

LISBON METROPOLITAN AREA:

CENTRALITIES, URBAN GROWTH AND POLICIES

THE RESEARCH

From the 1990's onwards it was observed that new forms of urban structure, began to show in the morphogenesis of the Lisbon metropolis, mainly due to the development of a motorway network, as well as to new forms of land use, which clearly has resulted from the change of an industrial economy into a knowledge-based one. The current projects for major infrastructures suggest the appearance of a new territorial hierarchy and a new cluster of centres superimposed on the current ones. This will naturally lead to urban phenomena that must be anticipated with a vision that looks to the future of the territory and of urban development.

Density, connectivity and diversity are the leading indicators, amongst previous data, mainly as a result of cartography specifically produced to interpret the urban development of metropolitan Lisbon. The development of the research resorted to a significant amount of new thematic cartography, aiming to interpret transformation dynamics within the Metropolitan Area of Lisbon, as well as establishing relevant assessment between public urban policies and their tangible impact on developing territorial dynamics regarding centralities. Therefore, the paper addresses two relevant topics concerning current metropolitan development in Metropolitan Lisbon:

- Patterns of land use and their dynamics (1965, 1992 and 2001), considering linkages between the transformation of the urban fabrics and the rural matrices;
- Metropolitan government in its correlation with national urban policies and local urban planning; proposed agendas: importance of centralities.

Research regarding urban and metropolitan policies has also been considered¹, particularly, while assessing the effects of current spatial regional and municipal plans (PDM – Municipal Urban planning and PROT-AML – Lisbon Metropolitan Area Regional Plan). It has been observed that poor multileveled planning has induced discontinuities between local and regional planning contributing for a lack of effectiveness in the proposed strategies. Which policies can contribute to overcome the lack of spatial continuity? What is the role of new centralities in a spatial metropolitan cohesion process?

CENTRALITY AND URBANISTIC FORMATION OF THE LISBON METROPOLITAN TERRITORY

Portugal, as the westernmost country in Europe, is axially structured through an urban development, which is situated mostly on its western coast. As a result, despite the peripheral nature of the Atlantic facade in the European context, a large conurbative structure is naturally being formed.

This national and metropolitan phenomenon combines dynamics which determine the inter-relationship of various metropolitan structures in an area of influence which extends from the Port of Sines, to Galicia - is strongly polarised by the main Portuguese cities – Lisbon and Oporto.

The evolution of the radial structure of Metropolitan Lisbon towards a network began to take place in the 90's, mostly through highways, as opportunities for connection and closing up of the major axes defined by the railway lines in the preceding period, the 60's, that was

studied. The major forthcoming transformations, which will be mainly of an infrastructural nature, will require a more effective integration in the large international networks and allow us already to anticipate phenomena of great urban interest (the new international airport, the high speed train and the logistical platforms).T

In the Metropolitan Area of Lisbon, legally acknowledged in 1991, a system of convergences in urban settlements started to develop, as an alternative to Lisbon and Setúbal, and as a result of the influence of mobility networks increasingly denser and more efficient. Innovative forms of increasing density of specialised uses started to emerge all together, namely large shopping centres and malls, as well as clusters of small and medium sized enterprises associated to knowledge based economy. Consequently, relevant uses in areas of high connectivity and in the edge of the metropolis also started to be introduced. This metropolisation process is quite noticeable, and it has been extending to the entire Region of Lisbon.

