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The Future of Post-Industrial Landscapes in East Lisbon: The Braço de Prata Neighbourhood

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Abstract: East Lisbon is being exposed to large-scale urban regeneration processes, where luxury residential projects and mixed-use spatial developments are already underway. Thus, it is a living laboratory for “smart”, “creative” and “green” projects, as well as related urban public space interventions. Braço de Prata is an urban space overlooked by developers, being surrounded by obsolete industrial buildings. Concerning the recent interest in international investments in brownfield regeneration and greenfield developments, it represents an attractive urban terrain as a post-industrial working-class neighbourhood, where “smart” and “green” suggest transforming space so that both new and old residents can live and work together and share public space regardless of analysis on their environmental recognitions. The aim of this paper is to present an empirical evaluation model that examines the possible impacts of environmental negligence through the reorganisation of the physical and social fabric. The analyses focus on dwellers’ moral understanding of their changing environment as site-specific domains to address the unique conditions that affect transiently defined presumptions about the collective needs. Taking an evaluative approach in the Braço de Prata case, this paper demonstrates the specific socio-ecological implications of urban inequality in post-industrial neighbourhoods that could be threatened by new decisions, both through urban planning approaches and instruments.

Keywords: Lisbon; smart city; brownfield; participatory environmentalism; gentrification; regeneration



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1. Introduction: On Possible Futures of Urban Outsiders and Environmental Justice

Environmental change in post-industrial cities is mainly caused by human activity and is related to spatial developments. The urban environment is depicted in diverse epistemological forms. In both forms, regarding recent urban developments, inclusiveness and socio-ecological unity are common concerns with respect to the resilience of the urban environment. Despite being mentioned in many academic studies, reported on by international organisations and framed by international conventions, economic contingency is still prioritised over socio-ecological unity in some urban regeneration projects as the main reflection of neoliberal developments. Partly, large-scale projects are justified through conceptions such as “green”, “smart” and “creative”, which can be specious in terms of environmental inclusivity. The main hypothesis of this paper is that the urban regeneration process, more specifically of brownfields, following the long-term negligence of a stigmatised post-industrial neighbourhood, can be considered a potential cause for the destruction of socio-ecological unity depending on the loss of socio-spatial commons.

The environmental unity of cities is widely disrupted by large-scale urban developments that are especially concentrated in previously neglected historic neighbourhoods around brownfields. This phenomenon has led to the view that such developments are having a “corrosive” effect on the lives and daily practices of these neighbourhoods’ inhabitants. While certain urban operations are justified through recent stigmatisations, the

negligence experienced by the inhabitants led them to consent to proposals that are not in their best interest. For this study, the projects in the urban agendas in the case of the Braço de Prata neighbourhood in East Lisbon have been problematised (Figure 1). The case comes forward as the terrain of large-scale brownfield regenerations in Lisbon. It is one of the most dramatically transforming urban spaces characterised by its green, then industrial past in Lisbon, and one wherein the impacts of transformation are thought to be relatively insignificant. Thus, Braço de Prata as an East Lisbon post-industrial neighbourhood represents a fragile urban space for examining the impacts of international developments through spatially visible evidence of spatial fragmentation in relation to socio-ecological stigmatisation.

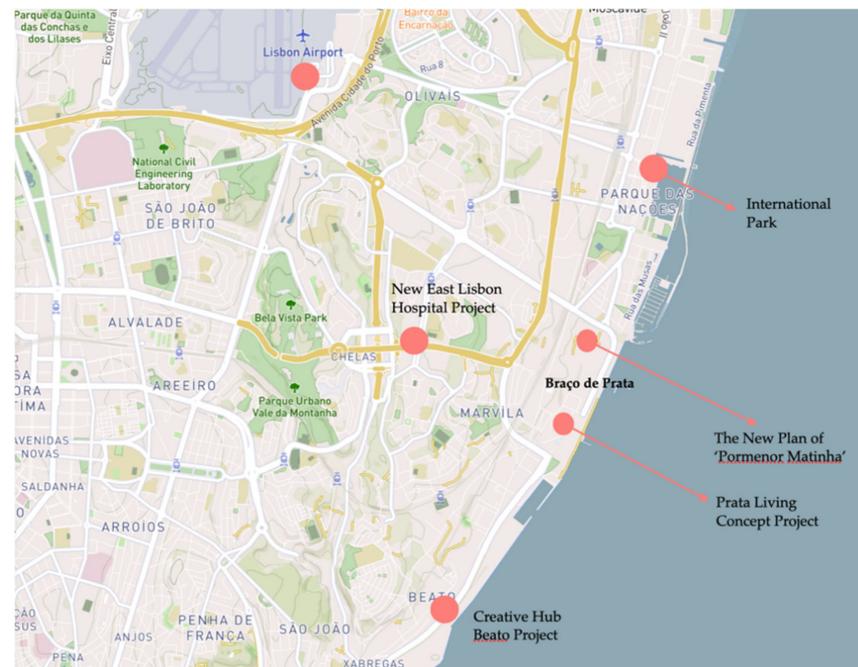
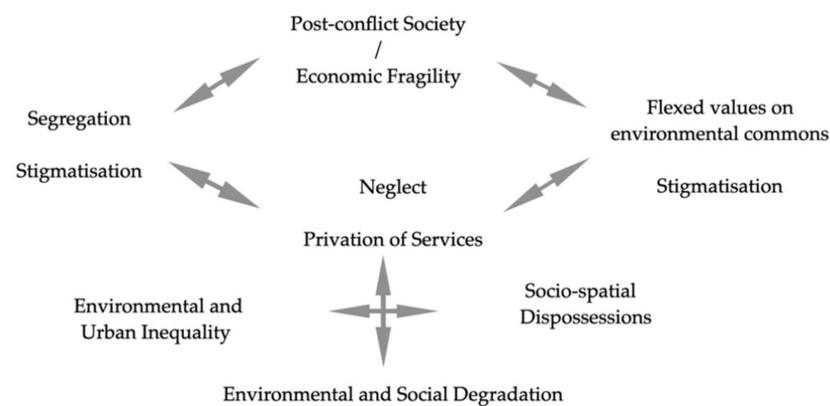


Figure 1. The locations of projects and the impact area of Braço de Prata in Lisbon (by the authors).

Since a socio-spatial sense of belonging is considered a fundamental motivation for humans to protect their environment from an anthropogenic view, it also becomes essential to discuss possible disruptions of collective moral understanding of the environment through socio-spatial transformations due to disingenuous use of the concepts of “smart” and “green” in regeneration projects. In the context defined above, the collective re/deconstruction of environmental commons is directly related to the adaptability of spatial changes. This brings the case forward as a unique urban space for international debates to remember the taxonomic relation of urban policies, architecture, environmental mitigation and development of social and ecological concerns, more specifically in post-industrial zones of cities. The historic overview presented in the second subtitle of this paper intends to overcome analogies that simulate favoured concepts in urban spaces which have unique dynamics (Scheme 1), considering that each urban form is dialectically the reflection of its own social, economic, political and natural dynamics [1] (pp. 60–62), [2]. The selection of the case was clarified following the literature review and intense archival research on Lisbon’s urban development process, whereas the research maintained the documentation of the socio-spatial evidence of environmental and social stigmatization as well as the filtration of neoliberal concepts by professionals. Following the literature review on the urban development of Lisbon, the case was selected for the purpose of filling the gap in academic knowledge production on such a disregarded urban space based on pre-acceptances on post-industrial neighbourhoods (Figure 2).



Scheme 1. The taxonomy indicating relationality of pre-assumptions of the enquiry.



Figure 2. The aerial photography showing the industrial and residential development in Braço de Prata, dated 15 April 1950 [3].

Environmental meanings of urban places can be amplified when the adaptability and inclusivity of favoured solutions are brought up in consideration of the environmental values embedded in collective memory. Therefore, the qualitative analyses become crucial to bring these concerns in the discussions that would mediate intersectional evaluations with newly assembled analysing models. This study, which introduces an analytical approach, proposes its main subject matter, selection of the case and context of analysis on the relationality of its pre-assumptions (Scheme 1) in order to propose new analytical sub-contexts for future discussions through synthesised theories in relation to the defined context whereby the infiltrated neoliberal solutions can be problematised wheresoever embedded in smart and green concepts.

The main context is specified within the study's dialectical approach and refers to related urban dynamics such as changes in policies, behavioural tendencies, environmental inequality and reterritorialisation through "smart" developments. Taking these into consideration is essential as long as the ecological landscape is interrelated with the socio-cultural landscape. The subject mainly implicates environmental sociology, environmental psychology, conservation theories and practices and environmental and urban rights and norms.

2. Methodology, Main Concepts and Aims

This enquiry followed an empirical methodology based on a qualitative analysis and a phenomenological approach to address the urban problems facing one of the main

post-industrial zones of Lisbon. Most recently, the urban problems concerning the transformation process in the post-industrial zones of East Lisbon triggered by the 1998 World's Fair were discussed intensely in *Jornal Arquitectos* [4–7]. Albeit this interest, there is a limited knowledge production on the socio-ecological aspects of such urban transformation processes. Taking this in consideration, in this enquiry, the methodological concept of “evolutionary epistemology” by Piaget [8] was adapted to the scientific approach, reconsidering the cognitive impacts of social and psychological dynamics in relation to the identification of spatial continuity with changing policies. Based on this assembled approach, in analyses, the historiographical extraction of urban policies is used along with the essential literature from implied disciplines in order to frame a cross-disciplinary approach in the context of environmental justice. The theoretical implications become definitive through synthesised theories which were interpreted through the information collected from the archives as well as the research findings that indicate accessibility of environmental reports. The neighbourhood corresponds to a dramatically segregated post-industrial working-class urban unit, where the behavioural aspects of environmental change can be tracked with these implications by identifying the parameters for specifying the environmental risks and potentialities of socio-spatial changes around brownfields.

