

## Hotel in Lisbon's Structural "Y" Between Human Factors and Gentrification

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**Abstract.** The hotel is one of the main constructs of contemporary landscape, and one of the phenomena that best summarizes some of the contradictions of present society, which is self-defined through two concepts that are interrelated in a dialectical and antagonistic way: Gentrification and Sustainability. The questions which the present work aims at answering are, not only how contemporary architectural hotel design has, in its different scales, been playing a determinant role in the gentrification of the center of Lisbon, but also how principles driven by the human factors/ergonomics discipline are determinant to support development, in an integrated way, namely in the three dimensions of sustainable development economic growth, social inclusion and environmental preservation, in line with the United Nations and European Union commitments towards a better future.

**Keywords:** Hotel in Lisbon · Gentrification · Human factors · Green hotel · Sustainability

## 1 Introduction

Tourism activity is currently regarded as the world's first industry [1] and one of the largest sources of income in Portugal, intensifying mass tourism.

The current situation of hotels in Portugal stands out as a means of responding to growing tourism demands. Its implementation focuses more heavily on the capital city of Lisbon or cities with a similar role. Those are under exponential pressure, without legal frameworks or hotel structures adequate and sufficient to meet the sustainability demands, resulting in an unprecedented density of hotels and short rental residential places. This creates new challenges to urban places and society. The hotel plays an active and sometimes decisive role in relation to other current issues and concerns, namely in the areas of housing, rehabilitation of the heritage, re-qualification of the landscape, intervention in the public space or (re)structuring of urban infrastructure.

The aim of this work is to study the stated dialectic, through the analysis centred in the structural Y of Lisbon, guided by ergonomic principles, based on a phenomenological reading. This approach is influenced by perceptive and cognitive schemes, rooted in the fields/force systems of the Gestalt methodology as applied to architecture.

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Until the actual Pandemic, Lisbon was the fifth European city with the fastest growing number of international visitors, and the one that presented the higher level of growing tourism, with a higher density in the center of its metropolitan area [2].

The territorial structure of Lisbon is very much commanded by the city-center, mainly due to the concentration and agglomeration of tertiary functions, namely tourism, with a great polarizing effect, where the hyper-center created a hyper-periphery and the confined city became the distrusted urban scenario (Fig. 1).

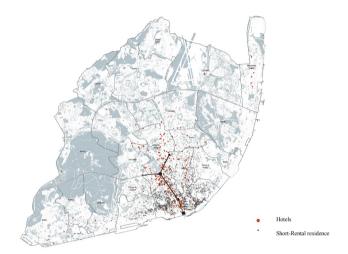


Fig. 1. Metropolitan area of Lisbon: hotels and short rental residences [2]

The structural Y of lisbon is a configuration based on the confluence of three axes on the urban center of Lisbon: Avenida da Liberdade, Avenida Fontes Pereira de Melo and Avenida Joaquim António de Aguiar. It also contemplated the extension of Avenida Da Liberdade, Baixa Pombalina, until Praça do Comércio (Terreiro do Paço) square, the origin of this arterial system, and its antechamber (Fig. 2).

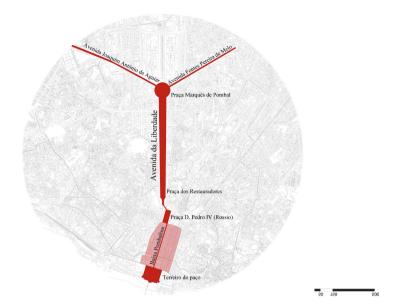


Fig. 2. The structural Y of Lisbon: arterial system

The structural Y of Lisbon crosses the Parishes most affected by tourism activity: Santa Maria Maior, Misericórdia, Santo António and Avenidas Novas:

- Between 2009 and 2016, the number of international visitors staying overnight in the center of Lisbon grew 7.4%.
- From 2013 to 2014, the number of tourists grew by 63.7%, from 1.31 to 2.14 million.
- This accelerate growing did not stop until a year ago due to the conditionings that we are living under. Even though until 2018 the expectation was the implementation of more than 35 hotel units, as well as with the new Cruise Terminal allowing the entry of more than 617 thousand tourists in Lisbon was predicted [2].
- The upward and accelerated growth curve in the last two decades has its origins in different factors, of economic and political nature, such as the so-called "Arab Spring" the new income law, the beginning of "Gold visas", as well the decisions of the Troika and establishment of the various membership programs for foreigners in 2014 (Fig. 3).

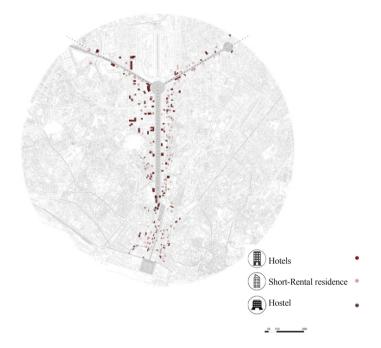


Fig. 3. The structural Y of Lisbon: hotels, hostels, short term rental residences

This arterial system was built in different phases, demonstrating a collective history, their different periods and intentions. The old downtown was destroyed by the earth-quake of 1755 and Baixa Pombalina was built after, establishing a relationship between two squares: Praça do Comércio, (open to the river) to the south and Praça do Rossio to the north that confined to the Passeio Público, in 1780.

