

Discussing Heritage Values in Local Planning: The Porto Municipal Master Plan's "Heritage Map"

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Abstract

In a new Urban Agenda that is largely determined by the demand for sustainability (UNESCO, 2016), heritage emerges as a strategic resource for urban development, as stated in the Recommendation on the Historic Urban Landscape - HUL (UNESCO 2011). Within this framework, this paper aims to discuss on heritage values in local planning with a specific case-study in the city of Porto, in Portugal. The discussion will be based on the "Heritage Map" of Porto's Municipal Master Plan (PDM) which was currently revised with support on the report on "Heritage Values" (Barata Fernandes et al, 2018a; 2018b) undertaken by the "Architecture, City and Territory Heritage" Research Group" (2016-2018) of the Centre for Studies on Architecture and Urbanism (CEAU – Faculty of Architecture of the University of Porto). The paper will present the results of this work, designed to assess the inventory of heritage values in the city of Porto, while, at the same time, evaluating its vulnerabilities, and presenting proposals for its proactive management and safeguarding through Porto's PDM. Although the "Heritage Map" of Porto's PDM has high potential in bridging heritage protection and urban development, the results of this study indicate the existence of strengths and opportunities of this instrument that need to be further developed and improved. With this case-study discussion, this paper also intends to provide new insights on the implementation of the HUL Recommendation and wider perspectives for the sustainable management of urban heritage.

Keywords

Heritage; Local Planning; Conservation; Urban Development; Historic Urban Landscape

1 INTRODUCTION

The Municipality of Porto is the seat of the second largest Metropolitan Area in the country and covers an area of 4,166km², with 238,000 inhabitants (INE, 2011). The River Douro marks the southern limit of the city, spreading along a winding valley with a rugged topography. The great variations in altitude along the banks have led to singular forms of appropriation of the territory that today forms the landscape of the Douro Valley and Porto. The metamorphosis of the city and the extensive urbanisation of the region have taken the territory beyond the limits of the old city, spreading into its peripheries. The exceptional diversity of values – built and natural, historic and contemporary, tangible and intangible – makes of Porto a relevant case-study to reflect on the implementation of the HUL Recommendation (Cunha Ferreira & Tarrafa Silva, 2019).

Also, the outstanding values of the oldest part of the urban settlement have led to the inscription of the Historic Centre of Porto in the UNESCO World Heritage List, in 1996 (WHC, 1996). This area is managed by the Municipal Council through the Management Plan implemented and monitored by the Society for Urban Rehabilitation – SRU (CMP, 2010).

Urban development in Porto is governed by the Municipal Master Plan (PDM), which establishes the strategic and land-use framework for the municipality's territorial development. The PDM, which was published in 2006 and is currently under review, defined a "municipal heritage structure" (embodied in the "Heritage Map") that was integrated into the Master Plan along with other urban systems (e.g. ecological, mobility, etc) (CMP, 2005).

Despite the fact that the first legal decrees relating to the Municipal Master Plans (PDMs) in Portugal already identified properties with heritage value, the first PDMs were limited almost exclusively to listing the city's protected buildings and were rarely concerned with their referencing in cartography. This situation has changed in the more recent revisions of the PDM, with Municipal "Heritage Maps" becoming ever more frequent (Tarrafa Silva, 2017). As instrumental documents that are simultaneously intended to form part of an ongoing and dynamic process, mapping the values of the inventory with georeferencing, among other aspects, the Heritage Maps could be also an operational tool for assessing risks and defining priorities and, thus, for guiding municipal urban planning and management (Tarrafa Silva & Cunha Ferreira, 2019).

In this way "Heritage Maps" can be a valuable instrument for the implementation of the HUL Recommendation (UNESCO, 2011) by bridging heritage protection and urban development and by addressing HUL steps such as mapping resources, reaching consensus (values and attributes), assessing vulnerabilities, integrating in the wider urban development framework, prioritizing actions and establishment of partnerships (Veldpaus & Roders, 2013).