The relationality of urban inequality, environmental justice and social alienation was underlined mainly by theorists within a certain class consciousness. In the theoretical grounding of this inquiry, these theories were synthesised in order to define the main considerations as well as to specify urban problems related to these considerations. Being interrogated by the theorists Harvey [9], Smith [10] and Lefebvre [11], whose works mainly focused on Marxist interpretations of urban inequality, the issue of inequality and discrimination in urban life has more recently been revisited in the context of social as well as environmental justice. In this way, the concept of “The Just City”—which was proposed by Fainstein [12] and interrogated by Harvey [9]—becomes central to discussions of “spatial justice”. The reproduction of nature and the environmental aspects of socio-spatial discrimination through spatial planning have been more widely taken up in cross-disciplinary studies merging environmental sciences with social sciences. Through these main concepts and the approach defined above, it might be said that urban equality, decolonisation and environmental justice are interrelated and, thus, are redefined in the discourses that are used to identify the urban environment. According to post-colonial critical studies, the recolonising impact of transformative global capital circulates around economically and socially fragile geographies. In this sub-context, Jacobs [13] pays attention to recent realignments in the power structures that affect urbanisation processes, which in turn have influenced the meanings of culture and spatiality. Much earlier, Fanon's [14,15] critiques of the white “corporate imperialist” structures of capitalism brought the psychological elements of discrimination to attention. In addition, the term *glocalisation* is frequently used by many theorists in the interpretation of changes resulting from the digitalisation of labour, which normalises the newly privileged concept of “digital nomads” as a new form of transnational urbanite showing itself in Lisbon as well. The spatial tendencies of newer lifestyles can be associated with the mixed-use phenomenon in architecture, as the environmental degradation associated with brand new consumerist behaviours can also be reconsidered in spatial studies. The fast emergence and spatial tendencies of such new lifestyles as new social entities expand the meaning of the urban actor and environmental networks in cities.

Digital instruments developed since the 1980s have paved the way for “smart” urbanism. Despite rapid developments in the uses of digital information and analysis systems, the spatial problems of the new millennium had already been predicted through the neoliberal motives that permeate the savvy solutions in smart projects. However, technological improvements—resulting in techno-centric approaches—have been partly responsible for the growing dependency on financing structures. On the other side, environmental data that have been open-sourced through geographic information system (GIS) applications and new data-tracking tools improved environmental information processing as well as

monitoring capacity of urban and environmental management but merged with qualitative facts in limited environments. In addition to these, ecologically concerned frames are supported and conducted with increasing interest despite the commodification of socio-ecological values, which has resulted from financing structures being provided through international carbon trading frames. In the review on International Rules for Greenhouse Gas Emissions Trading, it is stated that [16], “The Kyoto Protocol also accepts the concept of emissions trading under article 17, under which one Annex B country will be allowed to purchase the rights to emit greenhouse gases from other Annex B countries that are able to cut greenhouse gas emissions below their assigned amounts”. The same report also expresses that, “The market-based emissions trading approach can only achieve significant cost reductions in cutting greenhouse gas emissions while also allowing flexibility for reaching compliance if it is structured effectively. This study aims to facilitate the design of an international emissions trading scheme that is both workable for the Parties eligible for emissions trading and acceptable to all the Parties to the Protocol”. On the other side, as stated in UNFCCC reports [17], “Emissions trading, as set out in Article 17 of the Kyoto Protocol, allows countries that have emission units to spare – emissions permitted them but not ‘used’—to sell this excess capacity to countries that are over their targets. Thus, a new commodity was created in the form of emission reductions or removals. Since carbon dioxide is the principal greenhouse gas, people speak simply of trading in carbon. Carbon is now tracked and traded like any other commodity. This is known as the ‘carbon market’”. Nevertheless, in discussions among academic circles and urban grassroots, planetary problems and social inequalities are becoming more deeply interrelated in concepts such as “human ecology” and “political ecology” whereby cities are discussed mainly by social scientists or in comparative studies.

Predictions about the future of urban precariousness will likely be affected more by the socio-spatial consequences of environmental deterioration, as indicated in many reports and studies by international organisations (the Food and Agriculture Organization of the United Nations (FAO); UN-Water), more intensely by theorists and academics in the field of environmental sociology [18–21]. In these studies, Low and Gleeson [18] examine the role of policies in the development of societies’ moral concerns on ecological issues, whereas Nixon [19] relates environmental justice to social and cultural inequalities. Yearley [20] and Cudworth [21] make a contribution to environmental sociology in the context of collective responses. These theories can be adopted in urban studies for questioning to what extent the uses of smart and green concepts are sustainable and pave the way for smart solutions based on inclusive environmental impact assessment frames.

Based on the context, theoretical frame and the problems defined above, the aims of this study become more definitive in relation to urban democratisation and social cohesion discourses whereby possible underrepresentations in socio-spatial developments are aimed to be revealed through spatial fragmentations as evidence of environmental discrimination. From this approach, the differences in meaning of socio-ecological unity, and how urban actors interpret these meanings, can be discussed in future evaluation models.

In the conclusion of this study, and through the methodology outlined above, the pre-assumed taxonomy of causes and consequences (Scheme 1) will be presented according to the accessed information. It is found to be essential that the socio-spatial concerns of underrepresented groups are evaluated on the mainstream agenda intersected with the environmental concerns. The dialectic of social and environmental fragmentation defines the main frame of this paper as well as the literature on urban and environmental inequality to be revisited whereby the role of social sciences is highlighted for the filtration of favoured spatial concepts and their impact on the meaning of urban environment in evaluation frames.

3. The Changes in Urban Policies Concentrated in East Lisbon and Their Relationality with Socio-Spatial Fragmentations

It can be claimed that cities are being exposed to faster changes through migration, the digitalisation of knowledge and services and transnational financial flux and convergences

since the beginning of the new millennium. Lisbon has its own unique urban conditions and political dynamics which redefine its openness to these global developments. It becomes essential to consider the historical development of the city contextually related to urban changes in East Lisbon to specify the social and physical conditions of openness to global developments as well as to reconsider the social ecology of each city by avoiding analogies.

Lisbon's popularity has exploded worldwide in the last decade. Portugal's accession to the EU in 1986 and the tax exemption offered to permanent residents and "non-habitual" professional residents since 2009 have stimulated individual investments. The Golden Visa regulation, which was launched in 2012, has increased migration to and transnational investment in Lisbon. Meanwhile, the decolonisation process that started with the Carnation Revolution in 1974 had already brought immigrants from the former colonies, and these partly integrated immigrants became more precarious with each new development. Presently, Lisbon, as the capital of Portugal, has become an attractive city for international tourism, and this has triggered urban sprawl. The city's sprawl towards the northeast had already started with the 1902 Royal Decree, as the Tagus riverside has been defined as an industrial zone with gun factories. Consumption-based fluxes such as real estate investments, new inhabitants, visitors, global trends and developers are redefining the urban culture of the city. (Table 1) These developments have changed the nature of life and the environmental memory—especially in East Lisbon—beginning with the *Feira Internacional de Lisboa*, the International Exposition since the late 1990s that has included projects in the Beato, Olivais and Chelas areas previously characterised by vineyards and olive tree fields, as seen in old photos (Figure 2).

Table 1. Timeline table indicating the chronological facts and events of Lisbon's urban development. (by authors)

Timeline	Development	Implication
II Century C.E.	Roman settlement.	Urban development.
XIII Century C.E.	Lisbon became the capital of the Portuguese Kingdom.	
1425	Population of nearly 65,000 inhabitants distributed in 23 parishes [22].	
1597	The Grand Earthquake.	Early plans.
1713–1718	New Plan of the City, by Manuel de Maia.	
1755	An earthquake destroys the main part of the city centre, and the subsequent fire destroyed the historic neighbourhoods in hilly areas. Alfama and Mouraria, the historic neighbourhoods that reflect the Moorish past in central Lisbon, were less affected [22].	
1807	Lisbon Plan, by Fava D.J.: Benfica, Carriche, Ameixoeira, Quinta do Cabeço, Moscavide, Braço de Prata, Azinhaga da Veigas, Marvila, Xabregas exist in the plans as indicated by França [23].	Braço de Prata exists in Lisbon plans.
1821	Foundation of the Bank of Lisbon [22].	Economic and urban growth.
1845	Population: 182,000 inhabitants [22].	Population decline.
1851	Regeneration Programme with economic and urban targets.	Regeneration program.
1876	The first idea for the bridge over the Tagus River developed by the engineer Miguel Pais.	
1878	Population: 227,000 inhabitants [22].	Population recovered.
1880–1900	Construction of new roads, tunnels, recreational spaces, urban spaces. Creation of the Chamber of Architects in Portugal.	Railway connection in East Lisbon.
1900	Opening of grand avenues, <i>transportes eléctricos da Carris</i> as the first tramway lines [22,23].	
1902	Royal Decree to build gun factories in Marvila District, where Fabrica Braço de Prata was built.	Braço de Prata was defined as an industrial zone.
1910	The Republican Period accompanied the October 5th Revolution as a coup d'état; the population was 484,000 inhabitants.	End of monarchy, start of republican era.

Table 1. Cont.

Timeline	Development	Implication
1911	Plan for Lisbon extensions (Figures 3 and 4).	Braço de Prata was defined as an industrial and residential zone.
1926	May 28th, coup d'état to impose a dictatorial regime that would last until the 25th April 1974 Revolution.	
1933	The new constitution of Portugal (the <i>Estado Novo</i> regime brought a corporative and authoritarian state with fascist resemblances).	Conservative and corporatist policies.
1942	Opening of Lisbon's Portela Airport.	City's new gate to other cities.
1947	Portugal is included in the Marshall Plan.	The expansion of production lines of the military factory of Braço de Prata.
1962	Revision of the Urban Plan (beginning of the construction of the Salazar Bridge until 1974, which was later renamed the 25th April Bridge after the revolution).	Connection with the south.
1974	April 25th, the Carnation Revolution and the start of decolonisation.	The start of migration from the ex-colonies.
1976	New Portuguese Constitution is considered one of the early provisions (Article 66) in Europe that is related to environmental protection (Aragão [24] notes that the promulgation of titles related to environmental protection and quality of life within Article 66 reflects "the euphoric spirit of experiencing freedom for the first time in forty years".) [24,25]	Definitions of environmental protection.
1980	Construction of the Central Mosque of Lisbon started and completed in 1985.	Urban diversity.
1986	Membership in the European Union.	Integration into European regulations.
1990	Prof. Manuel Leal da Costa Lobo is elected as Ombudsman for Environment and Quality of Urban Life in Lisbon, and later reelected in 1994 and was also the founder of Centro de Sistemas Urbanos e Regionais do Instituto Superior Técnico.	Participative planning approach.
1992	Approval for the World EXPO 98 to be organised in Lisbon [26].	Urban development towards the east.
1994	Lisbon is named European Capital of Culture.	Urban rehabilitation projects.
1995	Construction of the new Vasco de Gama bridge and new projects in East Lisbon, construction of the Parque das Nações as the site of the Lisbon World EXPO 98 [26].	
1998	EXPO, opening of Gare do Oriente (East Lisbon Station Complex), designed by the Spanish engineer and designer Santiago Calatrava. It includes the red metro line, which connects the other lines to East Lisbon and then to the airport. Gun factory in Braço de Prata was closed.	Gradual abandonment of industry in Braço de Prata.
2007	<i>Programa Operacional Regional de Lisboa</i> 2020 initiates the "Smart City" concept for Lisbon; 2020 is first declared as the target [27].	Urban developments start to be adopted with "smart" concepts.
2009	Tax exemption scheme for non-habitual permanent residents of Portugal.	International investment flow.
2011	European Troika Programme (EC European Commission, ECB European Central Bank, IMF International Monetary Fund) enacts economic measures applied to Portugal due to economic recession. The population of Lisbon continues to decline. The city presently has nearly 545,000 inhabitants.	The city dwellers become economically vulnerable.
2011	Bairros e Zonas de Intervenção Prioritária (BIP/ZIP)—Neighborhoods and Zones of Priority Intervention of Lisbon Program.	Affordable housing crisis.
2012	Golden Visa Regulation; the Urban Lease Law; New Master Plan for Lisbon is approved (PDML 2012–2022). Portuguese Environment Agency (APA)'s duties were defined in decree No: 56/2012.	Legal frames on environmental impact assessment.

