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Incentives and barriers to environmental inequality mobilization: A case-study analysis in Wallonia, Belgium

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ABSTRACT

Environmental inequality scholarship has sought to shed light on the unequal environmental conditions borne by poor people and racial minorities, and to challenge public policies. Most studies are concerned either with assessing the unequal distribution of environmental amenities and disamenities or with exploring the theoretical foundations of environmental justice movements.

We propose an original approach to environmental inequality, focused not only on the unequal distribution of environmental burdens but also on two other types of factors: the capacity to mobilize and engage in community organizations on the one hand and the spatial dimension of environmental inequalities on the other.

The evidence for this study is from an opinion survey carried out in 2012 with 1298 individuals. We use a two-step cluster analysis method to compute a classification system based on four categories of variables: socio-economic, environmental, spatial, and social capital.

1. Introduction

This article investigates environmental inequalities in Wallonia (Belgium) and proposes a classification of its population using original data from a survey conducted in 2012 by the Walloon Institute for Evaluation, Prospective, and Statistics (IWEPS), the Social Barometer of Wallonia (Le Baromètre social de la Wallonie, BSW). This survey questions citizens about their involvement in political, social, cultural and environmental issues as well as their level of trust regarding regional policies and institutions (Cardelli et al., 2014). The survey includes questions relating to environmental conditions: How good is the environment where respondents live? Do they participate in environmental or local community organizations? Combined with standard survey questions about tenure status and perceived financial situation, the data gathered allowed us to assess environmental inequalities in Wallonia and to link potential environmental inequality outcomes with participation and involvement of respondents in the third sector.

Few data studies on environmental inequality distribution have been conducted in Belgium, and more particularly in Wallonia, the southern region (Cornut et al., 2007; Dozzi et al., 2008; Lejeune et al., 2015). This study aims to fill a gap in the literature and to provide empirical findings to assess whether such inequalities exist in Wallonia. Additionally, the analysis sheds light on the potential inertia and social reproduction of environmental inequality outcomes through the processes that concentrate poverty and weaken community involvement.

Therefore, our approach to environmental inequality is threefold: distributive, procedural (or linked to people's capacities or *capabilities*), and spatial. We identify profiles of respondents from the BSW 2012 sample according to four sets of data: their socio-economic profile (are they owners or tenants, how easily do they make ends meet?); the state of their environment (how good is the quality of surrounding structures? How common is litter in their street? How good is the air they breathe?); their spatial location (based on a housing density index); and their involvement in the community. We propose a classification according to four clusters, i.e. four main profiles of Walloon citizens with regard to environmental inequality.

The structure of the article is as follows. In the first section, we develop our theoretical considerations, mostly related to the environmental inequality framework. In the second section, we present the methodology and the survey used. In the third section, we review the main findings. Finally, in the fourth section, we discuss the results and their implications in terms of

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environmental inequality, that is to say the concentration of socio-economic deprivation and bad environmental conditions on the one hand, and the spatial dimension and social capital on the other. The conclusion discusses the limits of this research design as well as avenues for further research.

2. Theoretical background, research question and hypotheses

In this article, we focus on three dimensions of environmental inequality—distributive, procedural and spatial—to explain the complex interactions at play. To date, few studies have documented environmental inequalities in Belgium, either data-based studies (indicators, geographic information system), or environmental movement analyses focusing on the incentives or barriers to local mobilization on environmental matters (Boniver et al., 2009; Cornut et al., 2007; Dozzi et al., 2008; Lejeune et al., 2015, 2012).

First, most of the environmental inequality literature focuses on distributive patterns and postulates that socio-economic inequalities are strengthened by environmental factors, such as the provision of and accessibility to green spaces and to the quality of living and housing conditions, as well as by unequal exposure to several sources of pollution and nuisance. Despite the lack of a common and uncontroversial definition of the terms "environmental justice" and "environmental inequality" (Bowen, 2002; Chaumel and La Branche, 2008), environmental inequality is based on the view that people or communities do not bear the same burden of pollution and environmental hazards and do not have the same access to urban and environmental services (Emelianoff, 2006).