1.1 CONTEXT AND OBJECTIVES

This paper will discuss on the "Heritage Map" of the Porto Municipal Master Plan (PDM), in the context of the "Study for the Characterisation and Diagnosis of Heritage Values" produced by the CEAU team under the scope of the revision of the PDM. This work consisted of three phases: (1) Methodological Report; (2) Characterisation and Diagnosis Report (Barata Fernandes et al., 2018a); and (3) Complementary Proposal Report (Barata Fernandes et al., 2018b).

Within this framework, the team was asked to make a critical assessment of the previous PDM's "Heritage Map" (2006), while, at the same time, establishing some proposals and guidelines for its revision and updating (prevision of publication in 2020). Due to the limited extension of this article, the characterisation, diagnosis and proposals presented here are neither complete nor exhaustive, mentioning only a selection of the main issues raised by the CEAU interdisciplinary team (two architects, an engineer and an archaeologist, with drawing support by a junior architect and a Geographical Information Systems - GIS engineer).

1.2 METHODOLOGY

Methodology is supported on holistic and interdisciplinary work, crossing qualitative and quantitative research methods (providing georeferenced structured database and indicators). After a brief contextualisation, qualitative analysis is made of the characterisation and diagnosis of the current PDM, in order to substantiate the proposals presented for the better management and safeguarding of heritage values in the city of Porto.

At the same time, an assessment was made of the following parameters: content and categories of heritage assets, listed heritage, inventory forms and management guidelines. This analysis was based on the various supports that comprise the PDM: 1:10 000 scale cartography, PDM Report, PDM Regulations and respective annexes (e.g. inventory/characterisation forms), in addition to other background documents such as the REOT (Spatial Planning Status Report) (CMP, 2015). The interpretation is further supported by tables and maps, which allow for a better analysis and subsequent discussion.

2 CHARACTERISATION OF HERITAGE VALUES

The Porto Municipal Council has an interdisciplinary team of qualified technicians from the areas of history, archaeology, architecture and urbanism, enabling for the development of an accurate (and permanently updated) inventory and the protection of the city’s architectural and archaeological heritage.

1) Properties of Heritage Interest (IIP)	Properties which, due their historical, architectural or environmental interest, should be subject to protection and enhancement measures.
2) Areas of Urban and Architectural Interest (AIUA)	This includes the notion of an architectural “ensemble” associated with a broad view of how the city has grown and developed over several centuries, translating into the “architectural quality of certain groups of buildings with more or less extensive urban fronts, and their importance in consolidating the urban image” (CMP, 2012).
3) Nuclei and Places (NL)	Historic areas corresponding to the city’s oldest consolidated urban fabrics and to the remains of the original rural nuclei that still preserve their structure and their initial morphological elements with significant urban and architectural representativeness, which it is of interest to preserve and enhance.
4) Green Areas of Heritage Value (EVPV)	Those green areas of heritage value include the following categories: historical estates and gardens, estates located in historic centres, agricultural land, parks and courtyards (public and private).
5) Archaeological Areas (ZEP/ZAP; PEPA/ZOPA)	Archaeological Protection (Special Protection Zone/Automatic Protection Zone – ZEP/ZAP; Special Perimeter of Archaeological Protection/Zone of Archaeological Potential – PEPA/ZOPA)
6) ACRRU	Critical Area of Urban Renovation and Rehabilitation

TABLE 1 Categories of Inventoried Properties (CMP 2005; 2012)

This “Heritage Map” is part of the Land-use Plan of the PDM (such as the Zoning Map and the Street Hierarchy Map) and its main purpose is to promote and encourage the enhancement and protection practices in properties/assets/areas with heritage values (statutory listed or not) (Vasconcelos & Rio, 2014). This information can be found on the official site of the City Council, at the MipWeb cartography gateway (www.mipweb.cm-porto.pt). In addition, the Municipal Heritage Council provides expert advice, guidance and training to support the management and preservation of Porto’s heritage values (Vasconcelos & Rio, 2014).