Table 1. Cont.

Timeline	Development	Implication
2016	The Environmental Impact Assessment Directive Session is held in Lisbon on 24th June; the report suggests monitoring of implementation with regard to the Strategic EIA Scheme (Directive 2001/42/EC) [28].	
2017	Municipal elections: the New Cruise Terminal, an extension of Lisbon Port, is opened, increasing the tourism capacity of the city.	Lisbon becomes a popular touristic destination.
2019	January, the second airport of Lisbon is approved to be in Montijo on the ecological reserves of the city.	
2020	Lisbon becomes European Green Capital as the winner of the European Commission's award programme; Portugal Smart Cities Summit is rescheduled to be in Parque das Nações in Lisbon [29].	



Figure 3. The 1911 Lisbon plan: Beato. Braço de Prata can be seen as an industrial zone with few residential units towards the railway and urban farms in the northwest towards Chelas. Archival map obtained from Gabinete de Estudos Orlisiponenses, Lisbon.



Figure 4. The 1911 Lisbon plan: Archival map obtained from Gabinete de Estudos Orlisiponenses, Lisbon.

The chronological events given above show that Lisbon has caught up to find a place amongst the most ambitiously changing urban environments since the country opened up to global development after its period of imposed social isolation by the Estado Novo Regime. After the Carnation Revolution, the economy of its young democracy had been fragile much earlier than the global recession in 2007–2008, as proven by the imposed Troika measures that started in 2011. The rise of global urban trends could be observed in Lisbon, along with Porto, as consequences of financial capital accumulation concerning their potential urban spaces as well as cultural openness to new developments. In terms of responses to the above given environmental changes, a study [23] about the

environmental movements in Portugal shows that, “no group activity was recorded until the end of World War II. In 1948, Liga para a Proteção da Natureza (LPN) was created. The undemocratic Estado Novo regime deeply affected the development of civic society. In 1984–85, environmental NGOs organised their meetings in Caldas da Rainha and Troia”.

It may be said that the Municipality of Lisbon is globally one of the most entrepreneurial metropolitan administrative units, adapting the uses of new and smart concepts to present the openness of the city to futuristic developments. An open access urban data portal has been initiated and open-sourced by professionals from related fields, in collaboration with academia. Open Lisbon/Lisboa Aberta (an open access municipal online platform that provides an open-source urban information system and aims to make urban data accessible and transparent for everyone [30]) and Fablab Lisbon can be regarded as evidence for the city’s dynamism and ambition to become a European Smart Capital. The Shops with Stories/Lojas com História [31] Programme was created in 2015 in order to sustain historic shops and workshops as tangible and intangible heritage elements of recent commercial and artisan activities. Yet, on the other hand, the municipality’s department of culture (DMC) was declared as one of the partners of the European Commission-supported ROCK Project which was defined as a participatory social regeneration process based in central-east Lisbon, mainly the Marvila District where the Braço de Prata neighbourhood is located. The contribution as well as the alignment of the Municipality of Lisbon to the defined targets of the ROCK Project are defined with participatory cultural programmes. However, the recent ambition of the municipality towards a smart city was also expressed as the partner institution [32]: “Lisbon has also been developing a wide range of smart services that justified the ranking of n° 1 in the 2013 Portuguese Smart City Index. Smart systems/projects owned, coordinated or co-coordinated by CML include: SmartLx, Public Participatory Budget Programme, StartUp Lisboa, CitySDK, MyNeighbourhood, Open-DataLx, Public Lighting Telemangement, IP Led traffic lights, Energy Remote Manager (buildings), Euro 1 and Euro 2 Low Emission Zones—ZER (monitorisation still to be smarted), EVs public recharging infrastructure (540 electric recharging points) and EVs green parking permit”. Despite all these programmes, presently, international investments and tourism are redefining the urban culture of the city, promoting an intense gentrification process and resulting in relegation of old residents to the periphery or other cities.

Regarding the environmental interventions on collectively used urban spaces, the city council has developed diverse programmes, mainly concentrated in the historic centre, such as the integration of “green” transport and the support of public events. On the other hand, projects like the Martim Moniz escalator towards the Mouraria neighbourhood, the Mouraria Creative Hub under the “Made of Lisboa” programme and interventions at Intendente Square, affected the most fragile neighbourhoods of the historic centre with gentrification waves, where the multi-ethnic population can no longer afford rent. “Made of Lisboa is an entrepreneur community that makes your start-up business ideas and ambitions feel at home”. Although the programme declares the above quoted [33] aim of nurturing an innovative population in Lisbon, the transformative impacts of such projects have been disregarded. These initiatives were followed by the occupation of industrial buildings with numerous “smart” start-ups, co-working spaces and a large-scale creative hub project in Beato in the vicinity of Braço de Prata. The current concentration of these sophisticated collective spaces in Lisbon reflects the need for authenticity, the societal capacity for diversity and tolerance of foreigners among European cities so that the transnational upper/middle class can contribute to the remaking of the new urban “spirit” *ethos* [34].

In historic neighbourhoods, “ethnic” and “spatial” values are gradually commodified through relatively maintained authenticity based on diversity. In this context, a process of urban *trendification* can be in question in spatial studies, in the context of the inclusivity of these reappropriations. However, in particular cases, there is a potential to nurture the integration of new middle-class “marginals” with pre-existing marginalised people of colour and the urban poor, thus environmental integration is maintained through

social interactions. Mendes [35] (p. 141), interprets the increased demand for the historic central neighbourhoods as a partly “emancipatory practice”, whereas the “hegemonic discourse of the Creative City” is altered by the idea of maintaining the diversity of the inner city against new conventional concepts and norms such as the “creative city”. He reiterates Rose’s [36], definition of “marginal gentrification” and adds: “State interventions designed to enhance the creative city unleash contradictory mechanisms of expulsion and reappropriation. The new urban policies represent a major orientation towards the market and consumers, to the detriment of the less privileged classes”. In a different urban context, this form of gentrification triggers struggles between the “new marginal” and the “pre-existing marginal”, and in some, the collective resistance mediates interaction and partly overcomes xenophobia, as in the experience of Berlin’s Kreuzberg [37]. Protection of the right to adequate housing in a healthy environment depends not only on legal national frames but on certain characteristics and reactionary dynamics that occur in time and space relations, as Piaget [8] brought to attention and reconsidered in this enquiry. Besides, the majority of interventions through “smart”, “creative” and “green” discourses are focused on the staged stimulation of tourism and international investments. Thus, “sustainability” becomes dependent on the flux of tourists, and subsequently on financial capital providers. Bookchin’s [38] concept of “social ecology” directly relates to urban deterioration, with the alienated post-industrial urban self, bereft of its own ecological system. From this critical standpoint, urban sprawl triggers the convergence of suppressive and pragmatic practices. As Yearley expressed, the erosion or degeneration of collective values occurs wheresoever the “psychological resources” as well as the social resources to stand against environmental deterioration are lost [20] (p. 116).

According to Douglas and Isherwood’s [39] anthropological evaluation, the impetus of such re-aestheticisation or appropriation processes based on individual reputations may have psychological and cultural rather than social explanations within the new consumerist culture. In this way, they bring attention to the possibility of subversion and recommodification in capitalist societies. Social theories on the environment focus on the relation between the collective values and the transformation of the environment. The theories on the emergence of a new consumerist fashion system in urban life are primarily conceptualised by Simmel [40] (pp. 324–339). Based on Simmel’s theory of fashion, Chaney [41] (pp. 137–152) explains the capacity of urban life for the production of symbolic capital through fashionable conceptions and their impacts on social sensitivities. With the context provided by these conceptions, the rhetorical or pseudo uses of “smart” and “green” could be examined more intensely by architectural and urban theorists and practitioners regarding the implied social theories on environmental changes. In these theories, Macnaghten and Urry [42], Cudworth [21] and Nixon [19] concentrated on the social aspects of environmental inequality. Similarly, the behavioural aspects of environmental psychology discussed by Crinson and Tyrer [43] (pp. 49–75) and much earlier by Ittelson [44] (pp. 193–213), became applicable to analyse the pathological and behavioural impacts of environmental changes such as noise, pollution, lighting, humidity, stress and shock on flexing tolerances. In both studies, degradation of the environment is considered a cause for the degeneration of concerns followed by the possible destruction of social unity and moral values to protect nature and the environment. Through these theories, social alienation caused by dramatic changes in the built and natural environment, destruction of the socio-spatial commons of the dwellers and ethical concerns for the protection of their neighbourhood and cities can be analysed in a context wherein the changes in urban policies can be regarded as major causes for the destruction of socio-ecological unity. In this context Hannigan [45] (pp. 178–186) exemplifies the possibility of social conflicts and disputes among city dwellers through changes in property values due to urban decisions.

