CENTRUM VOOR SOCIAAL BELEID
HERMAN DELEECK

CSB Lunch Seminar, in cooperation with <u>CMS</u> (Centrum voor Mexicaanse Studiën)

"A new procedure to map and set up the spatial hierarchy of social problems.
The spatial pattern of the Mexican poverty in 2010"

Presentation by Jesús Treviño

UNAM (Universidad Nacional Autónoma de México), Mexico City

Abstract

This research presents and applies a new procedure to elaborate a spatial hierarchy of poverty. The proposed method simultaneously combines variables of magnitude and intensity based on recent (bootstrapping & spatial autocorrelation) and traditional statistical techniques, and overlay routines of Geographical Information Systems.

While magnitude and intensity refer to absolute and relative data, respectively, each variable may be concentrated or agglomerated in space. In this study, concentration is the presence of high global values, regardless of their location, and agglomeration is the concentration of spatially contiguous high local values. Both agglomeration and concentration are merged through a geographical overlay procedure to create conglomerates of magnitude or intensity of poverty. Cases inside these conglomerates are classified by gaussian (natural breaks) or paretian (heads and tails) procedures to set up a spatial hierarchy.

For the first time in the study of the spatial pattern of poverty, the resulting spatial hierarchy is based on the simultaneous combination of the concentration and agglomeration processes measured in relative and absolute terms. The benefits of the procedure for an area-based public policy are illustrated by assessing the spatial targeting of poverty in the 2,456 Mexican municipios in 2010. The suggested methodology in this research may be easily extended to identify other spatial patterns, such as crime, industry, diseases, pollution or environmental justice in different areas or countries.

<u>Date</u>: **Wednesday June 3, 2015 - 12:00pm-1:00pm.**

<u>Room</u>: **M.102** (City Campus, Building M, Sint-Jacobstraat 2, Antwerp).

<u>Registration</u>: Please confirm your attendance before June 2, 11:00am.

A sandwich lunch will be provided.