GETTING INSIGHTS INTO WHAT REALLY MATTERS TODAY: SCENARIO APPROACHES AS COMMUNICATION TOOL

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Communicating the future of periurban areas. Following the long lasting discussion on how periurban areas should be defined, eventually time has arrived to acknowledge them as "space in its own right", as put forward by Rauws and De Roo (2011). This means to shift the discussion on "what it is" rather than on "what it is not". Especially it has to be recognized that "periurbanity" is not only about gradients and densities of urbanization. It is a much more complex and diverse entity, manifesting itself not only trough a physical structure but also by articulation of activities and life-styles. Having this backdrop in mind, planning strategies for periurban areas need to be discussed, as available policy tools need to be questioned on its adequateness for this new type of spaces.
It is not novel: discussing future scenarios is mostly about discussing present conditions. Based on this assumption this paper aims to report on how scenario approaches can be a useful tool to get insights into the diversity of periurban areas by firstly identifying types and trough a downscaling procedure to identify plausible futures for each of those types, which serve as a trigger to discuss desirable futures with local communities. Using this methodological approach it becomes possible to confront the desired future with characteristics of each type of periurban area in order to capture what are the issues that really matter today in that community and that need to be addressed in the present planning process.

Exploring periurban types. In this paper addresses the case of periurban areas located in the Lisbon Metropolitan Area (LMA) home to about 3 million people. It is a complex territory, highly dynamic, crossed by the estuary of the Tagus River. This area has a polycentric structure with strong urban growth polarized by Lisbon. Like other metropolitan areas, there is a strong functional interdependency due to an interlinked economy, multiscale dynamics and multiple influences with consequences on land use cover. Also here, periurban areas are far from being homogeneous. In order to identify types of periurban areas, a multivariate statistical analysis was applied using a multidimensional set of indicators collected at the "freguesia" level (LAU2[1]). The methodological approach, different from others (OECD, 2010; Kroll et al, 2009), exploring different viewpoints judged by a wide expert knowledge and stakeholder perspectives, led to the identification of six fundamental dimensions - Mobility, Identities and lifestyle, Natural Elements, Land Cover, Economic Activity and Spatial Functions – and 83 indicators distributed by those dimensions, chosen by its importance and meaningfulness and validated by actors involved in the process.
A Principal Components Analysis was performed for each dimension so as to obtain a representative subset of indicators to be used in Cluster Analysis. Hence, all dimensions are present in the definition of typologies for the periurban areas, which could not be assured if Principal Components Analysis was applied to the global set of indicators. The amount of representative indicators for each dimension was: Mobility (4); Identities and lifestyle (6); Natural Elements (2); Land Cover (5); Economic Activity (6); Spatial Functions (2). Non-hierarchical Cluster Analysis, using the method of Partitioning

[1] http://ec.europa.eu/eurostat/web/nuts/local-administrative-units

Around Medoids (PAM), used these 25 indicators to define typologies of periurban areas, so that each cluster represents one specific typology where we can find a single parish (medoid) that is the best real representative of that typology.
After some multiple iteration with experts and stakeholders concerning different outputs with variable number of clusters, the choice of the most appropriate and balanced configuration was made according to the researchers' experience and perception of reality. The final map is shown in figure 1.

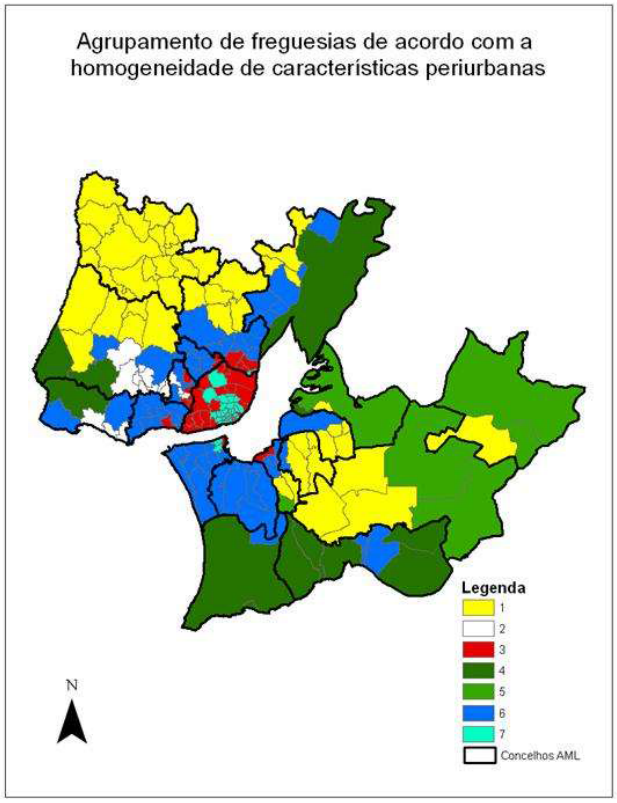

Figure 1 - Typologies of periurban areas in LMA.

The main results showed that there are two clusters coincident with the urban core of LMA (Clusters 3 and 7); and, that there are 4 types of periurban areas. Cluster 4 is clearly related to the presence of outstanding values – biodiversity and heritage, but also natural resources that set the basis for the communities' economic activities and builds up a strong local identity. Cluster 1 is strongly urbanized with high presence of single housing mixed in a diversity of activities, as agriculture or logistics. Population is increasing due to newcomers that find this location attractive for dwelling, setting the ground for gentrification. Cluster 5 is still very based on traditional values and activities as agriculture, that are being merged with new modern agro-industry, mainly linked to wine production. Clusters 2 and 6 are those sharing the most similar characteristics, highly urbanized with high presence of brownfields - remainders of an industrial past, and small patches of reminiscent of natural areas – scattered forest and agriculture. Cluster 2 stands out due presence of the railway which shortens the travel to Lisbon, but which is basically a subtype of Cluster 6.

Scenario development process: Scenarios can be considered as tools for ordering one's perceptions about alternative futures through constructions of internally consistent

views of what the future might turn out to be. Visualization is a powerful tool trigger discussions with different actors on how they envision a more sustainable future. Communication is a two-way process, and ultimately, if visualizations are tools to collect information on the aspirations of the public towards the future then interactivity becomes a key-issue. Visualizations of the future are mostly helpful to establish a platform to think about the present and present conditions in an uncompromised way and to make visible the range of alternative decisions that can be taken today. Thereby visualizations used in a collaborative setting highlight the uncertainties which can condition the future, to unvail innovative ways to progress.

Confronting the desired scenario with present issues: Periurban areas cannot be any longer considered as a territory in transition from non-urban to urban. If so, there would a predetermined urban future waiting for these territories and its inhabitants. By identifying periurban types and plausible alternative futures, communities regain control to address (in the creation of their desirable future) all the issues that really matter to them today. The comparative analysis between what differentiates each periurban type with the ambitions expressed by local communities during scenario building sessions, and also the influence coming from the critical uncertainties – local/global and individual/collective- may enlightening the improvement of planning policies.

Bibliographic references

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