In the context of extensions in the urban policies of Lisbon, the 3R Plan initiated in 2012—which enables refurbishment and regeneration processes—marks an important change. However, the municipal practice has not followed the principles in urban management, mainly due to the pressure of the tourism boom and the resultant explosion of prices

in the real estate market. The masterplan was clarified through abandoned properties in the city centre caused by Lisbon's population shift to the suburbs, which started at the beginning of the 1980s, as indicated in Tulumelo and Allegretti's study [46]. The plan was followed by several refurbishment and regeneration programmes, such as "Bairros e Zonas de Inervação Prioritária" (BIP/ZIP) and the Municipal Housing Programme. Those policies were mainly put into practice in the peripheral neighbourhoods where low-income or socially disadvantaged groups live. On the other side, as underlined by Costa Lobo and Craveiro [47], the "city of neighbourhoods" culture co-funded neighbourhood requalifications, referring to 3R: *Recria, Rehabita, Recriph* and integrative and environmental future solutions that were put among the essentials of Lisbon's Strategic Visions for 2012 [48]. In the same report [48], one of the challenges to create a green ecological corridor for the city was an investment in a golf course and luxurious housing projects back in the mid-1980s, which were reconsidered in 2012 as strategic visions for ecological barriers and the future of the solid waste management of the city. However, this coincided with changes related to the government's economic policies to overcome the Troika measures, the international dynamics that have changed tourists' tendencies, as well as the augmented investment capacity. Consequently, the planned smart future for Lisbon was replaced with the one that speeds up *touristification* and risk the city's environmental and social unity. A study titled "Sounds of Tourism" coordinated by Fuarros [49] focused on the changing sound ecology of Lisbon due to noise pollution caused by self-defined "over-touristification".

Due to a rapid increase in real estate prices—both rentals and new acquisitions—and economic conditions due to the Troika measures, the pre-existing dwellers of the city became more vulnerable [50] with the increased cost of living, which led to an increase in homelessness (Figure 5).

In historic neighbourhoods, due to the tourist invasion, the typical Lisbon apartments were appropriated for touristic uses, and this led to a spread of *façadism* alongside adaptive restorations. Moreover, forced evictions have become visible in the news, with a specific example being the Santos Lima Building in Marvila, which is in the impact area of the projects concentrated in Braço de Prata. Recent international and local news highlight the impacts of Lisbon's increased popularity for tourists and investments [51,52]. Yet, related disintegrations or inequality cannot be observed in the case of Braço de Prata, where possible accessibility issues for newly defined services in the projects are not present.

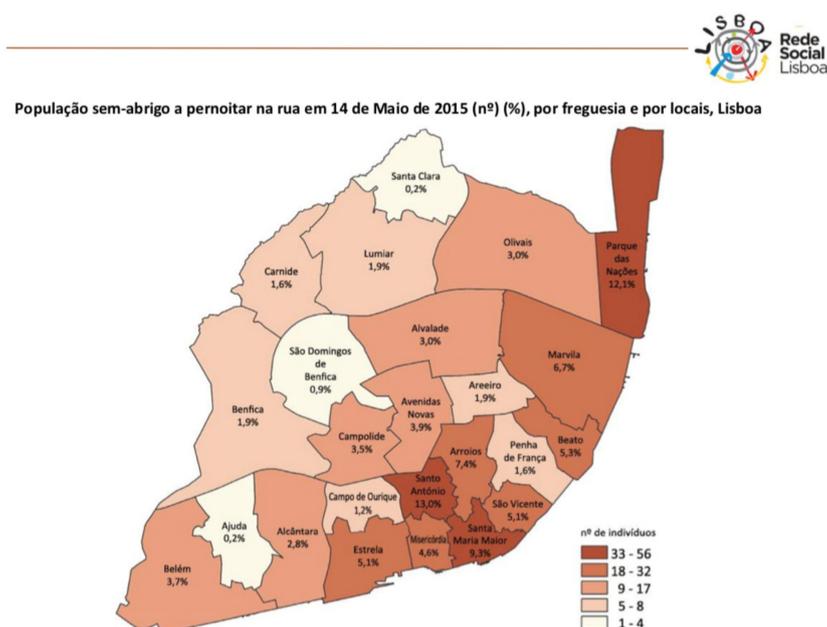


Figure 5. The map shows the homeless population increasing in Marvila—those who spent the night of 14 May 2015 on the street in Lisbon [53].

Within the defined frame that has become definitive through the abovementioned changes in urban and environmental policies, Lisbon is considered more open to global developments following the post-isolation conditions since the Carnation Revolution. Portugal's membership in the European Union not only sped up the process of renewing the policies with new definitions and regulations, but it also made the capital city more attractive for international investors. In addition, the Troika measures that were imposed from 2011 on made Portugal's economy more fragile and caused frailties and flexibilities in urban decisions. Among many historic neighbourhoods facing a tourism and real estate boom following the tax exemptions and certain regeneration programs such as the Golden Visa Program, most specifically, these developments took a toll on East Lisbon, with an increased interest in brownfield developments since the city proved its interest for international entitlements by becoming European Capital of Culture in 1994 and later placing EXPO 98 in this part of the city.

4. The Case of Braço de Prata

4.1. A Segregated Neighbourhood

In Lisbon, Braço de Prata, as an East Lisbon neighbourhood—previously a disregarded neighbourhood in Marvila District—is presently the site of many urban projects. The residential settlement is bordered by the railway, which limits mobility and relations with the rest of Marvila, Infante Dom Henrique Avenue to the south and the old gas factory to the north. The neighbourhood is bordered by the railway on the southeast side of the Marvila District, where the social housing blocks which were built in the 1980s and 1990s are isolated and suffer limited pedestrian access towards the riverfront, and likewise the pre-existing residential units in Braço de Prata (Figure 6). A brownfield development is also underway in Plano de Pormenor da Matinha (PPM) on the field of the inactive old gas factory, as well as the Prata Living Concept residential and mixed-use development near the Tagus River in the southeast (Figure 7). The abandoned buildings around the train station portray a physically segregated image of the neighbourhood, where stigmatisation of this urban space becomes spatially evident and underestimation of its dwellers in pre-acceptance of Lisbon's urban actors.



Figure 6. The 1955 cadastral map shows the residential units in Braço de Prata along the railway among industrial buildings. Archival map obtained from Gabinete de Estudos Orlisiponenses, Lisbon.

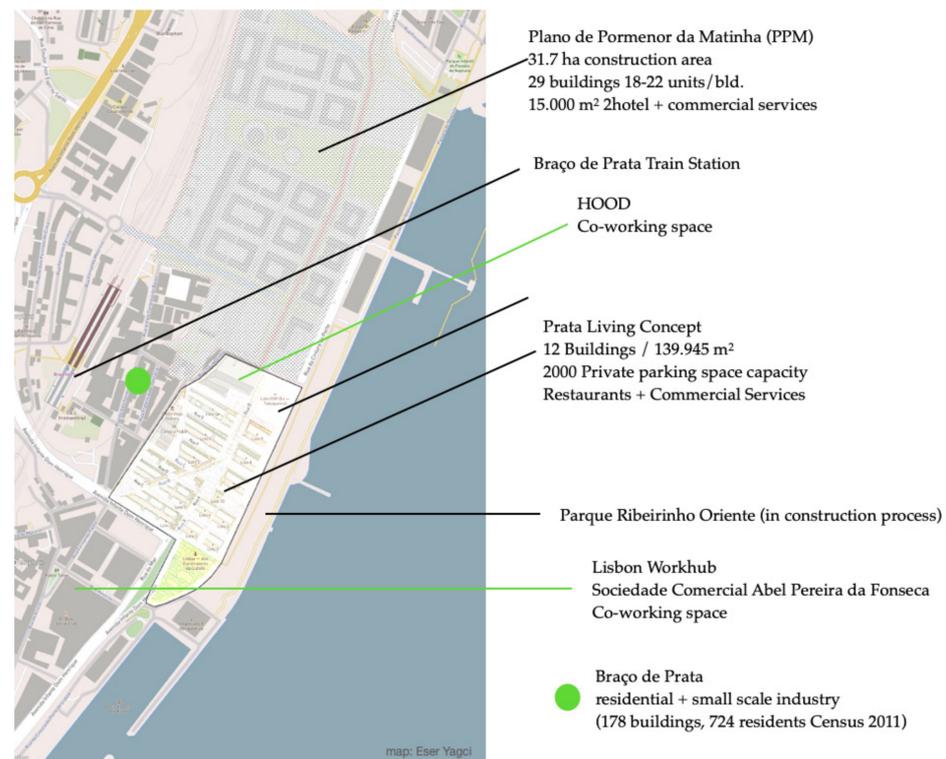


Figure 7. The projects in Braço de Prata were superposed onto the map (by the authors).

Until Marvila was defined as an administrative unit in 1959 [22], it was connected to Olivais, whose morphology was defined by urban farming, small-scale housing units and terraces with some self-built shanties mostly occupied by socially disadvantaged groups—immigrants from Portugal’s ex-colonies, Chinese and Romani, as indicated in Martins and Mourato’s study [54]. According to the same study, the population density of the area increased during “the second industrialisation wave in the 1950’s, which led to informal self-built houses”. Later, in the 1980s and 1990s, the cooperative and social housing developments—mostly initiated by *Gestão do Arrendamento da Habitação Municipal* (GEBALIS)/the Municipal Housing Agency—started to redefine Marvila and Chelas as surrounded by formal and informal urban farms.

According to “The Social Atlas” [55] prepared by the Municipality of Lisbon, Marvila has the most precarious population in Lisbon. The social and economic vulnerability of its dwellers changed dramatically between 2013 and 2015 in Marvila, as the stated atlas also indicates changes in social vulnerability through accessibility to public services for each district. However, the recent projects surrounding the neighbourhood suppress the neighbourhood with mainly brownfield regeneration projects (Figure 1).

Through this case, making urban decisions through the maps becomes crucial to be discussed in each urban space’s context and to take relocation of the risks on maps in the studies that are aiming to coincide the concerns of policy-making actors as well as academia related to spatial, cultural and environmental developments. On one hand, the cartographic representation of data makes the changing environmental and social structure of the city visible and interpretable. On the other hand, when the projects that have only been approved and under the implementation process are superposed to a map of Braço de Prata (Figure 7), the scales and possible impacts of these projects become more visible, although they imitate the pre-existing morphology.

The Marvila Velha–Poço do Bispo part of the district has become relatively more vibrant considering its industrial and cultural past, unlike the neglected and stigmatised Braço de Prata part. The buildings that could be considered as tangible heritage elements in the vicinity of Braço de Prata started to be transformed by transnational private investments

at different scales, as mixed-use spaces. The Art Nouveau-style Abel Pereira da Fonseca wine factory was transformed into a work hub [56], the baroque-style José Domingos Barreiros building was listed as a property to be invested in by Portugal Sotheby's International Realty [57], and the Tabaqueira/tobacco factory is proposed to be a gastronomic museum (Figures 8 and 9).