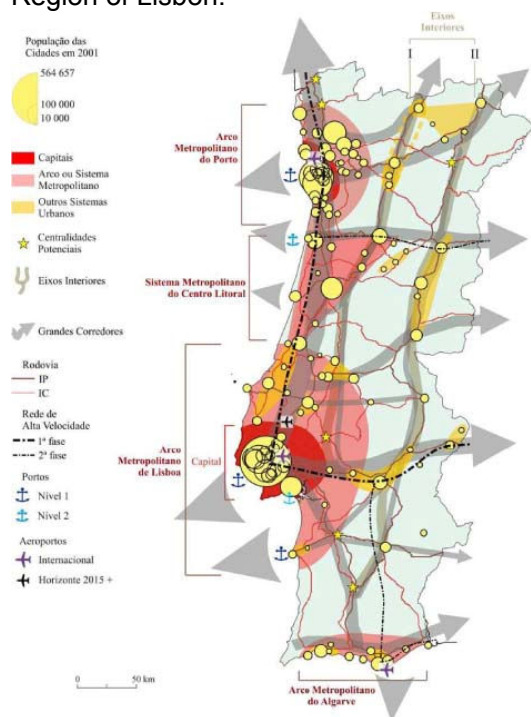


Image 1. Sources: PNPOT, 2006, National programme for spatial planning policies, Urban system and transport infrastructure network;

Metropolitan Area of Lisbon

Municipalities	18 (since 2003)
Parishes	207
Total Area	2.962,6 Km2
Population 2001	2.661.850
Population 1991	2.540.276
Population Density 2001	898,48 inhab/km2

Table 1. General Data - Metropolitan Area of Lisbon. INE – National Institute for Statistics, 2001

DENSITY, CONNECTIVITY, DIVERSITY

The detailed study of the several stages of development of the Lisbon metropolitan territory, as well as the contribution of major works on several cities and distinct aspects of metropolisation (Sieverts, 1997; Jouvé and Lefèvre, 2002; Lang, 2003) allowed us to identify some determining factors in the identification of centrality phenomena.

Other works we had the opportunity to access, albeit in limited form, also revealed the presence of lines of specific intervention in urban planning in areas of disperse urbanisation (documentation referring to the Regional Plan in the Lisbon Area as well as in the North - PROT, *Planos Regionais de Ordenamento do Território*, as well as the Committee for Regional Coordination and Development Lisbon and Tagus Valley Region - *Comissão de Coordenação e Desenvolvimento Regional - Lisboa e Vale do Tejo*), considering that polarisation does not necessarily occur in sedimented urban centres but, on the contrary, in the disperse landscape of territories which are under the effect of a more intense metropolisation, which the PROT (Regional Spatial Plan) of the Lisbon Metropolitan Area already takes into account when it identifies axes of centrality that are more active from an economic perspective.

These phenomena had already been identified, in cartographic terms, as a possibility, and the actual work demonstrated it, also in cartographic form, but fundamentally resorting to quantified indicators, which have been further spatialised, thus revealing new information on the Lisbon Metropolitan Area and its corresponding territorial and urban dynamics.

The key advancements include both the explanation of the indicators, which have determining indexes (by statistical subsection, parish council and council), built from the quantification extracted from various types of data sources (statistical and vectorial information, resorting to GIS techniques). Above all, it provides a stable methodology which can provide answers to one of the proposed scientific enunciates – *what is centrality and how does it manifest itself in the urban formation of the Lisbon metropolitan territory?* – and is fundamentally coherent with the sources and techniques available.

As research progressed, it has been noted that three main factors contribute towards the condition of centrality. The factors were considered in three different years and periods - 1965, 1992, and 2001 - for each of which a set of indicators was established:

- 1) Density – regarding an interrelationship between building area and population by Parish, or smaller statistical unity; Nine (9) Indicators were explored considering densities and their variation;
- 2) Connectivity – regarding transport systems, especially multimodal areas which allow insertion of urban space into the metropolitan network; several (≥ 8) Indicators were explored including transport infrastructure analysis and the relationship between the localization of new buildings and their insertion into the metropolitan network.
- 3) Diversity – regarding heritage, functional (land uses and facilities). Several (≥ 8) Indicators were also explored, including sociological, economical activities and employment, putting into evidence the relationship between the localization of the proposed centralities, by Regional Planning and connectivity nodes.

The results obtained made known that:

- As long as one of the factors manifests itself in a very strong way, the necessary conditions for the potential development of a centrality are created;
- The factor with highest incidence determines the type of centrality that will take place, as well as the urban forms which will be adopted.