From the demolition of the walls that delimitated the Passeio Público, with the intention of expanding the city, the construction of Avenida da Liberdade was initiated in 1879 at the image Haussmaniana city of Paris, extending to the square Marquês de Pombal square. This Avenue, inaugurated in 1885, forks at Avenida Fontes Pereira de Melo and Avenida Joaquim António de Aguiar, which earthworks began in 1897.

Baixa Pombalina is the area where the highest density of hostels and short rental residences is located. If in the initial plan local commerce at the level of the ground floor was contemplated (as the taxonomy of the streets shows) and housing on the top two floors, nowadays these spaces are being appropriated by international service chains and by real estate companies leading to the displacement of the original local population to peripheral areas of the city.

In the Avenues, the construction of five-star hotels predominates, constituting architectural barriers that compromise their first intention of constituting a space, initially a sort of housing where nature and city met.

The few local families that are still settled in this arterial system have the tendency to transform their homes into a business of temporary stays. This transformation has led

to an innappropriate living of the city by local residents with their own identity, thus becoming a product of ephemeral and temporary consumption, like a globalized stage.

The transformations in the landscape - both cause and consequence of dominant or emerging ways of hotels, initially used as one of the main strategic axes for development, as an opportunity to enrich social, productive, architectural, urban and landscape fabrics that do not have the means to achieve it - paradoxically contributed to the exhaustion and impoverishment of natural, social and urban systems. The mono-cultivation of different typologies of hotels overlaps the existing structures, making buildings and pre-existences redundant, promoting the progressive gentrification, or thematization of the city that annuls its specificity (intrinsic values) as the destination of choice.

"Gentrification" - an expression initially used by Ruth Glass in 1964 and consolidated by Neil Smith in "The new urban frontiers: gentrification and the revanchista city" - is a process associated with economic and social changes. It reflects the appreciation of real estate, namely through tourism, with impacts on heritage, social segregation and the unsustainability of the lives of people with less economic power who reside there. The average values practiced in areas with greater tourist density reveal an immense effort for daily and occasional mobility. Exemplary of this is the central core of Lisbon, which has become a permanent congestion that fills and empties every day.

The experience of the city, in spite of the historical varieties, new spatiality and temporality associated with the conception of postmodern hyperspace, continues to establish its syntactic structure in tissue that weaves semantics between the built, and what is to be built and integrated. However, it is still perceived by citizens and tourists as the nucleus of the genetic code that being here and now, where the being situates him/herself, organizes their immediate surroundings based on their perceptions, cognitively identifies their position in the external world capable to be mapped, in which body and built environment are able to stand as a symbol and "analogue" [3].

According to T. Barata Salgueiro, and P. Guimarães, in Lisbon the implementation of hotels has been essentially associated with economic factors, in an accelerated post-liberal logic, leading to progressive gentrification, the right to "polis" to a large number of inhabitants and increasing several conflicts, namely "cancellation of local characteristics versus global machine that standardizes the locus at the service of the market".

In order to avoid the increase of multiple phenomena of gentrification principles concerning the Human Factors/Ergonomics [4] discipline has been well addressed by various authors. It depicts an iterative process for hotel design activities such as users' involvement, their variability and diversity consideration in the different phases and cycles of the project and building, from project to post occupancy analysis and optimization.

The human-centred hotel building design methodology presents how a holistic approach of ergonomics is determined for a sustainable development, in order to assure corporate social responsibility based on global and local value creation.

We conceived a diagram using as a reference the study developed by Buthayna Eilouti, that illustrate how Environment, Building and the Human are taken in consideration in extended ergonomics. The referred diagram has the purpose of summarizing some principles that could meet both present and future needs of the Hotel typology, in accordance to our case study on the Structural Y in Lisbon, without distressing the ecosystem and the environment (Fig. 4).

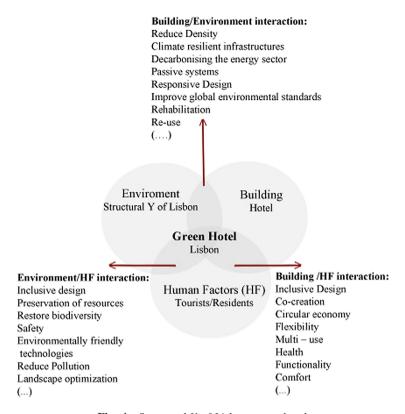


Fig. 4. Structural Y of Lisbon: green hotel

Through this approach we hope to contribute to what we denominate as the Green Hotel, which could be the basis for a new paradigm of this typology with the aim of achieving a more sustainable global and local development that could work as a trigger to face the uncertain future.

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## References

- 1. UNWTO, World Tourism Organisation, October 2018
- 2. According to statistics Portugal disseminates, INE, Instituto Nacional de Estátistica (2018)
- Analogue, from ancient Greek is taken as analogous and According to Sartre, an equivalent of perception (such as a painting or a mental image) that is necessary for the process of imagination to take place
- 4. According to the International Ergonomics Association (IEA), Ergonomics is "the scientific discipline concerned with the understanding of interactions among humans and other elements of a system, and the profession that applies theory, principles, data and methods to Design in order to optimize well-being and overall system performance"