Figure 8. The current condition of *Tabaqueira* (the tobacco factory) (photo by the authors).

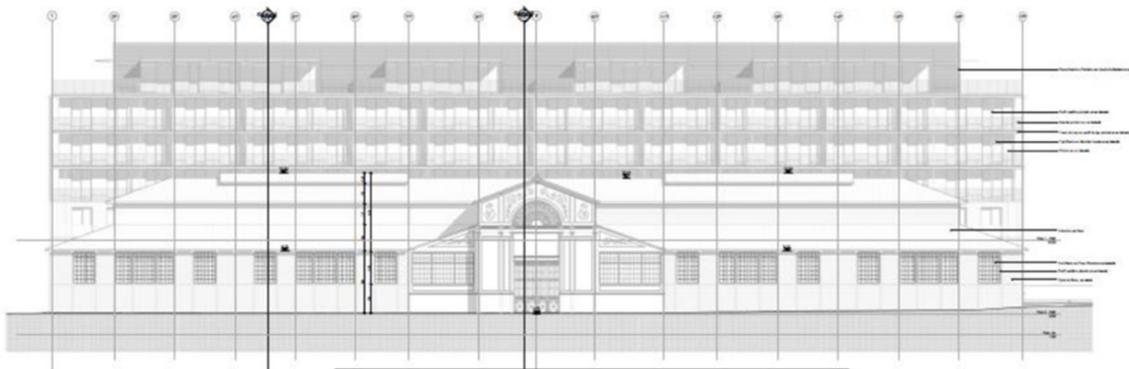


Figure 9. The proposed project for the Tabaqueira (tobacco factory) Building with additional floors where the industrial heritage becomes a building skin [58].

Besides these ambitious “prestigious” projects, there are also inclusive examples such as Casa Mitra, the social inclusion project for the elderly initiated by the Municipality and Santa Casa, and resilient spaces such as Fabrica Braço de Prata Culture Space, the Meridional Theatre, the Music Society of 3 August 1885 and a few local cafés in the basements of the social housing blocks, supported by the BIP/ZIP programme as well as the ROCK Project which aims to regenerate self-organised community understanding. Besides these resilient spaces, the present condition of the train station and its extensions are the spatial evidence of negligence in this neighbourhood (Figure 10).

The transformation of the collective values following long-term negligence becomes evident with the transformation of industrial heritage not only as tangible heritage but also the intangible heritage elements with the recent interest by developers. The Abel Pereira da Fonseca Building, which was once a winery, designed by Manuel Joaquim Norte Júnior and constructed in 1917, could be considered heritage for the winery culture [59] in the area surrounded by the vineyards which presently is a coworking space. These industries were concentrated here in relation with the Poço de Bispo Port.

Located in the east of Lisbon, as the old industrial and newly developing residential and commercial area, Braço de Prata would become more attractive with the new projects. These developments affect the pre-existing life and characteristics that have been neglected and resemble a significant part of urban memory. The new projects are showing their spatial signs of segregating impact as well as the social impacts through environmental

concerns. However, on the fringes of the transforming industrial buildings, there are old inhabitants that have sustained recent activities resembling the characteristics of the area. In this sub-context, Carrier's study [60] reminds the role of urban memory in sustaining certain habits and forms that might be regarded as crucial elements for urban sustainability.



Figure 10. The current condition of Braço de Prata train station and its surroundings, as one of the few connections to the rest of Marvila District, is spatial evidence for urban neglect (Yagci, 2019).

4.2. Research Review: A Proposal for Analysing Behavioural Aspects of Urban Segregation

The research in which this enquiry has been grounded was carried out through series of collaborative efforts comprising the forum, followed by a seminar, interviews, site analysis, archival scanning, mappings and a post-graduate level international workshop. Throughout the research, the collected information and analysis were organised according to implied contexts in order to specify the evaluation criteria in regard to the related international strategic/environmental impact assessment frames that have been used to define potentialities and risks of regeneration projects in the conclusion of this paper. A similar dialectical approach to the one that has been taken in the structuring of this enquiry was taken to propose a socio-spatial evaluation model with the aim of analysing the validity of a priori forms that pave the way for rhetorical or environmentally discriminatory uses of “smart” and “green” concepts within a phenomenological approach. Accordingly, a comparative work has been adopted for its own empirical methodology to set the evaluation criterion to specify evidence of socio-spatial stigmatisation.

The open forum (Table 2) aimed to bring related official and academic actors together to discuss possible smart futures and failures with a focus on the recent developments in East Lisbon. During the seminar, post-graduate students, professionals, academics and activists—with the support of social scientists—participated in the reevaluation of the urban processes. The main discussion context was introduced as “Framing the Urban

Concerns on Braço de Prata” for the discussion of the future risks and potentialities of recent urban decisions.

Table 2. “What Future for Braço de Prata” forum structure ¹.

Pre-Forum Presentation	Context	Participant	Affiliation
1	Major Urban Issues in Lisbon	Nunes da Silva, F.	IST-CITUA Coordinator
2	Framing the Urban Concerns in Braço de Prata	Yagci, E.	MSFAU/IST-CITUA
3	Recent Projects Marvila	Campelo, E.	Municipality of Lisbon
4	Documentary Screening	Braga, J.	Curator (TOPIAS URBANAS) PhD cand. (ISCTE-IUL)

¹ The participants discussed the relations between the ecological landscape and the social landscape that define the urban characteristics through the case of Braço de Prata (Yagci, 15 March 2019).

As expressed in the forum discussion, stigmatisation and recent neglect have characterised the neighbourhoods of Chelas and Marvila. The municipality has intended to revitalise the area since the 1998 Expo. However, the international interest and macro-scale financialisation of large-scale projects disrupted the implementation of urban corridors that could become the spaces of integration. Through discussions, it became apparent that Chelas, in the north of Braço de Prata, was stigmatised much earlier, with its precarious residents predominantly having migrated to Portugal from the ex-colonies. The residents became more precarious and isolated in terms of urban accessibility as it became more difficult to sustain life there, considering new physical obstacles, such as fast traffic routes, fragmentation caused by big projects such as the “Prata Living Concept” luxury residential project (Figure 11) and related real estate interests.



Figure 11. “Prata Living Concept” Project occupies the riverfront of the neighbourhood and limits the accessibility.

The living conditions of existing inhabitants (Table 3) are thought to be in need of the proposed new services in these projects regardless of their actual environmental needs and social precariousness. In recent projects on the agenda for Braço de Prata, which reshape the neighbourhood in line with the demands of the international upper/middle class, the current population faces the risk of being sacrificed through the assumptions that depend on the determination of an abandoned industrial zone.

The workshop corresponds to the last phase of the research as a collective and multi-disciplinary process and the participants were set five pieces of group work, for the

documentation of the present forms as tangible and intangible elements characterising the neighbourhood. The oral history documentations aimed to reveal the impact of the stigmatisation of the neighbourhood on the dwellers' concerns on spatial transformation in Braço de Prata. Within this phase, the guided excursions and the seminars by specialists provided essential information for the participants to constitute semantic relations between the spatial features and socio-cultural background of the area in which researchers from diverse disciplines related to spatial studies could engage.

Table 3. According to the data extracted from the 2011 census, the inhabitants of the Braço de Prata neighbourhood are mainly elderly couples (extracted by the authors, 2019) [61].

Section	Subsection	Total Resident	Women	Men	Family	Units dw.	Building
o12	2	150	77	73	68	104	35
o12	3	116	66	50	57	98	73
o35	1	57	25	32	28	15	9
o31	1	75	42	33	34	51	5
o31	2	127	72	55	57	79	24
o31	3	156	81	75	74	87	12
o31	4	6	4	2	2	4	1
o31	5	–	–	–	–	2	1
o31	6	–	–	–	–	–	–
o31	7	18	6	12	9	19	10
o31	8(Fabrica Braço de Prata)	–	–	–	–	–	–
o31	9	12	6	6	7	7	6
o31	10	7	5	2	3	5	2
total	61	724	384	340	339	471	178

According to the oral history documentation and site analysis conducted by the participants in the 3rd group of the graduate-level workshop [62], the current stigmatisation of the neighbourhood had been documented as video records which were later extracted (Table 4). According to the interviews, most of the residents expressed their concerns about the accessibility of basic public services in privatised projects.

Table 4. Oral expressions of the dwellers of the Braço de Prata neighbourhood.

Number of Participants	Time Scale	Positive	Negative
27	Past	16	11
27	Present *	16	11
27	Future *	13	11

* 3/27 expressed their concerns about present transformation as 3/27 expressed their confusion about the future of the neighbourhood.

As the last phase of the research, one-hour in-depth interviews were carried out for empirical interpretation with a small sample size in order to reflect academic views. Both participants were particularly specifically selected among the profiles as those who have an academic background and have certain concerns about Braço de Prata. In the face-to-face interviews, four main questions were directed non-sequentially to the participants who also represent different positions in academia in order to document the responses to spatial changes on a local scale. The first question concentrates on their determinations of the urban resilience in Lisbon, the second question concentrates on their insights about the considerations of the decision makers, the third concentrates on the possible socio-cultural impact of fragmented projects and the fourth concentrates on their future predictions on environmental inequality in Braço de Prata. Among the specified three interviewees, Nabais [63], the founder of Fabrica Braço de Prata representing a socially engaged cultural

entrepreneur; Silva [64], a PhD candidate and an activist from the HABITA Lisbon platform representing the urban grassroots; and Mendes [65], a geographer and specialist on gentrification, all declared their concerns about forced evictions in Lisbon. The first interviewee, Nabais, approaches the transformation positively; he is optimistic that new dwellers from creative industries would bring life and required urban services to the neglected neighbourhood, and that the old dwellers' lives would be enriched by interaction with the "creative newcomers". The second interviewee, Silva, worries about the precarious old inhabitants, as the area already witnessed forced evictions, adding that the urban social fabric has already been fragmented, and she worries that the risk of urban inequality is being underestimated. The last interviewee, Mendes, indicates that the metropolitan municipality, as the local governance, remains passive towards neoliberal development and more particularly the tourism-led gentrification spreading from the historic centre to the rest of the city, which would disrupt the fragile socio-economic integrity. Mendes also mentions the real estate speculation shortcuts in Lisbon.

