## **Urban Renovation of Portuguese historical centres**

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### ABSTRACT

Cities are ecosystems that consume a lot of energy and substance, as well as generate much waste and pollution. Concerns about waste and misuse of natural resources have led people and governments to think better about urban growth. Nowadays half of world population lives in cities, and it is expected a considerable increase over the next years in developing countries. Already in some European Union countries, which currently go through times of crisis, it is misunderstood the necessity of cities expansion. Portugal is one of these developed countries, with many historical cities and non-necessity of expansion, but a need for changes, which accompany the world development and their sustainable premises. The way cities in Portugal should evolve, goes through the sustainable renovation, whether urban or buildings. In the scope of sustainable rehabilitation as well as in the conception of sustainable projects, it is important to consider the, inevitably connected, environmental, social, economic and cultural aspects. The main objective of this paper is to discuss urban renovation, which should be resilient, should know how to add value to the environment where people live in, taking advantage of cities elements, through the technological evolution and rational use of natural resources, sustainable materials and techniques.

### 1. INTRODUCTION

The economic crisis in Europe, somehow, has had consequences for the construction industry in Portugal, generating a reduction in new real state enterprises, being visible a moment of stagnation of the cities expansion. Thus it is verified the growth of a new market, urban renovation – urban upgrade - which becomes a necessary factor for cities, which are in constant changes, in order to track the contemporary needs of the population.

It can be said that these acts of urban renovation are occurring, or should be, in urban historic centres - that reveal themselves fragile - endangered by physical degradation and industrialization. Degradation is a concern, once historical centres are places that tell the cultural memories of a whole community, represented through its historic buildings, streets, parks, landscapes and local people. The industrialization is a great responsible for the neglect

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of the historic centre by community, which moves to outlying areas in pursuit of their contemporary needs.

Assuming Portuguese historical centres as subject of study, will be addressed their regeneration, as well as their necessities and how this rehabilitation can be resilient and sustainable, meeting the basic human needs. Methodologies and fundamentals will be discussed in order to achieve a sustainable renovation, with subsequent presentation of key topics surrounding the subject. As an example, the regeneration model of cities of Guimarães and Braga will be presented and reviewed, focusing the valorisation and renovation of their historic centre.

## 2. URBAN REHABILITATION

The urban rehabilitation term appeared in 1929, in USA, related to a replacement policy of existing precarious dwellings in North American cities. However, it was at the end of World War II that it became current, due to the need to rebuild European cities destroyed by the conflicts, as well as a response to the accumulated housing deficit. The theme of urban regeneration was also placed on the theoretical debate in the field of urbanism in 1951 with the publication entitled 'The Heart of the City', during the organization of CIAM (International Congresses of Modern Architecture), which codified a set of guidelines for the redevelopment of urban centres in accordance with the founders postulates of the Modern Movement, synthesized at the Athens Charter (Compans, 2011).

Only later, concerns about the urban rehabilitation of historic centres would arise, documented at the Venice Charter, Toledo and Amsterdam Declaration, for example. These concerns are manifested in projects with strategies aimed at the renewal and vitalization of historic centres, spaces considered with evidence and traces of past human activities, possessing unique character, being the centre of social, economic and cultural cities.

Both models of rehabilitation have similar goals, based on social aspects, economic and cultural of cities and its people. These aspects serve to ensure the development and growth of towns in a structured manner. However, through the years, these concerns seems to be insufficient, coming to arise a greater concern for the environment, with the ecosystem, renewable and non-renewable natural resources, which added to the previous aspects, conceptualize the sustainability concerns.

#### 2.1. Concept of Urban Renovation

Urban renovation follows the concept of conservation and protection of historic urban areas, guided by aesthetic architectural, environmental and cultural values. Values which are concerned about the continuity of citizens memories (Vehbi and Hoskara, 2009). A current definition, taken from the Council of Europe (2005) stresses that "urban renovation (rehabilitation) is a process of urban revitalization in the medium or long term. It is above all a political act, in order to improve the components of urban space and the well-being and quality of life of the whole population". Spaces that are constituted basically by buildings, streets and squares, undergoing through changes in their use and appearance, and therefore presenting the need for regeneration and promoting longer life cycle.