The current PDM “Heritage Map” (2006) incorporates different categories (Table 1; Fig. 1) which can be, in general terms, grouped in: i) Areas with Heritage Interest (AUAI, NL, EVPV, ZEP/ZAP, ZEPA/ZOPA, ACCRRU) and ii) Properties of Heritage Interest (IIP). The last consist mostly of built heritage, ranging from single buildings to architectural ensembles, but also including isolated urban assets (e.g. sculptures, bridges, etc.). Each inventoried property holds an individual inventory file and is georeferenced on the PDM “Heritage Map” through its location, street, legal protection level (listing category, when listed) and a code locating it on the map.

Properties of Heritage Interest (IIP) are inventoried and displayed on the “Heritage Map” according to the following values: i) Architectural (and Urbanistic) Value; ii) Artistic Value; iii) Historic Value; iv) Landscape and Ecological Value; v) Symbolic, Cultural or Social Value; vi) Technical-Scientific Values (Table 2).

From the 1324 Properties with Heritage Interest (IIP), about 12% are statutory listed: i) National Monuments (25 properties), ii) Properties of Public Interest (105 properties or iii) Properties of Municipal Interest (29 properties).

i) Architectural (and urbanistic) value	- architecture of historical importance: property designed by an architect or builder whose work is of special significance to the city; architectural typology (e.g. palaces, mansions, manor houses, etc., or a typology representative of a particular architectural school/rational); building of high architectural quality (even when the architect is not known) that has its own distinct identity in terms of urban image;
ii) Artistic value	- properties with artistic interventions of special value, whether their author has been identified or not;
iii) Historical value	- architecture prior to the mid-18 th century. However, this is not an exclusive value, i.e., this criterion is applied systematically to architecture before the mid-17 th century, whereas the buildings dating after this period were subject to other evaluation criteria, namely their architectural value and their state of conservation; architecture that is representative of certain periods and historical phenomena that marked the city and the evolution of its urban development;
iv) Landscape and ecological value	- spaces which, due to the design, size or quality of their green structure contribute to the ecological, environmental and scenic quality of the surrounding area; architecture in the form of groups of buildings holding up the rural atmosphere;
v) Symbolic, cultural or social value	- spaces, properties or paths associated with practices, traditions or rituals of intangible interest; linked to outstanding personalities in the city’s history and culture or which served as a stage for events of special significance; a reference for understanding the identity and memory of an extended community.
vi) Technical-scientific value	- constructions/architecture that stand out because of the technological innovativeness of their building materials or construction systems, or the virtuosity of the structure; buildings and other constructions that were the scene of important technical-scientific activities for understanding the city’s infrastructure processes (water, gas and electricity supply), etc.

TABLE 2 Categories of Values (CMP, 2005)

Furthermore, there is a wide range of buildings enjoying legal protection even though they are not listed individually. Those include properties integrated within the Protection Zones (ZEP/ZAP) of listed properties or in the "Architectural Ensembles of Public Interest" (CIP), as well as the ones located within the area of the Historic Centre of Porto (UNESCO World Heritage) and thus, according to the Portuguese legislation (Law 107/2001) listed as a National Monument. Corresponding to 18% of the total area of Porto (Fig. 2), the management of these protected properties, are from the shared responsibility of National Government's Heritage Offices, such as the Northern Regional Directorate of Culture (DRCN) or the Directorate-General for Cultural Heritage (DGPC) (Fig. 2).

