## Espinho's urban morphology: the genesis of its orthogonality and structural factors of growth

## **Marina Castro**

Faculty of Arts, University of Porto

Rua 18, No. 640, 1 ° esq. 4500 Espinho, Mobile: (+351) 914 165 460

marinacastro79@gmail.com

This paper is based on a research conducted under Geographic interests. It looks for the understanding of how did the city state and grow up until it reaches the current urban network, in the early twentieth century.

In carrying out this investigation, it became necessary to go back to the nineteenth century, early development of the cluster population under study, which in that time integrated the North railway and reinforced its attraction to the contemporary tourist activity of "going to baths." In order to able the reading of the local morphology changes, it was necessary to understand the urban movements, especially in Europe and Portugal, to the entire thematic framing of this study as well as try to identify some possible influences in the choice of the urban form acquired. The main sources of information structuring this investigation were to consult local records, municipal budgets and maps available in the municipal archives. Thus emerged the need to explore two archives: the Historical Archives of Santa Maria da Feira and Municipal Archives of Espinho, once Espinho originally belonged to Feira (parish independence in 1889 and municipal in 1899). Given his dynamic and demanding population, was also consulted the Archives of Espinho Parish Council as a complement, it was possible to find data on the implementation of some local facilities that they were responsible.

The study is divided into two sections: the first one related to accessibility, essential to understand the evolution of any population center once it is usually seen as the basis for all development; and a second point with respect to local works designed and built, an important factor in modifying the morphology territorial structure across four categories - streets, municipal services, equipments, and building that although private, is the result of decisions and actions of the central and local levels, contributing to information and influencing the urban form of places. After all the investigation, it was concluded that the transition from an irregular primitive core to an orthogonal urban form was a conscious planned act, in result of the constant regularization and opening of streets, fully following the strategies outlined in the plans drawn up. All this movement was eased by the invasions of the sea (common at the time) that engulfed the ground and thus reduced the need for more expropriations and alignments. The capital required for investment was

being made available, as Espinho took a prominent place in local council, resulting from the fact that it states, increasingly, as a vacation hot spot during the second half of the nineteenth century. It is also possible to conclude that the responsibility for the selection of the orthogonal urban form is assigned to the Military Engineer Bandeira de Mello Coelho, since it is clearly aimed at city council meeting minute of August 27, 1874. However, the reason for choosing this type of grid seems not to reach consensus. The criteria used for selecting this type may result from national influences, European, American, or even the presence of the railway. Anyway, there seems a strong possibility that by the fact he was a military engineer, can explain the choice simply because it is the dominant type of territorial occupation in the military, as a result of all its advantages: easy to draw; easy to process the territorial division into lots; easy to edify; easy to circulate, and easy in guidance. The orientation of the urban form seems to be influenced by the orientation of the railway, since it directs not exactly north-south, but parallel and perpendicular to the line near the primitive agglomerate.

Keywords: Espinho, orthogonality; expansion.

## References

BENEVOLO, Leonardo (1994 3.ª edição) – As origens da urbanística moderna, Editorial Presença, Lisboa.

CÂMARA Municipal de Espinho (1996) – *I ENCONTRO DE HISTÓRIA LOCAL: ACTAS*, Espinho, Câmara Municipal de Espinho.

CERDÁ, Ildefonso (1991, 1.ª ed. 1859) – *Teoria de la construcción de las ciudades aplicada al proyecto de reforma y ensanche de Barcelona*, *Cerdà y Barcelona*, Madrid, Ministério para las Administraciones Publicas e Aiuntament de Barcelona.

CERDÁ, Ildefonso (1991, 1.ª ed. 1861) – *Teoria de la viabilidad urbana y reforma de la de Madrid, Cerdà y Madrid*, Madrid, Ministério para las Administraciones Publicas e Ajuntament de Madrid.

CHUECA GOITIA, Fernando (1982) – *Breve História do Urbanismo*, Lisboa, Editorial Presença. COSTA, Susana M.ª Marques da (1995) – *Cidades de malha recticulada – Espinho como referência*, Coimbra, Universidade de Coimbra, relatório de estágio do 6.º ano de Arquitectura sob a orientação do Professor Arquitecto Alexandre Alves da Costa.

DIAS, Benjamim Costa (1981) – "Narrativas e documentos", Espinho, Câmara Municipal de Espinho, *Boletim Cultural*, Vol. III, n.º 11/12, pp. 221-347.

FERNANDES, Mário Gonçalves (2002) – *Urbanismo e morfologia urbana no Norte de Portugal (Viana do Castelo, Póvoa de Varzim, Guimarães, Vila Real, Chaves e Bragança):* 1852/1926, Porto, Faculdade de Letras da Universidade do Porto.

GIRÃO, Amorim (1945) – "Origens e evolução do urbanismo em Portugal", Lisboa, *Revista de Estudos Demográficos*, n.º 1, pp. 41 – 77.

GRAVAGNUOLO, Benedetto (1998) - História del Urbanismo en Europa, 1750 - 1960, Madrid, Akal Ediciones.

LAMAS, José Manuel Ressano Garcia (2000 2ª edição) – *Morfologia urbana e desenho da cidade*, Lisboa, Fundação Calouste Gulbenkian.

LOPES, Teixeira (1998) – O nascimento de um aglomerado urbano: Espinho no limiar do século XX, Faculdade de Letras da Universidade do Porto, Porto.

LÓPEZ TRIGAL, Lorenzo (Ed.) (1999) – Los ensanches en el urbanismo Español, El caso de León, Madrid, Editorial Biblioteca Nueva e Junta de Castilla y León.

ROSSA, Walter (1997) – "A cidade portuguesa", in *História de Arte Portuguesa*, Vol. 3, Dir. de Paulo Pereira, Lisboa, Temas e Debates, pp. 233-323.