The regeneration of historic centres tends to have two different approaches: static and dynamic (Vehbi and Hoskara, 2009). The static approach refers to the preservation of heritage buildings with possibility of improvements for posterity. Thus in dynamic approach, the historic core is revitalized and develops a process of integral conservation, being the only manner to render this sustainable renovation, incorporating the principles of protection and management of cultural heritage. The rehabilitation of an integrated manner provides insights

for the use of the built heritage, introducing new functions or renovation of the original functions in order to bring activity through its revitalization. This dynamic approach applies the resilient regeneration, aimed to safeguard historic urban centres, full of abandoned and empty spaces, which represent the disregard. This neglect is seen as the responsible process for most urban problems, such as degradation, violence, filth and lack of sanitary condition. The renovation goal is to keep the historical artefact (building or landscape), protecting it as far as possible, and trying to include it for any practical use in modern society. The empty urban spaces stand out as morphological structural elements of the city, as areas liable to intervention, which may play an important role in the changes of organization, design and qualification of the city (Miana, 2010).

The Amsterdam Declaration conceptualizes integrated rehabilitation defining it as a recognition that protection and enhancement of architectural heritage are not separated from economic, social and cultural factors that frames the environment. This declaration emphasizes the use of built heritage as a part of community social life, and for benefit of present and future generations.

The documents of considerations and arguments that guide the conservation and renovation are already known, but it is worth strengthening them. The architectural rehabilitation and conservation should have its main goal clearly defined, in which local authorities have special responsibilities on heritage protection and should be supporting each other with exchange of information and ideas (IPHAN - *Declaração de Amsterdã*, 1975). The urban renovation must be designed in such a way that does not require major changes in the routine of residents, ensuring that society may enjoy and share the benefits, making public enjoy their cultural heritage, especially the younger generation (IGESPAR - *Carta Internacional para Salvaguarda das Cidades Históricas*, 1987). The participation of people at this process is very important to guarantee safeguarding, and to help society understand their heritage value, hence educational programs are a great asset, providing information on environmental and cultural issues.

It is important to emphasize to authors of projects that not all areas to be renovated are equal, and these areas should be treated according to its individual characteristics. In order to obtain a good work in these areas, it is needed an inventory of all fields of intervention, namely, zones to be protected. The deep understanding of its historical and physical characteristics, and traditional construction techniques, allows the preparation of a proper regeneration plan. This plan will be detailed in order to reach a successful rehabilitation, over the long term, that might be sustainable. Short-term plans only result in physical renovation, often represented by a superficial intervention. So it can be said that "a Global Plan Renovation does not constitute by itself, the battle in the rehabilitation of a historic centre, the Plan builds on the measure of the stakeholders dynamics and available resources" (Gesta, 2010).

## 2.2. Sustainable Renovation

Within the sustainable view, it is important to understand that the preservation of heritage buildings helps to save energy resources (renewable and non renewable) and to reduce waste, a major concern of modern society. It has been demonstrated that historic buildings can receive new features that meet the needs of contemporary life - demands of comfort, security - increasing its life cycle. Furthermore, conservation requires the use of traditional building techniques, as well as artists and highly skilled workers, whose talents and traditional knowledge should be kept alive and transmitted to the future through specialized courses aimed to municipalities and private individuals, as well as interested community.

There are no set rules to achieve sustainable urban renovation of historic centres, since sustainability is a process that must be dealt over time, being in constant pursuit for better outcomes. It can be enumerated some sustainability indicators to be used by municipalities and designers as support to develop this process. It is verified the importance of applicability and feasibility of certain indicators - divided into factors associated to environmental conditions, social, economic and cultural - in order to achieve global patterns of renovation process. It is noteworthy that the set of indicators, that is suitable for a community, may not be specific to another, as they may not be appropriate for this location, which suggests that the community should be involved in the selection of indicators to be evaluated for their region.

It is thought that indicators of urban sustainability must be based on the following themes: urban density study, diversity of building typologies, mixed-use proposals; favouring social equality and economic diversity; green areas systems and open spaces structuring of urban life, providing the continuity of biodiversity; optimization of urban infrastructure, equipment integrated to networks of open spaces and green areas; sustainable management of urban traffic, with efficient public transport network and diversified, with areas for preferential use of pedestrians and cyclists; reduce and reuse solid waste; appreciation of the surrounding soil, preventing urban sprawl. These pleas must be compatible to local cultural identity, respecting its historic heritage.

The sustainability indicators for a community only provide information that help to direct whether it is on track, being used to provide an overview of the situation. They are like "numerical tools used to measure changes in the physical, economic and social structures of an urban area" (Vehbi and Hoskara, 2009). According to Happio (2012), the indicators can be seen as an important instrument that conveys information, in a simple way, to decision makers, translating the collected data in manageable units of information.

