC and the periodicity of EU-SILC provide an opportunity to conduct socio-spatial research on several years and to retrace poverty trajectories in the European regions.
- The availability at two levels for most of the countries (Nuts 0, 1 or 2) allows multiscalar approaches;

The processing of UE-SILC data will enable the production of a set of maps at infranational level, presenting a new picture of poverty in Europe. The maps will express the information contained in the database about living conditions and housing in the European countries, combined with the degree of urbanisation, family composition and income of the households.

The set of variables selected from the original database is a combination of various fields: monetary poverty (arrears, capacity to afford holidays or meals with meat, possession of convenient items, income), housing (dampness, isolation, brightness), environment (noise, pollution, violence). Data at the household level has been aggregated in order to obtain a database with a regional and degree of urbanisation breakdown.

The results obtained from EU-SILC will be combined with the results from Eurostat. The datasets will be directly compared if data is available at the same spatial level (EU-SILC data available at the NUTS 2 level in 2007 for Spain, France and Czech Republic) and we will test the comparability of data between countries with different aggregation levels in Eurostat and EU-SILC (NUTS 1 / NUTS 2).

The comparability between the two databases would be made much easier if the regional breakdown was more precise. For example, the variable DB040 indicating the region is available in 2007 for most of the countries at the NUTS 1 level, at the NUTS 2 level for only three countries, and is not available at all for five countries, including Germany, the United Kingdom, Portugal and the Netherlands. Likewise, the classification in three degrees of urbanisation (variable DB100) which is basic for our study is not available for every country.

The lack of spatial and infra-national data in EU-SILC is the main limitation we would like to point out: any improvement on that front would turn the data into a more functional tool for geographical uses.