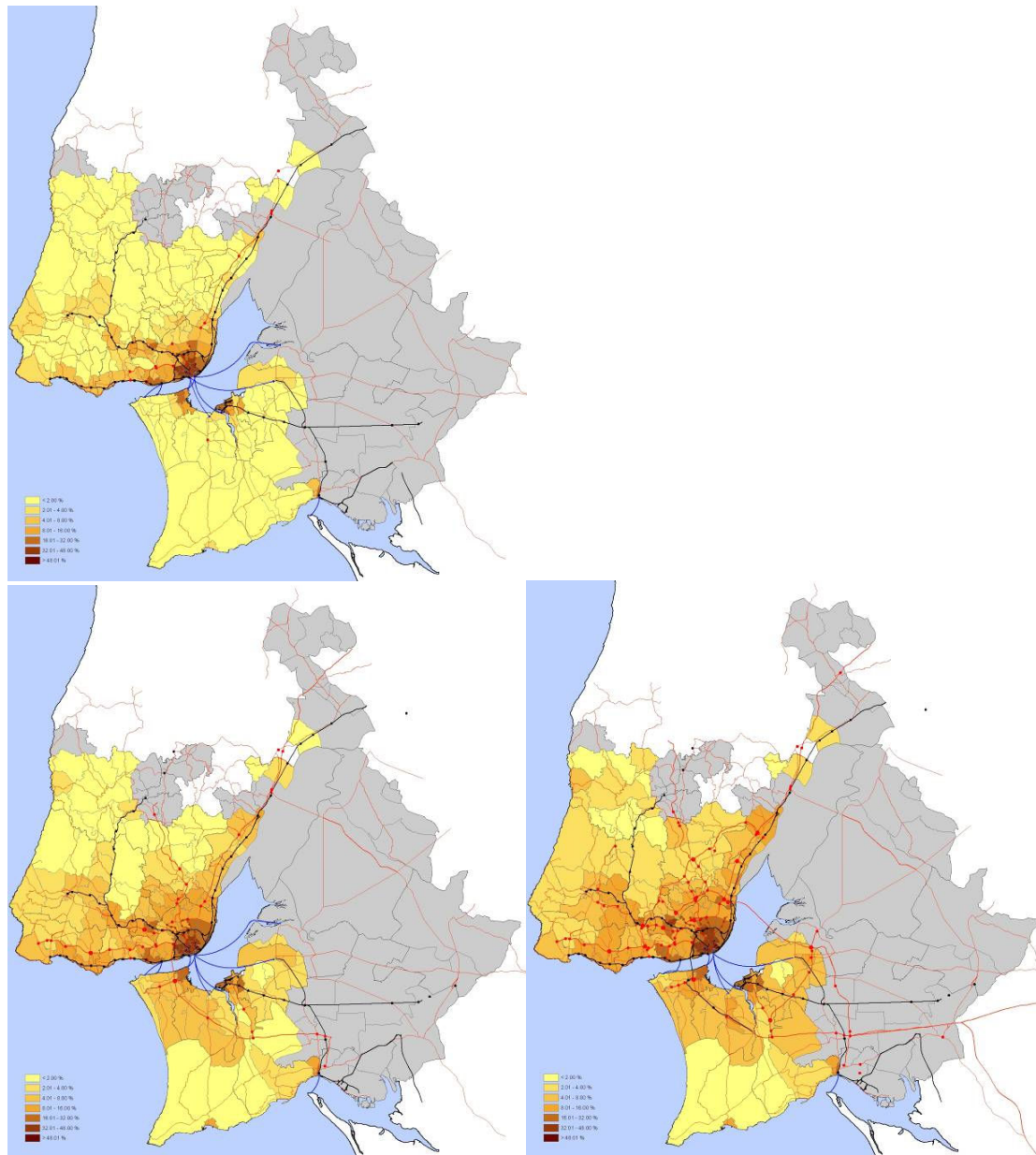


Image 2. 1965, 1992 and 2001 Built Area by Parish (%). Source: Territorial transformation and new centralities in Lisbon Metropolitan Area: what role for public policies?

IS IT POSSIBLE TO PLAN CENTRALITY?

From the urban and regional development stance, planning and specifically spatial planning hold a relevant role and has also been considered in this study.