## **3. GUIMARÃES CITY**

### 3.1. Historical context

The city of Guimarães, usually designated as the Cradle of Portuguese Nationality, has a historical centre that holds a set of historical buildings which illustrate the evolution of different built types from the middle ages to the XIX century. This set is part of the world heritage, recognized worldwide, and has been under renovation since the 80s (Câmara Municipal de Guimarães, 2012). Guimarães is a city that early on bothered to disrupt the process of degradation which had been suffering, and to work in their urban regeneration. The Municipality of Guimarães has been focusing this thematic with greater interest after the creation of an association in defence of the cities heritage (1979-1980) and after being quoted by architects and urban planners as a site of great architectural interest and archaeology.

In 1980 it was given the kickoff, with architect Fernando Távora being invited by the Municipality to design the General Urban Plan of Guimarães, and was in 1981 that Nuno Portas, a renowned Portuguese architect, suggested the establishment of a Local Historical Centre Office. The future GTL (Local Technical Office) of Guimarães Municipality started its activities in the same year, in collaboration with the architects Fernando Távora and Alexandra Gesta. This office will only have its structure completed in 1985, but from the beginning had a broad concept of cultural heritage, which was expressed and valued in their work (Portugal, 2008). The creation of this office marks the beginning of concerns with the preservation and transformation of the contemporary city, as well as the renovation of the Historic Centre of the city, proud of all local inhabitants – the Vimaranenses.

## 3.2. GTL from Guimarães

The GTL, after its creation, began its work based on urban administrations, with practices projects and design in real time. It starts the adaptation of the historic urban core to the current way of life of its inhabitants, taking into account the concern with the new demands of comfort and security of the buildings, preserving the architectural identity, and keeping the resident population in their homes.

GTL uses some principles for urban regeneration, three may be highlighted: (i) renovation to and for people, (ii) conservation of identity and authenticity values, in order to preserve referential qualities from the architecture of the historic city and (iii) ensuring the continuity of heritage essential long-term, retaining its formal qualities already settled (Aguiar, n/d). These principles jointly with a clear management rule, sought to intervene in public spaces of Municipality competence, serving as an example and inducing action initiatives. Interventions were conducted in municipal buildings, through the installation of equipment and infrastructure. At the same time, the municipality provided technical and financial support to private individuals, valuing and encouraging initiatives to renew its housing stock (Gesta, 2010).

Among the activities undertaken by the Municipality, it was intend to recover the housing stock (investing and rehabilitating), to revitalize public spaces (equipment and infrastructure) and to promote quality of its architectural and urban spaces, with the interest to host activities that could provide people meetings, with a closer relationship between historic centre and surroundings (Aguiar, n/d). The rehabilitated spaces were modified, taking advantage of their reuse, for both old activity as new in order to avoid abandonment of structures and their own degradation.

The actions of urban renovation, in Guimarães, occurred and still occur while respecting the principle of minimum intervention, instilled in the Venice Charter (1964), and the principles and objectives of the Charter of Toledo (1986, ratified by ICOMOS in 1987), which refers to safeguard the historic cities. Besides this, traditional construction courses were created, with the use of local materials and labour, ensuring that renovation follows original constructive technique obtaining its peculiar character, being refused superficial interventions.

The ideals and attitudes of GTL were revealed with visible results in the late 80's, first with the Europe Nostra Award (1985) by adapting the seat of their own GTL (Figure 1), shortly after is concludes the project of "Praça de Santiago", in 1989 (Figure 2). The office has received the 1st prize of the Association of Portuguese Architects, in 1993, for the best work of conservation - which were usually rewarded individual authors -, and the prize of the Real Fundación de Toledo Prize in 1996. The renovation of the historic centre of Guimarães city has become a benchmark in terms of conservation of urban heritage, which began to be commented in national and international conferences, being the professionals working in GTL invited to speak on the interventions made by the office.

According to Alexandra Gesta, former director of GTL, "interventions in the historical centre should provide a functional reanimation (and financial) linked with the process of (re)qualification of the remaining urban area (urban and suburban). Understanding the renovation of historic urban cores as an inducing action of formal and functional rehabilitation of a 'continued urban', seeking to spread qualities and induce by 'contagion', similar processes in the periphery, making it (again) the historic city as a 'core reference', a formal structure and functional (particularly) significant and meaningful within the territory" (Aguiar, n/d), this thinking demonstrates the political concern that Guimarães Municipality, trough GTL, committed in its interventions. It is thought that the idea was to deal with historic centre first, which would serve as a model for, only then, the surrounding areas begin to receive more attention.