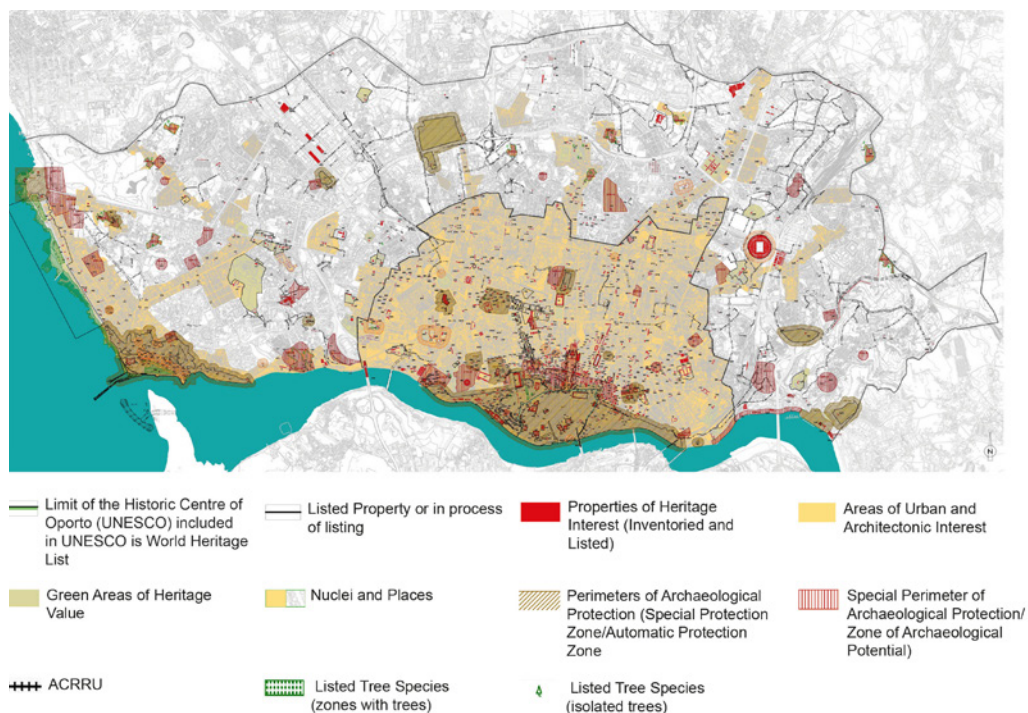


FIG. 1 Heritage Map, Porto, 2006 (Source: DGT, 2006)

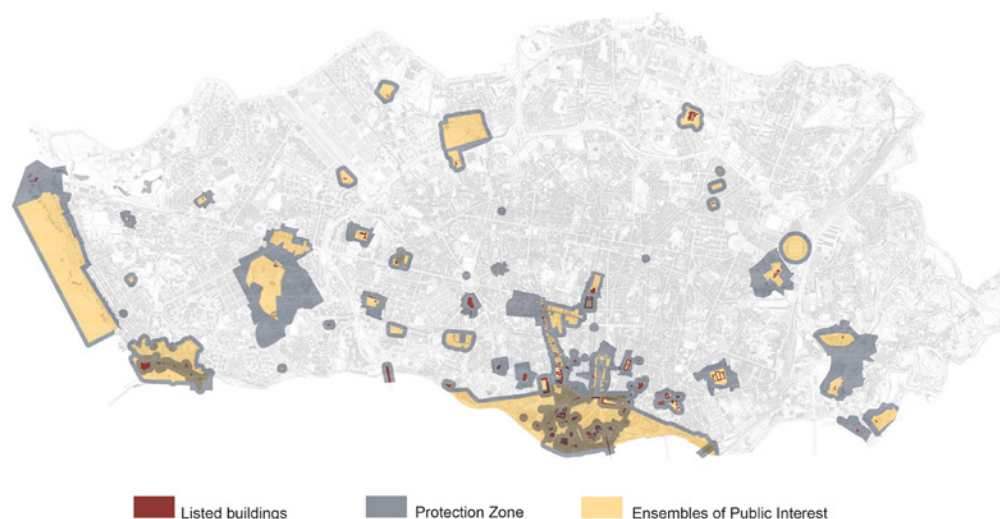


FIG. 2 Map Identifying the Listed Heritage and Protection Zones (Source: CEAU, 2018)

Although the LBPC2001 Law (National Cultural Heritage) states that inventorying is the first step towards protection, it is important to acknowledge that, in the practical day-to-day management of interventions in the city of Porto, only statutory listed buildings or buildings belonging to listed ensembles or protection zones have a more effective legal protection through the compulsory guidelines established by the DRCN or the DGPC.