In what the metropolitan area of Lisbon is concerned it has been observed that metropolitan government in its correlation with national urban policies and local urban planning is fundamental in what the future of the metropolis is concerned, especially in what

its proposed agendas are concerned and regarding the importance centralities have as impellers for further development.

Over the last decade, national urban policies gradually have included a multileveled planning system, despite several flaws, which is more flexible in its approach within several scales. This shift in the concept of urban planning was due not only to the natural advancement in urban tools – which includes iterative and recursive spatial planning from the regional scale throughout intervention on the local scale using detailed master plans and urban design – but also to a favourable conjuncture regarding economic progress and political openness, especially with the overture to democracy and the integration of Portugal in the European Union in the 70's and 80's.

Recently these improvements proved to be fundamental, since the decades of 60 and 70 were quite troubled and marked by important rural and ex-colonies exodus to Lisbon and to its adjoining municipalities. Moreover, concrete actions were constrained and stricken by a formal and not as nimble urban planning, which was not able to deal with a new set of significant urban inconveniences that included relevant urban sprawling and the increase of commuting populations. During that period, the lack of housing policies and other fundamental urban planning strategies brought scarcity to an evolving metropolitan area still anchored in Lisbon, contributing to the decrease in the quality of life, which the implementation of coordinated systems of planning, from the 90's onwards, began to annihilate.

These adjustments in planning approaches included a new law introducing an organized but flexible hierarchy of planning instruments (including metropolitan and regional plans, municipal master plans and detailed local master plans), recognizing the emergence of a new urban reality – Lisbon and Oporto metropolitan areas - and the need to anticipate alternative scenarios under a strategic planning scope, in order to swiftly deal with an increasingly changing and urbanized territory. Also, the shift from an industrial based economy to a knowledge based one, mostly after the oil crisis in the 70's and 80's, introduced, as in most of the western countries, the urgent need to intervene in central and obsolete areas of the city, such as historical, port and industrial areas, which opened new qualified urban areas to the city, never perceived before.

At a regional scale, the development of the road system from the 1990s, linked to a new National Road Plan (2001) and to the expansion of highways, introduced a situation of increased mobility which was effective in several places in the Lisbon Metropolitan Area, and which became new centralities in what jobs and housing were concerned, contributing to the coming out of an effectively polycentric metropolitan structure.

However, although all the Lisbon Metropolitan Area Spatial Plans predicted several strategies of policentrality (1964: PDRL – *Plano Director da Região de Lisboa*/Directive Plan for the Lisbon Region; 1990-04, PROT-AML/*Plano Regional de Ordenamento do Território*/Regional Plan for Territory Planning; 2003–PROT-AML/ *Plano Regional de Ordenamento do Território*/Regional Plan for Territory Planning), only the 2003 PROT-AML was duly ratified. Moreover, given that the Municipal Master Plans for the several municipalities (PDM, *Plano Director Municipal*) are simultaneously under revision, the predicted and fundamental articulation between territorial/metropolitan and municipal planning cannot be taken into account, nor can the development of an effective spatialised metropolitan strategy.

For these reasons, the development of transport infrastructure and other fundamental policies (port areas authorities, housing and environmental areas) which occur at a national level, still hold the primacy in the advancement of the metropolitan strategy regarding centralities. Actually, centralities boost and broaden in areas where the opportunities for a more efficient connectivity occur, and that depends, for the most part, on direct links to highways, railway and port facilities, as well as on the exchange areas such as logistical centres with few constraints regarding urban land uses.

In short, from the perspective of its urbanistic formation, it becomes clear that centrality evolves from geographical coincidence with dense urban centres characterised by great functional diversity, given their time sedimentation and which have great heritage, political and administrative status; to situations polarised by uses of great specificity, particularly industrial areas, and, more recently to filaments of clusters of interrelated uses (SMLs and SMEs linked to research centres, multinational headquarters, housing and facilities for a highly qualified population from various countries) and which are highly competitive in international terms. Nowadays, the evolution of the metropolitan hierarchy can be seen, no longer coincident with conventional urban centres, i.e. geographical, but forming constellations of central places, characterised by multimodal access, large areas which are free from constraints and great connectivity offered by insertion into a metropolitan and international network.