Figure 1 – Rua Nova's house, the former seat of Guimarães GTL.

Figure 2 – "Praça de Santiago".

Analyzing the political and financial sides, this attitude achieved results, which allowed the city to be listed as World Heritage by UNESCO in 2001 (Aguiar, n/d), and that opened the eyes of the world population to recognize this city as a tourist and cultural destination bringing more activities, income and recognition. Guimarães was chosen to be the European Capital of Culture 2012, and underwent some recent interventions to receive a large audience that will pass through the city throughout the year. These measures were financed by the founding institutions and partners - including the City of Guimarães, the Ministry of Culture and Tourism of Portugal, the European Structural Funds and capital raised by the Patronage and Sponsorship Program (Portugal, 2008), which has aimed to bring improvements to the site, boosting the city to continue its activities, ensuring a better life quality for population.

## 3.3. Sustainability

No concerns were identified relating to sustainability in urban interventions undertaken by the Guimarães municipality, but it can be said that it was implicit, inside of actions performed. Perhaps because Guimarães had a concern with the early degradation of its historic centre, records of references to sustainable concerns do not exist in its Renovation Global Plan.

It should be highlighted, interestingly, that by not leaving its urban centre to reach a certain level of degradation, urban renovation is responsible for transforming the public spaces in the continuity of domestic spaces, in its historic quarters (Aguiar, n/d), where the population coexists with the local, letting it alive; this shows a sustainable concern regarding the social and cultural level, which has not occurred in many urban centres out there. The use of traditional materials and local recovery of its housing stock, demonstrates environmental concerns. Therefore it is possible to achieve all important aspects of sustainable development, in which economically, the city has been growing over the years. Despite the crisis, these events, that are currently taking place in the city, come from every effort of the Municipality, GTL and community with the care of their patrimony.

The latest interventions, upon which does not exist many publications, are known as the Urban Requalification Project at "Largo do Toural" (2009-2011), see Figure 3, designed by Maria Manuel Oliveira - architect, teacher and director of the Centre for Studies of School of Architecture of University of Minho; herein, it is perceived the initiative to use sustainability as an item for the reformulation of the space. In this project were used local materials and labour, it was respected the existing around, and being used high technology to benefit the decrease in energy expenditure, such as the case of lighting system.



Figure 3 – "Largo do Toural", renewed.

According to the author of the project, it is noted the "recognition of long and important history of the site with their contemporary interpretation of space", as well as the current trend to "limit the traffic of cars in central areas of the city" with "beneficiation of pedestrian", being an attempt to humanize the space (Costa, 2012). This manifestation demonstrates the concern in designing for and by people, aiming to enhance a joint public space, with social equality, respecting the history and identity of its population.

## 4. BRAGA CITY

## 4.1. Historical context

Braga is a city nearby Guimarães, and also has a historical centre with many Roman vestiges which tells its history. Braga is recognized as one of the oldest cities in Europe converted to Christianity (Câmara Municipal de Braga, 2012), which has immense value to the economic and cultural development of the city, which is considered the Rome of Portugal. Analyzing the city of Braga, more precisely its historic core, can be said that one concern is evident in the context of urban restructuring. The city presents a development plan that goes to meet their pre-existence, maintaining an identity value, markedly present on historical centre, both in its irregular outlines from medieval times (Figure 4) as the regular outlines in the present city, a result of baroque expansion.

In summary, the urban morphology of Braga can be characterized by a core of medieval origin which is the centre of the Historic Zone, where occurred multiple transformations of different types, but that remains the main centre of urban dynamics (Câmara Municipal de Braga, 2011). The concern with the historical centre is described and documented in the Strategic Plans of Urban Rehabilitation of Braga; municipality technical staff, private sector and institutional agencies were involved in making reports.



Figure 4 – Irregular outlines from medieval Braga historical centre.

### 4.2. Strategic planning

The concern of the municipality of Braga with the degradation of its housing stock in the central zone is verified through the analysis of its Strategic Plan, as well as existing urban disqualification. The loss of the active population of the historic centre becomes worrisome, leaving it characterized by an aged population. The buildings that are being refurbished are due only to investments of private sector, in which old houses are converted into shops and services, or high level housing, while its former residents, with lower purchasing power, become obliged to go live outside the city, losing the bonds constituted there.