In forums, interviews and oral history documentations, the environmental aspects of the large-scale transformation of brownfield regeneration projects are prioritised and discussed as issues through the legal frames, mainly the ones that Portugal has become party through the European Union. Lisbon's post-industrial urban landscape brings the local procedures and concerns of the environmental impact assessment (EIA) system into focus. The environmental impact assessment system is monitored by APA Ambiente, as Portugal's National Environmental Agency was partly flexed with the involvement of private expertise bodies and developers, as defined in DIRECTIVE 2011/92/EU [66]. The local EIA system and the post-implementation impacts are related to the flexed social values on environmental degradation caused by long-term stigmatisation and segregation within the urban scene, as the brownfield developments were concentrated in this part of Lisbon. This has become more visible in the case of Braço de Prata, as an old post-industrial neighbourhood that has been identified by many Lisboners as an area to be developed. Examples of optimistic revitalisation proposals can be found in a thesis on Braço de Prata by Kong Nunes [67].

In the projects of brownfield developments, such as the Prata Living Concept Project, the Matinha Project and the new hospital in Chelas, the environmental analysis and monitoring of the construction process are in question with regard to the brownfield cleaning up process of the area's contaminated soil and the urban infrastructure in this industrial part of the city, considering that the information on environmental impact assessment processes are not accessible and transparent. Creative investments might have become a shortcut for tax evasion, and Portugal might become a tax haven for the transnational elite as well as the financial capital providers that have less concerns about the social and environmental impacts of the construction processes. The forced eviction cases started in this part of Lisbon began to be reported in the news as "real estate bullying" [52]. Additionally, the data concerning the environmental impact assessment of dense demolition, cleaning up and construction processes in the brownfields are not open access. The untraceable environmental analysis processes pave the way for a certain ecology of privileges for international developers, not only as financial capital providers, but also as environmental re/pollutants in such post-industrial neighbourhoods.

5. Conclusions

5.1. Review of Results

Upon the taxonomy that was set in this study, it can be said that the causes of environmental and urban inequality are in direct relation and can be analysed through behavioural aspects of spatial changes in cities, as exemplified here with the causes and consequences of neglect and urban stigmatisation. Within the context and regarding the location and characteristics of this research, the Aarhus Convention (The United Nations Economic Commission for Europe, UNECE 1998) emerges as an important frame also for Portugal, recalling the recent frames concerning public participation and justice in environmental

matters. Additionally, the United Nations Environment Program (UNEP) monitors and reports each country's Environment Progress Reports on Mental Culture, Moral and Social Progress profiles, including Portugal (Johannesburg Summit 2002). In addition, the 2019 Lisbon meeting of the UNECE Strategic Environmental Assessment Frame suggests environmental protection with culture heritage under the definition of the Strategic Environmental Assessment [68]. Other recent frames by the EU/EIA Directive were concerned the Portuguese Environment Agency (APA 2016) and were accepted as the principles to be followed. However, the flexibilities, which were designed to make EIA processes more practical, enabled private bodies to be involved in the public participation phase of environmental impact assessment processes [69]. Although the international and national legal frames constitute a general base for environmentally and socially concerned urban practices, underestimation of environmental quality and living conditions in suburban post-industrial neighbourhoods remains as a problem in the context of environmentally and socially concerning brownfield developments.

Old brownfields became attractive terrains for real estate developers more intensely from the mid-1990s on. Among the studies defining the regeneration principles of brownfields, the reliability of "environmental claims"—as well as the social claims—in brownfield regeneration projects were problematised and expressed through various legal cases from the US compiled in a study by Witkin [70] (pp. 41–59). Thomas [71] (p. 63), brings the crucial need for "user needs analysis in decisions regarding land use change" to attention in brownfield redevelopments, addressing limitations in site-specific data as "information constraints". According to the same study (p. 67), the possible social risks are identified as relative risks which may not be included in the impact assessments, management guidelines or in other technical reports.

In the case of Lisbon, the civic society's critiques show that cleaning the toxic soil, water or air pollution during the implementation processes might not have been sufficiently monitored in the National Fair Park Zone during the EXPO construction, which surrounds the new city hospital area in Chelas and Braço de Prata [72]. The increased visibility of fragmentation has come with large-scale brownfield projects wherein forced evictions started [52]. In addition to the large-scale regeneration projects in the east of Lisbon, the second International Airport of Lisbon was approved by the Portuguese Environment Agency (APA) [73] and became the focus of environmental debates over Lisbon's future. The old suburbs, as neglected neighbourhoods, are being heavily impacted by large-scale constructions, mainly as brownfields, and information regarding environmental and health risks is not fully accessible. In a phenomenological evaluation, the projects can be found as a generic reproduction of the pre-existing urban morphology, as long as the places lost their collective meaning through refunctioning, imitation of forms and social replacements. The impact of these changes on an architectural scale and fragmentations on an urban scale can be monitored as post-implementation consequences. Although environmental data processing programs were developed to spread the usage of GIS tools, initiated by the University of Lisbon, and mainly by Instituto Superior Tecnico, the pro-active usage of ecological indicators in environmental analysis and control of brownfield developments in Lisbon remains limited in practice.

Over the course of this research, the necessity of dialectical enquiries into nature–human–place relations has been repeated. Narratives on urban interventions have widely focused on smart developments since the cities started to compete with their "smart" and "green" projects. The developmental approaches which have resulted in fragmented targets with eco-centric, techno-centric or anthropocentric standpoints maintain the risk of the reproduction of discriminative solutions. As another aspect, biased or fashionable concepts might prevail over the majority of society through environmental and social rhetoric. Through these aspects, the smart motives behind the reasoning for the increasing regeneration projects in Lisbon's post-industrial neighbourhoods correspond to a new context for urban studies to be interrogated with environmentally and socially inclusive

approaches, where the meaning of heritage meets with environmental concerns, and critical perspectives are balanced with constructive–protective perspectives.

The risks (Table 5) and the potentialities (Table 6) of brownfield regeneration projects that are identified as “smart” or “green” developments are problematised in this study through the identified problems and context of the case of Braço de Prata, assuming that the social and environmental fragmentations become visible with spatial concerns as long as the commons for protection can be implied with the loss of tangible and intangible heritage elements that are embedded in the built environment.

Table 5. Risks, their causes and possible consequences that were addressed within the main context of the study.

Type of Risk	Cause	Consequence
Social disintegration	Negligence	Re/marginalisation, xenophobia, agoraphobia, alienation, pollution due to lack of sense of belonging
Inaccessible urban services for physically and socially disadvantaged individuals	Excessive increase in luxury spatial developments	Discriminative urban environment
Partial urban solutions	Over control by developers	Socio-spatial disintegration
Heritage loss	Flexible public conservation policies and privation of adaptive reuse	Loss of urban identity and memory
Loss of services and place-making instruments for interaction	Stigmatisation	Social and environmental polarisation
Degradation in processes of Environmental Assessment Reports	Formal/informal shortcuts for investments	Pressure by transnational investors and lobbies
Toxic soil, water and air problems	Dense and uncontrolled destruction/construction in urban brownfields	Public health issues, irreversible environmental damage
Co-optation in decisions	Insufficient information on international projects	Green washing, degradation in environmental assessment processes
Real estate bullies	Speculation	Flexed moral values on social and environmental changes

Table 6. Potentialities of brownfield regeneration addressed within the main context of the study.

Urban Context	Environmental Context
Activation of public spaces and services	Future responses to climate change
Adaptive reuse of abandoned places	Regeneration of spatial reserve in a sustainable manner
Rehabilitation of urban brownfields	Cleaning up the pollutants by improving public urban services
Enriching urban culture through participative spaces with environmental damage mitigation programs	Enriching environmental culture of the city

What becomes clear from the analysis is that the municipal urban management and environmental policies can play an important role in minimising the impacts of fragmented large-scale projects. This can be realised by prioritising the dwellers’ rights to adequate housing, urban services and right to live in a healthy environment, which were defined in the International Covenant on Economic, Social and Cultural Rights [74]. This implies a more proactive approach, and the abandonment of a perspective that targets immediate financial gain. Recent tourism-based developments, investments and the real estate market’s growth maintain the risk of co-opting environmental assessment, planning and decision-making processes. For large-scale implementations, the metropolitan municipality has currently become financially dependent on international developers and tendentious to embrace smart developments that disregard the social fabric and the history of the city. This fact becomes spatially more visible in the Braço de Prata case, where the possible environmental impact assessments should be conducted not only by specialists from the fields of environmental sciences but also by social sciences whereby through long-term socio-ecological impact estimations, smart and adaptive solutions are brought in practice.

5.2. Discussion

“Smart” and “green” cities are usually associated with the development and application of new technologies, and recently as regeneration processes in cities. While urban regeneration projects are evaluated, developments should not be limited to generic technological and pseudo “green” aspects. If social and ecological diversity are assumed as prerequisites of the vitality and sustainability of each city, participation and co-developmental approaches can be considered essentials of smart futures. As Brown [75] (p. 207) expressed, “Networking all the participants to the planning effort around common agendas may forge productive social networks, which in turn may foster social entrepreneurship and more civic-minded behaviours. The rise of environmental justice coalitions, the emergence of community development spaces, and the community gardens movement, to name just a few, are all examples of how co-development can foster shared values, reciprocity, and the restoration of vital inter-cultural and transgenerational relationships”.

In the urban practices and, more specifically, international investments, the impacts of branded projects and lucrative decisions become visible mostly during and after implementation processes, and they find flexible conditions to bypass or co-opt the inclusive approaches from the environmental impact assessment phase to the project site management wherever the conservation policies are bent. As a consequence of this, environmental and social concerns are flexed through the environmental consequences of such policies and start with stigmatisation. In regard to this, Platt [76] (p. 125) mentions the “non-numerical” benefits of ecological restorations through brownfield developments fostering social engagement, which might potentially activate Light’s [77] concept of “ecological citizenship”. Wilson and Piper [78] (p. 15) emphasise the importance of “the principle of equity for current generations; community engagement” in the processes that are known as sustainable development. From another perspective, Butler’s [79] (pp. 86–95) interpretations of the contemporary self and their relationship with social spaces bring the political commons forward. In the interview with Athanasiou on forms of dispossession, Butler indicates that liberated individual “personhood” in times of neoliberalism can uncover suppression through collective reactionary expressions, which potentially create some “*autopoietic*” forms of resistance. In this perspective, resistance through urban commons is assembled through these new ethical codes based on intersectional and collective practices towards environmental inclusivity and diversity. At this point, the role of academic knowledge production becomes essential to take urban grassroots, specialists and other social networks’ reactions into consideration to mediate progressive spaces and discuss socio-spatial inequalities through the context of environmental justice.