3 DIAGNOSIS AND PROPOSALS

Based on the above mentioned characterization, CEAU team proceeded to the diagnosis of problems and to the proposal of management guidelines covering the following issues: i) Areas of Heritage Interest (AIUA, NL, EVVP, ACCRU); ii) Properties of Heritage Interest (IIP); iii) Inventory Forms, among others.

3.1 AREAS OF HERITAGE INTEREST

Critical analysis revealed the need to review the delimitation of Areas of Heritage Interest (and of the respective inventory criteria) in order to establish greater coherence and maintain an interrelationship between protected areas, inventory criteria and urban management guidelines. For example, in some cases, the Areas of Urban and Architectural Interest (AIUA) correspond to areas that are too large (ACCRU), and thus difficult to manage. Within this scope, criteria were defined for the revision and delimitation of Areas of Urban and Architectural Interest (AIUA), as well as for Nuclei and Places (NL) and Green Areas with Heritage Value (EVVP). This process resulted in the reformulation of the limits of the areas of each of the categories and, in some cases, led to their elimination (ACRRU) or the addition of new areas (Fig. 3). Also, guidelines for heritage protection and urban management were defined for each category.

3.2 PROPERTIES OF HERITAGE INTEREST (IIP)

Although the inventory of Properties of Heritage Interest (IIP) (1324 properties) showed their chronological, typological and geographical coverage, this extensive and undifferentiated listing (i.e. the absence of 'categories of properties') makes the inventory and urban management process difficult. With this objective, categories of heritage properties were defined by CEAU team according to their "matrix" – i.e. "the set of essential elements that make it possible to identify the work and respect the memory of its historical process" (Barata Fernandes, et al, 2018b). In his way, it was thus possible to identify their (identity-based) elements to be safeguarded, as a support for urban management.

The concept of the "matrix" underlies the definition of seven categories of heritage properties: i) Housing or Housing with Retail; ii) Equipment and Facilities; iii) Retail and Services; iv) Rural Buildings; v) Industrial Buildings; vi) Engineering Works; vii) Urban Furniture and Public Works of Art. The guidelines for heritage protection and urban management were defined in accordance with each category.

An analysis of the total sample of the inventoried heritage (1324 properties) by categories shows that the predominant group is "Housing or Housing with Retail Services" (933 properties, which account for about 70% of inventoried properties). The second most prominent group is "Equipment and Facilities" (196 properties, i.e. about 15%), which includes a considerable number of buildings with an exceptional character in the urban fabric and refers to buildings with different functions, such as churches, schools and universities, among others. In lower percentages (between roughly 1% and 7%), we have the categories of "Retail and Other Services" (92 properties), "Rural Buildings" (39 properties), "Industrial Buildings" (33 properties), "Urban Furniture and Public Works of Art" (29 properties) and "Engineering Works of Art" (13 properties).



FIG. 3 Proposed revision of the Heritage Map (source: CEAU)

CATEGORY	PROPERTIES LISTED BY THE STATE (MN, IIP / MIP) (%)	PROPERTIES INVENTORIED (%)	PROPERTIES INVENTORIED (TOTAL NUMBER)
i) Housing or Housing with Retail	47	70	933
ii) Equipment and Facilities	48	15	196
iii) Retail and Services	10	7	92
iv) Rural Buildings	4	3	39
v) Industrial Buildings	2	2	33
vi) Engineering Works	4	2	29
vii) Urban Furniture and Public Works of Art	13	1	13

TABLE 3 Listed Properties by Category (source: CEAU)

From the analysis of the inventory of Properties of Heritage Interest (IIP), we can observe that there is a deficit of works and buildings from the second half of the twentieth century, as well as of architectural works of industrial and rural origin (e.g. old industries; mills). This is a weakness because all the referred are highly representative of Porto's heritage values (historical, architectural and urbanistic, artistic and social, etc).