The historical centre of Braga, trough a wider view, is a privileged place within the city and its region, with good quality of life, representing a hub of activity and innovation. Due to this analysis were provided some strategic axes for improving the urban city dynamic, in which each of these axes has general and specific objectives. It is highlighted four areas: (i) economic and social renewal, focusing on sectors of development and creativity as inducers of modernization process of the city. Concern about provision of housing for a diverse audience, including the renovation of buildings; (ii) technological innovation in terms of rehabilitation of buildings, infrastructure and urban services, with training professionals to work in the renovation of historic centre, promoting innovation through partnerships between agencies such as Portuguese Architects and Engineers Chambers, universities and specialist associations. Create ways for these promotional activities. Interaction of the regional University with new techniques; (iii) addition of governance in the process of urban management, which refers to the public and private partnerships by promoting concerted action between government and private sectors to the urban marketing and communications. Create meetings for resident population participation and not just residents of the surrounding areas, to discuss the city problems. Inform and educate the population; (iv) enhancing the insertion of the historic centre on the structure and dynamics of the surrounding territory, which reinforces the concept that to 'Live in History Centre' cannot be penalizing in terms of mobility and accessibility, and defends concerted action with institutions education and culture as regards the promotion of programs to sensitize people to the history urban city, its historic centre and urban planning.

The Strategic Plan has some macro concern about the sustainability, related to spatial planning, but also to sustainability of city regeneration and construction process. Related to these concerns few projects are expected, such as the revision of the Municipal Master Plan.

### 4.3. Notes of the strategic plan

The renovation proposals of the strategic plan cover important aspects that require a collective effort among the stakeholders (public, private and society), allowing the revitalization of the built environment for worthy use of the city itself. Thus, it emphasizes the use of the built heritage as part of the social life of the community and for the benefit of present and future generations (Vehbi and Hoskara, 2009), through a view that urban renovation should be for and by the population, based on Guimarães principles.

Another note is that Municipality should be more careful with its historical centre. The administration has already understood its value, but is still unable to avoid, for example, construction without a rule, made by private individuals, which is visible in some parts of the historic city centre. It is found that the idea of creating a sector within the municipal council for dealing with specific issues of the historical centre, with experienced technicians, may help the development and restoration of degraded urban space. As in Guimarães, this attitude will manifest when they start to emerge renovation works which could be the proud of the residents and the Portuguese nation. Incorporating projects that can characterize the historic centre of this city, and that may be a reference to other urban centres.

The review of Municipal Master Plan of Braga aims to help the city to recover from its urban decay. Establishing rules that are applied in defence of their heritage, ensuring the city growth in which the services offered by its urban centre are compatible to contemporary needs, ensuring development with sustainable bases, where "the city should be close to its inhabitants, providing the eye contact, willing to act as the leaven of human activity, the generation and expression of a culture. The pursuit of sustainable development is to create a flexible framework for a strong community within a healthy and clean environment" (Rogers, 2001). Sustainability is the bet for new master plans, with redefinitions of concepts and strategies, where sustainability indicators may be present, serving as guides to sustainable urban planning.

### 5. FINAL CONSIDERATIONS

The concept of urban renovation of historical centres was found to be a difficult and lengthy process, in which the existence of documents such as Venice and Athens Charters as well as the Amsterdam Declaration, help to guide interventions, demonstrating concerns that, should be taken into account. Good results are achieved only when there is a population involvement in this process, which must be led by local authorities. It is verified the importance of a sector or specialized office within the municipalities to deal with the issues relating to its historical centre. Offices composed by qualified architects who understand and value the historical identity of the region, passionate about their culture, with less selfish thoughts, where actions taken are designed to their communities, as Guimarães GTL, serving as reference to other historical cores.

When dealing with renovation of historical city centres, it is necessary to take into account their physical, social and economic characteristics, which can be used in order to aid the development of a renovation plan, in which the sustainable component becomes an urgent concern of the current regeneration plans, as was noted by the concern of the city of Braga. As already discussed, the sustainability of an urban renovation is a process that must meet basic human needs and desires. It was seen that the city of Guimarães had no documented concerns about the sustainability of their renovation, but the set of rules respected by the local office, regarding the management of interventions of its historic centre, came to give such signals, even without the municipality raise the flag.

Therefore it is possible to say that there are no defined rules to achieve a sustainable urban renovation of historic centres. This renovation will depend upon the community that lives there, the values which it defines as major to be safeguarded, and indicators that match the objective of improving the quality of life, in order to ensure the health of its population, security, social equity and conservation their ecosystem.

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