Regarding the interrelation between the degeneration of environmental values and rapid changes in physical space, the significance of spatial memory is more intensely emphasised by social scientists. Low and Gleeson [18] described the concept of “sustainable development” as overrated, when they relate environmental injustice to economic policy, as such policies become “blatant” through the social conditions that result from the political ecology apart from global economic pressure. Regarding the transformation pressure concentrated in East Lisbon, changes in urban policies, as well as ecological concerns, can be traced to the changes in the legal frames, as in the Lisbon case it becomes more evident with Decree 10710 in 2019 [80], which delimits certain areas from the ecological reserves of the Tagus River. Housing problems and the increased privatisation of public services—mainly urban services—are regarded as the most visible form of such flexed urban policies. In the context of the fragmented transformation of East Lisbon, moral flexibility and urban inequality cyclically shift in a mutual cause–effect relationship as a consequence of the most recent developmental approaches in urban and environmental policies, which become more dependent on international investments following the Troika programme and following society’s need for openness to new developments since Portugal encountered isolation during the Estado Novo Regime. This implies historical reasoning in spatial studies to discuss the differences of spatial and environmental responses to neoliberal developments within the context of each city.

The role of the local authority, as the policy maker as well as an important stakeholder in the urban scene, can be specially discussed in future studies for the orientation to preserve cultural and heritage elements that maintain the functionally and socially adaptive spatial use and avoid environmental alienation. In the defined context of this paper and through the highlighted concerns on the case, the preservation of urban identity and diversity is seen as the crucial aim for visionary urban development towards smarter futures, not only from a functional perspective but also a social and an ecological one since the planet witnesses the impacts of climate change, related migration and discriminations in the context of environmental justice. In the condensed context of sustainable brownfield development, the following sub-contexts are specified to be reconsidered and become provisions for future processes:

- Redefining commons for environmental protection through socio-economical assessment.
- Strategic planning for heritage protection with participation.
- Defining community building structures and instruments with respect to urban memory and socio-environmental needs of dwellers.
- Demolishment, construction and building operation waste management frames.
- Autonomous project and post-project monitoring structures.
- Bottom-up approaches for the development of organic urban mobility.

The positions and concerns in academic knowledge production are as crucial as civic participation to rethink how the ecological and social urban environment can be preserved and improved by adapting new urban solutions to pre-existing living conditions. In addition, pre-project and post-project monitoring of the policy-making, decision, design, assessment and implementation processes of each regeneration agenda become decisive for the smart future of the city as a whole. A smarter future for Lisbon is proposed to be discussed primarily through the intersectionality of academic views with wider engagement of social scientists, rather than partial urban solutions by designers and decision makers. In this enquiry, it becomes apparent from the provided examples that the use and continuity of places provide spatial evidence of negligence and stigmatisation. However, it becomes more essential to co-analyse the cause–consequence relations beyond epistemological boundaries as the scientific stage of participatory urban decision making.

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References

1. Harvey, D. *Justice, Nature and the Geography of Difference*; Blackwell Publishers: Cambridge, MA, USA; Oxford, UK, 1996; ISBN 1-55786-680-5.
2. Rapoport, A. *Human Aspects of Urban Form: Towards a Man-Environment Approach to Urban Form and Design*, 1st ed.; Pergamon Press: Oxford, UK; New York, NY, USA; Toronto, CA, USA; Sydney, Australia; Paris, France; Frankfurt, Germany, 1977; ISBN 0-08-017974-6.
3. Lisbon Municipal Archive. 1950-04-15 / AMLSB/SPT/000196, p. 1. Available online: <http://arquivomunicipal2.cm-lisboa.pt> (accessed on 4 May 2020).
4. Santiago Baptista, L.; Malâneo, P. *Lisboa Oriental, Jornal Arquitectos*, 257th ed.; Ordem dos Arquitectos: Lisbon, Portugal, 2018; pp. 56–62.
5. Fonseca Correia, L. *Arquitetura: Empreender ou Cuidar, Jornal Arquitectos*, 257th ed.; Ordem dos Arquitectos: Lisbon, Portugal, 2018; pp. 68–73.
6. Malâneo, P.; Gonçalves, C. *Lisboa Oriental: Mapeamento em 2018, Jornal Arquitectos*, 257th ed.; Ordem dos Arquitectos: Lisbon, Portugal, 2018; pp. 74–85.
7. Queiroz do Vale, A. *O Urbanismo e o Cimento da Cidade: Expo'98/Parque das Nações: A Visão do Urbanista, Jornal Arquitectos*, 257th ed.; Ordem dos Arquitectos: Lisbon, Portugal, 2018; pp. 86–88.
8. Piaget, J. *Psychology and Epistemology: Towards a Theory of Knowledge*; Penguin: New York, NY, USA, 1972; ISBN 0-140-809-341.
9. Harvey, D. *Social Justice and the City*; Revised Edition; The University of Georgia Press: Athens, GA, USA; London, UK, 2009; ISBN 978-0-8203-3403-5.
10. Smith, N. *Uneven Development: Nature, Capital, and the Production of Space*, 3rd ed.; The University of Georgia Press: Athens, GA, USA; London, UK, 2008; ISBN 978-0-8203-3099-0.
11. Lefebvre, H. *Writings on Cities*; Kofman, E., Lebas, E., Eds.; Wiley-Blackwell: Cambridge, MA, USA, 1996; ISBN 978-0-631-19188-9.
12. Fainstein, S.S. *The Just City*, 1st ed.; Cornell University Press: Ithaca, NY, USA, 2010; ISBN 978-0-8014-4655-9.
13. Jacobs, J. *Edge of Empire: Postcolonialism and the City*; Routledge: New York, NY, USA, 2002; ISBN 0-203-43090-5.
14. Fanon, F. *A Dying Colonialism*; Grove Press: New York, NY, USA, 1965; ISBN 978-0-8021-5027-1.
15. Fanon, F. *Black Skin White Masks*; Pluto Press: Sidmouth, UK, 2002; ISBN 978-0-7453-2848-5.
16. Tietenberg, T.; Grubb, M.; Michaelowa, A.; Swift, B.; Zhang, Z.X. Review of the Relevant Provisions on Emissions Trading in the Kyoto Protocol, International Rules for Greenhouse Gas Emissions Trading Defining the Principles, Modalities, Rules and Guidelines for Verification, Reporting and Accountability. p. 23. Available online: <https://unctad.org/system/files/official-document/pogdsgfsbm6.en.pdf> (accessed on 20 August 2020).
17. UNFCCC. International Emissions Trade: Greenhouse Gas Emissions—A New Commodity. Available online: <https://unfccc.int/international-emissions-trading> (accessed on 20 August 2020).
18. Low, N.; Gleeson, B. *Justice, Society and Nature: An Exploration of Political Ecology*, 1st ed.; Routledge: London, UK, 1998. [CrossRef]
19. Nixon, R. *Slow Violence and the Environmentalism of the Poor*; Harvard University Press: Cambridge, MA, USA, 2013; ISBN 978-0-674-04930-7.
20. Yearley, S. *Cultures of Environmentalism: Empirical Studies in Environmental Sociology*; Palgrave Macmillan: London, UK, 2005; p. 116. ISBN 1-4039-0120-1.
21. Cudworth, E. *Environment and Society*; Routledge: London, UK; New York, NY, USA, 2005; ISBN 0-203-99490-6.
22. Consiglieri, C.; Abel, M. *Lisboa, 750 Anos de Capital: Livro de Ouro da Cidade*; Dinalivro: Lisbon, Portugal, 2005; ISBN 972-576-386-6.
23. França, J.A. *Lisboa-História Física e Moral*, 2nd ed.; Livros Horizonte: Lisbon, Portugal, 2008; p. 484. ISBN 978-9-7224-1612-2.
24. Aragão, A. Environmental Standards in the Portuguese Constitution. In *Environmental Rights: The Development of Standards*; Turner, S.J., Shelton, D.L., Razzaque, J., McIntyre, O., May, J.R., Eds.; Cambridge University Press: Cambridge, UK; New York, NY, USA, 2019; p. 248. ISBN 978-1-1084-8224-0.
25. Vasconcelos, L.T.; Baptista, I. The Role of Environmental Activism in Society. In *Environmental Activism in Society*; FLAD: Lisbon, Portugal, 2002; pp. 177–194.
26. Casanova, J.L.; Castro, A.; Ferreira, V.M.; Indovina, F.; Lucas, J. *A Cidade da Expo '98: Uma Reconversão na Frente Ribeirinha de Lisboa?* Bizâncio: Lisbon, Portugal, 1999.
27. Lisboa 2020. Available online: <https://lisboa.portugal2020.pt> (accessed on 22 November 2020).
28. European Commission Directive 2001/42/EC on the Assessment of the Effects of Certain Plans and Programmes on the Environment SEA Directive 2001/42/EC. 2001. Available online: <https://ec.europa.eu/environment/eia/sea-legalcontext.htm> (accessed on 22 November 2020).
29. Lisboa Green Capital 2020. Available online: <https://lisboagreencapital2020.com/en/> (accessed on 19 January 2021).
30. Lisboa Aberta. Available online: <http://lisboaaberta.cm-lisboa.pt/index.php/pt/> (accessed on 22 November 2020).
31. Lojas com História. Available online: <http://www.lojascomhistoria.pt/shops> (accessed on 28 November 2020).
32. ROCK. Regeneration and Organisation of Cultural Heritage in Creative and Knowledge Cities. 2020. Available online: <https://rockproject.eu/lisbon> (accessed on 20 August 2020).
33. Made of Lisboa. Available online: <https://madeoflisboa.com/entrepreneur-community> (accessed on 20 August 2020).