Also, there are other local inventories conducted by the Municipal Department for Cultural Heritage (e.g. Industrial Heritage, Public Art, *Azulejos* (Tiles) Database, etc.), but are not yet linked with the "Heritage Map". However, these are positive contributions to raising awareness about other types of heritage attributes, such as building elements or even intangible values which should be more enhanced in resources' mapping (Veldpaus, 2015). Moreover, although any citizen can recommend the introduction of new properties to the heritage inventory, the inclusion process remains largely supported by expert assessments, with little participation by local inhabitants and associations (Tarrafa Silva & Cunha Ferreira, 2019).

3.3 INVENTORY FORMS

Inventory forms are encoded with an acronym in the PDM "Heritage Map", allowing for its easier consultation. However, most of the Inventory files are very synthetic and information is missing namely regarding inventory criteria, as well as any information relating to the interior of the buildings and the elements to be preserved. With this in mind, CEAU team proposed a reformulation of Inventory Forms in order to incorporate the inventory criteria and the identified values. It also includes the proposal of specific fields related to the morphology-type, the construction systems and the state of conservation of the properties, as well as an elucidation of the elements to be preserved, among other issues.

The incorporation of this information materialises the operational potential of the "Heritage Map", introducing a balance between the values to be safeguarded, the potential risks and the management measures. In this way, it will be possible to prevent demolition operations inside the blocks or buildings, promoting the preservation of the urban cadastre, as well as the morphology matrix (access system, vertical circulation, internal organisation, etc.) of the materials and construction systems.

The current context of urban pressure in Porto, arising from the large volume of tourism and real estate speculation on the last half decade, increased the difficulties in conducting urban management in such a way as to prevent demolition works in inventoried or listed areas or buildings. The development of more detailed inventory forms, identifying the values and attributes to be preserved according to each category, could thus work as part of a solution into pursuing more sustainable development models.

4 DISCUSSION OF RESULTS

Porto has a long history of heritage safeguarding and protection, and its respective incorporation into urban development frameworks and strategies. However, some problems persist, and the scattered nature of the responsible bodies, areas and tools often makes management ineffective. Moreover, from the HUL perspective, while the step of resource mapping is partly accomplished by the PDM (including the comprehensive inventory of the whole of the Porto city area on the Heritage Map), the same cannot be said of further steps, which reflect the low levels of investment and knowledge applied to opening up the discussion about the values and attributes to be preserved, and the limited development of instruments that can be used to assess the impact of threats to properties of established cultural significance (Cunha Ferreira & Tarrafa Silva, 2019).

Hence, even though the study presented in this paper provides some contributions towards the management of heritage values in the city of Porto, there is still a great work to be done. More structural reforms should be undertaken, namely in creating assessment and monitoring instruments (with quantitative and qualitative data) which could better support decision-making and management. Moreover, it is important to develop complementary maps for assessing vulnerabilities, namely in regard to the state of conservation or the risks affecting the properties.

In this way, although the “Heritage Map” of Porto’s PDM has a high potential in bridging heritage protection and urban development as stressed in the HUL Recommendation, the results of this study indicate the existence of opportunities that need to be further developed and implemented, namely by increasing participatory processes, as well as by linking more heavily these values with the threats to which they may be exposed and with the proposals for urban management and development.

5 FINAL REMARKS

In an Urban Agenda that is largely determined by sustainable development (UNESCO, 2016), heritage safeguarding has been evolving from a strictly static, regulatory or reactive form of protection to become a proactive vision in which heritage is seen as a vector and driver of development (Cunha Ferreira, 2018).

In this way, Heritage inventories and mapping (such as PDM “Heritage Maps”) should not be limited to the static listing of properties (traditionally only related with tangible values) but work as effective integrating, dynamic and operative instruments for urban development (managing both tangible and intangible values). Also, these should be defined not only in a ‘top down’ perspective (policies and technicians) but also through ‘bottom up’ approach, with the participation of local communities in the identification of values and attributes to be preserved and enhanced.

In this framework, with the case-study discussion in Porto, this paper also provides insights on the implementation of the HUL Recommendation (UNESCO, 2011) and wider perspectives for the sustainable management of urban heritage.

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