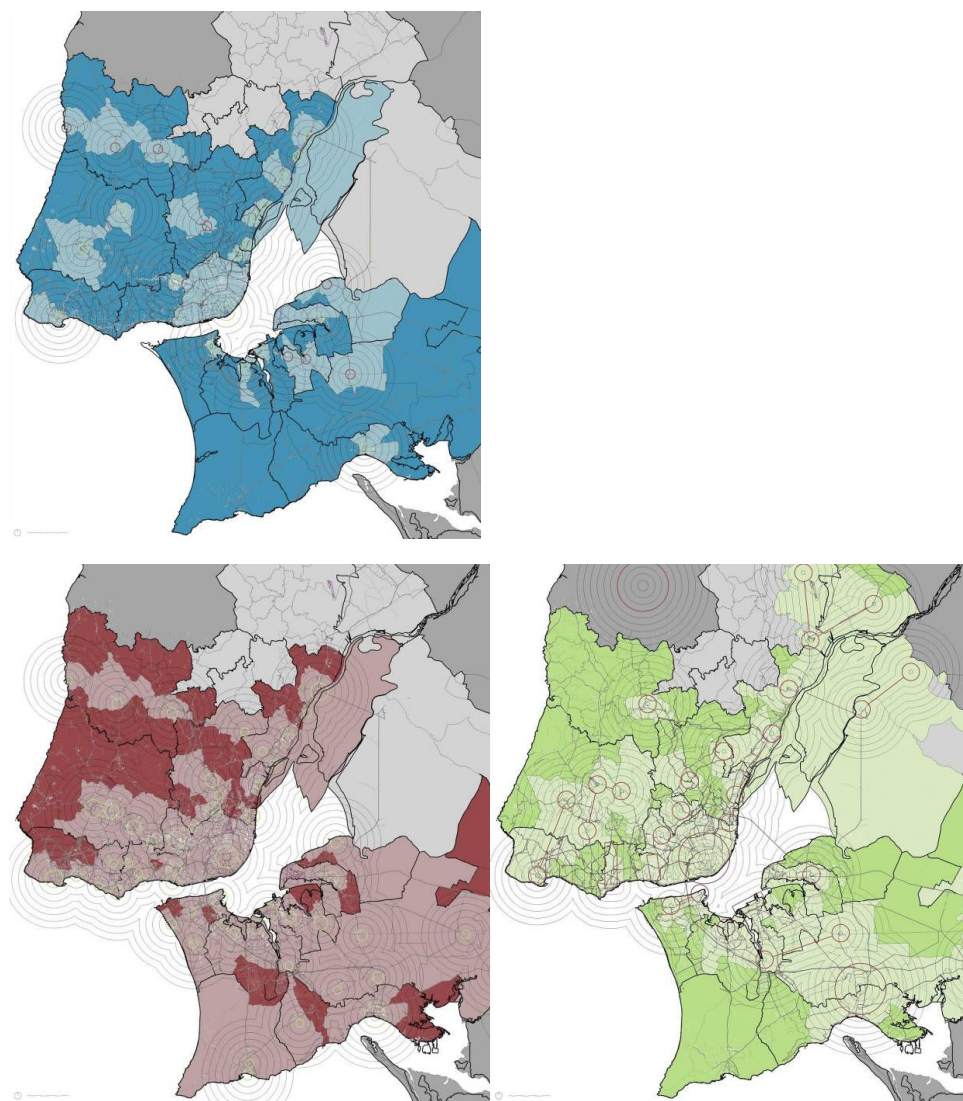


Image 3. 1965, 1992 and 2001 Metropolitan/Regional Planning and Proposed Centralities. Sources: *Territorial transformation and new centralities in Lisbon Metropolitan Area: what role for public policies?*; Lisbon Regional Spatial Plan, PDRL 1961-64; Lisbon Regional Spatial Plan, PROT-AML 1991-94; Lisbon Regional Spatial Plan, PROT-AML 2003.

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¹ *Territorial transformation and new centralities in Lisbon Metropolitan Area: what role for public policies?* Research Project, TU Lisbon; general coordination Clara Mendes, with Morgado and several authors, 2004-08.