
Post-industrial urban shrinkage in Lisbon: planning challenges for former manufacturing site

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Abstract

Many cities across the world have experienced in tandem population shrinkage and land use changes mainly since 1970's. Urban shrinkage doesn't affect all municipalities in metro areas nor affects equally neighborhoods at intra-city level, thus requiring carefully analysis of shrinkage factors and tailored planning responses and community development, instead of common adopted universal responses to the problem.

This paper offers an innovative approach to physical changes of urban shrinkage. Typically, urban shrinkage studies rely on population and housing units data from decennial census tracts at the sub-section level. This paper develops a new approach to measure physical change outcomes of urban shrinkage. This methodology approach is based on GIS techniques in conjunction with classic methods of photo-interpretation and photo-identification, instead of satellite image classifications. Although more time-consuming, the adopted method is more reliable and more appropriate to capture intra-urban spatial physical change at neighborhood level. Moreover, costs are decreasing with much information being released on open data platforms increasingly adopted by public information providers. Four categories of abandoned sites in urban areas are adopted according to morphological criteria: ruins; ruinyards; suspended/aborted projects; and vacant lands. Using photo-interpretation in a GIS environment, we were able to simultaneous use Street view and clarify must of the doubt regarding the categories of abandoned sites, which had been impossible with satellite classification of classical vertical photo-interpretations. Whenever such task becomes impossible, we have done fieldwork aiming at on site verifications. Finally, a sample of vacant land was conducted to 20% of the vacant spaces intending to fine-tune vacant land features and processes.

This paper showcase Lisbon city, which has suffered depopulation, explained by economic restructuring, delocalization of manufacturing and distribution activities, metropolitan suburbanization and the effects of economic cycles (boom and bust) mingled with political options. It aims to discuss the 2007/08 crisis effects on the manufacturing activity in the city. Thus, the paper focuses on physical change of former industrial spaces in the city of Lisbon. Interesting enough 7.3% of the total identified ruins are located in areas that had manufacturing land use status in 1990 decreasing by only 0.7% in 2007 and representing then around 25% of total ruins area in Lisbon. These findings raise a concern with traditional land use planning rationality, since a large share of ruins area is still located in manufacturing land use statutory zones which have become abandoned spaces in the city. Furthermore, the

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results call for a new approach to manufacturing areas planning process more oriented to neighborhood-based community development, in which local population may articulate land use strategies according to their needs and values.

The paper starts with the discussion of the factors and processes of manufacturing declining at city level. Then it describes methods, technics and data used in the empirical study. Finally it presents and discusses the results, and concludes with the implications of these results for urban and planning policies along within a community-based development approach.

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