Environmental inequality research challenges "*the dominant ecological paradigm utilized by environmental researchers (that) failed to recognize and/or adequately address the fact that environmental problems are contextual and experienced unevenly across the population*" (Krieg and Faber, 2004). This observation is important in terms of whether environmental issues and problems are perceived and framed differently according to class, spatial location, or tenure status. Taylor (2000) made the following claim:

Environmental problems are social problems; they are socially constructed claims defined through collective processes. By social construction, I mean that environmental problems are not static. They are not always the product of readily identifiable, visible, or objective conditions (Taylor, 2000; p. 509).

Second, one of the major goals of environmental inequality research has been to explore the emergence of grassroots and local environmental mobilizations among poor people and minorities. The procedural inequality side of this field of research analyses the movements, resources and social capital necessary to engage into environmental activism locally. The focus on local activism is a necessary incentive for the public management of environmental inequalities. If US scholars have based their research on movements explicitly linking their actions to an environmental justice framework (Taylor, 2000), a similar study in Belgium necessarily implies a focus on less 'formalized' action, i.e. more common forms of community engagement. In this paper, we are particularly interested in understanding the differences in the ability of individuals to act to protect their environment: financial resources, location, and social capital (Laigle, 2009). Distributional justice is too narrow a perspective on environmental justice, where cultural, identity, institutional and policy design, as well as historical conditions are important parts of the 'explanation' for unequal outcomes.

Third, environmental justice has become an important consideration concerning the combination of social and environmental issues in urban America and around the world (Agyeman et al., 2002; Bullard and Johnson, 2000; Holifield, 2012; Kurtz, 2003; Pellow, 2001; Pulido, 2000; Schlosberg, 2007; Taylor, 2011; Wenz, 1988). This article seeks to examine social and environmental justice from a city perspective in Wallonia by focusing attention on spatial inequalities in general, and particularly on urban areas, where most problems are concentrated today. In the environmental inequality and justice literature, the spatial dimension is studied mostly at the national (Dozzi et al., 2008; Lavaine, 2010), regional (Fairburn et al., 2009) or city levels (Boone et al., 2009; Bowen et al., 1995; Heynen et al., 2006; Pham et al., 2012). Here we are interested in differences observed at different levels of morphological and functional urbanization within a region.

Therefore, the research questions guiding this analysis are: where do residents who mobilize for community organizations to protect their environment live? Can we identify spatial discrepancies in terms of environmental quality? What is the socio-economic background of those who are most active and involved in community action? By determining specific profiles, the aim of this analysis is to identify appropriate problematical segments of the Walloon population and consider the potential of these target groups for future environmental (in) equality policies (Fig. 1).

In this paper, we hypothesize that poor people live in worse environments than wealthier people (in terms of air pollution or cleanliness of the neighbourhood). Moreover, deprived communities living in deteriorated environments are less likely to take collective action to enhance the quality of their neighbourhoods and environment. We assume that there is a retroactive effect or

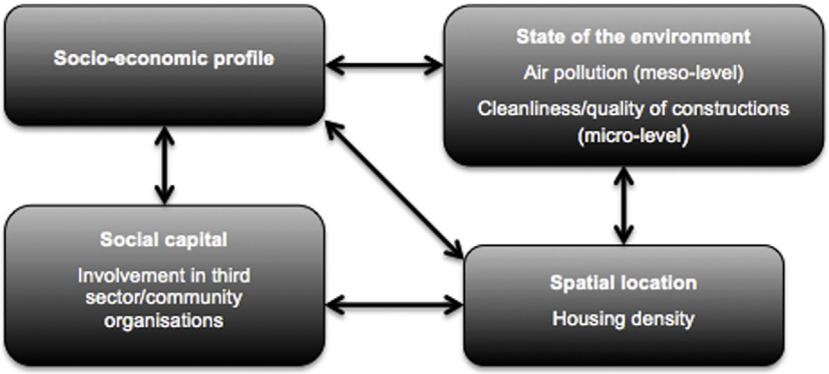

Fig. 1. Categories of variables in the cluster analysis.

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