34. Bell, D.A.; de-Shalit, A. *The Spirit of Cities: Why Identity of a City Matters in a Global Age*; Princeton University Press: Princeton, NJ, USA; Woodstock, UK, 2011; ISBN 978-691-15969-0.
35. Mendes, L. Marginal Gentrification as Emancipatory Practice: An Alternative to the Hegemonic Discourse of the Creative City? *RCCS Annu. Rev.* **2013**, *2003*, 141. [CrossRef]
36. Rose, D. Rethinking Gentrification: Beyond the Uneven Development of Marxist Urban Theory. *Environ. Plan. D Soc. Space* **1984**, *2*, 47–74. [CrossRef]
37. Perl, S.; Steffen, E. *1945–2015 Abriss und Aufbruch am Kottbusser Tor, Demolition and Protest at Kottbusser Tor*; FHXB Friedrichshain—Kreuzberg Museum: Berlin, Germany, 2015; ISBN 978-3-935810-09-1.
38. Bookchin, M. *Urbanization without Cities: The Rise and Decline of Citizenship*; Black Rose Books: Montreal, QC, Canada; New York, NY, USA, 1992; ISBN 1-895431-01-8.
39. Douglas, M.; Isherwood, B. *The World of Goods: Towards an Anthropology of Consumption*; Routledge: London, UK; New York, NY, USA, 1996; ISBN 978-04151-3047-9.
40. Simmel, G. The Metropolis and Mental Life. In *On Individuality and Social Forms*; The University of Chicago Press: Chicago, IL, USA; London, UK, 1971; ISBN 978-0-226-75776-6.
41. Chaney, D.; Tarzlari, Y.; Kutluk, I.T. *Lifestyle* (Routledge, 1996); Dost: Ankara, Turkey, 1999; ISBN 957-7501-62-X.
42. Macnaghten, P.; Urry, J. *Contested Natures: Theory, Culture & Society*; Sage Publications: London, UK; Thousand Oaks, CA, USA; New Delhi, India, 1998; ISBN 0-7619-5312-4.
43. Crinson, M.; Tyrer, P. Clocking off in Ancoats: Time and remembrance in the post-industrial city. In *Urban Memory: History and Amnesia in the Modern City*; Crinson, M., Ed.; Routledge: Abindon, UK; Berkeley, CA, USA; New York, NY, USA, 2005; ISBN 0-415-33405-5.
44. Ittelson, W.H. Environmental Perception and Urban Experience. *Environ. Behav.* **1978**, *10*, 193–213. [CrossRef]
45. Hannigan, J.A. *Environmental Sociology: A Social Constructionist Perspective*; Routledge: London, UK; New York, NY, USA, 2002; ISBN 0-415-11255-9.
46. Tulumelo, S.; Allegretti, C. Articulating urban change in Southern Europe: Gentrification, touristification and financialisation in Mouraria, Lisbon. *Eur. Urban Reg. Stud.* **2020**. [CrossRef]
47. Costa Lobo, M.; Craveiro, T. Integrating the City—A Third Solution for Lisbon City Periphery. In Proceedings of the 42nd International Planning Congress ISoCaRP, Istanbul, Turkey, 14–18 September 2006; Available online: http://www.isocarp.net/Data/case_studies/889.pdf (accessed on 30 November 2020).
48. European Commission. Application Form for the European Green Capital Award 2020, Lisbon’s Strategy. Available online: https://ec.europa.eu/environment/europeangreencapital/wp-content/uploads/2018/07/Indicator_12_Lisbon_EN.pdf (accessed on 6 January 2021).
49. Fuarros, S. Sounds of Tourism. 2019. Available online: <https://www.soundsoftourism.pt/mapping-sonic-turistification/> (accessed on 6 January 2021).
50. CM-Lisboa, Diagnostico Social. 2017. Available online: <http://habitacao.cm-lisboa.pt/documentos/1245064061D0aCC1bx8Iy10DT8.pdf> (accessed on 6 January 2021).
51. Minder, R. Lisbon is Thriving. But at What Price for those Who Live There? *New York Times*. 23 May 2018. Available online: <https://www.nytimes.com/2018/05/23/world/europe/lisbon-portugal-revival.html> (accessed on 7 January 2021).
52. Naomi de Sousa, A. Inside Santos Lima: The Block at the Heart of Lisbon’s ‘Real-Estate Bullying’. *The Guardian*. 30 October 2018. Available online: <https://www.theguardian.com/cities/2018/oct/30/santos-lima-lisbon-marvila-gentrification-real-estate-bullying> (accessed on 7 January 2021).
53. População Sem-Abriço e Pernoitar na rua em 14 de Maio de 2015 (no) (%), por Freguesia e por Locais, Lisboa, II Diagnóstico Social De Lisboa—2015–2016, p. 188. Available online: http://www.cm-lisboa.pt/fileadmin/VIVER/Desenvolvimento_Social/DIAGNOSTICO_SOCIAL_versao_final_JANEIRO-2017_11_01_2017.pdf (accessed on 28 November 2020).
54. Carlos Martins, J.; Mourato, J. Marvila/Beato Research Report, Document produced for the Horizon 2020 Project ‘ROCK’. Year: 2018. Status: Final. Disseminação Level: Public, Institute of Social Sciences University of Lisbon. 2018. Available online: https://lisboa.rockproject.eu/wp-content/uploads/2019/04/Martins_report_completesmall-1.pdf (accessed on 20 December 2020).
55. Câmara Municipal de Lisboa, Vulnerability Atlas. 2017. Available online: <http://sigfotos.cm-lisboa.pt/AtlasSocial/Vulnerabilidades> (accessed on 9 March 2019).
56. Sistema de Informação Para o Património Arquitectónico (SIPA). Available online: http://www.monumentos.gov.pt/Site/APP_PagesUser/SIPA.aspx?id=3180 (accessed on 7 January 2021).
57. The Spaces, Property of the Week: A Baroque Palace with Commercial Potential in Lisbon. Available online: <https://thespaces.com/baroque-palace-lisbon/> (accessed on 7 January 2021).
58. Tabaqueira Project. CidadaniaX. Available online: <http://cidadaniaX.blogspot.com/2020/06/133-reuniao-de-cml-2-aplausos-museu-da.html> (accessed on 6 January 2021).
59. Restos de Coleção. Sociedade Comercial Abel Pereira da Fonseca (Image Retrieved 6 January 2021). Available online: <https://restosdecolecção.blogspot.com/2011/10/abel-pereira-da-fonseca-era-no-inicio.html> (accessed on 9 January 2021).
60. Carrier, P. Places, Politics and the Archiving of Contemporary Memory. In *Memory and Methodology*; Radstone, S., Ed.; Routledge: Oxford, UK; New York, NY, USA, 2000; ISBN 978-1-003-086-086.

61. Census Portugal 2011, Extracted Data Retrieved 2019. Available online: https://censos.ine.pt/xportal/xmain?xpid=CENSOS&xpgid=ine_censos_indicadores (accessed on 2 April 2019).
62. Yagci, E.; Nunes da Silva, F.; Ustundag, K. *Behavioural Past and Places: Braço de Prata International Workshop*; Fabrica Braço de Prata: Lisbon, Portugal, 2019.
63. Nabais, N. (Interviewed by Authors, 1 August 2019). Extracted from the sound records.
64. Silva, R. (Interviewed by Authors, 30 August 2019). Extracted from the sound records.
65. Mendes, L. (Interviewed by Authors, 4 September 2019). Extracted from the sound records.
66. Directive 2011/92/EU, EUR-Lex Access to European Union Law. Available online: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32011L0092> (accessed on 13 January 2021).
67. Kong Nunes, A.M. “Aging in Place”: *Revitalização Urbana em Braço de Prata/Marvila: Projecto para Obtenção do Grau Mestre em Arquitectura Mestrado Integrado em Arquitectura Habitação, Equipamento, Lazer e Trabalho numa Estrutura Multifuncional*; Universidade De Lisboa Faculdade De Arquitectura: Lisbon, Portugal, 2015; Available online: https://www.repository.utl.pt/bitstream/10400.5/10569/1/PFM_AnaMartaKongNunes.pdf (accessed on 13 January 2021).
68. Do Rosário Partidário, M. Strategic Environmental Assessment Better Practice Guide, Methodological Guidance for Strategic Thinking in SEA. 2012. Available online: https://ec.europa.eu/environment/eia/pdf/2012%20SEA_Guidance_Portugal.pdf (accessed on 11 January 2021).
69. Environmental Impact Assessment (EIA). Framework in Portugal, IST-UL. 2018. Available online: https://fenix.tecnico.ulisboa.pt/downloadFile/845043405474850/APA_EIAframeworkinPortugal_27092018.pdf (accessed on 9 March 2019).
70. Witkin, J.B. *Environmental Aspects of Real Estate and Commercial Transactions: From Brownfields to Green Buildings*; American Bar Association: Chicago, IL, USA, 2012; pp. 41–59. ISBN 978-1616329112.
71. Thomas, M.R. Brownfield Redevelopment: Information Issues and the Affected Public. *Environ. Pract.* **2003**, *5*, 62–68. [CrossRef]
72. Cristino, S. Mistério dos Solos Contaminados na Expo Ainda Preocupa Moradores e Ecologistas, O Corvo, 12 January 2018. Available online: <https://ocorvo.pt/misterio-dos-solos-contaminados-na-expo-ainda-preocupa-moradores-e-ambientalistas/> (accessed on 9 March 2019).
73. Alves Rito, F. Estudo Ambiental Viabiliza Novo Aeroporto do Montijo: Ameaças Para a Avifauna e o Ruído, com Efeitos na Saúde Humana, são os Principais Impactes Negativos. Os Maiores Riscos Para a Segurança são o Perigo de Colisão das aves com os aviões e os Tanques de Armazenamento de Combustível. *Publico*, 29 July 2019. Available online: <https://www.publico.pt/2019/07/29/sociedade/noticia/estudo-ambiental-viabiliza-novo-aeroporto-montijo-1881561> (accessed on 13 January 2021).
74. International Covenant on Economic Social and Cultural Rights, UN Treaty Collection, Human Rights, New York, NY, USA. 16 December 1966. Available online: https://treaties.un.org/pages/viewdetails.aspx?chapter=4&lang=en&mtdsg_no=iv-3&src=treaty (accessed on 13 January 2021).
75. Brown, H. Codevelopment as a Principle for Next Generation Infrastructure. In *What We See: Advancing the Observations of Jane Jacobs*; Goldsmith, S.A., Elizabeth, L., Eds.; New Village Press: Oakland, CA, USA, 2010; p. 207. ISBN 978-0-9815-5931-5.
76. Platt, R.H. Part III: Restoring Urban Nature: Projects and Process. In *The Humane Metropolis: People and Nature in the 21st Century*; Platt, R.H., Ed.; University of Massachusetts Press: Amherst, MA, USA; Boston, MA, USA, 2006; pp. 123–127. ISBN 1-55849-554-1.
77. Light, A. Urban Ecological Citizenship. *J. Soc. Philos.* **2003**, *34*, 44–63. [CrossRef]
78. Wilson, E.; Piper, J. *Spatial Planning and Climate Change*; Routledge: Abingdon, UK; New York, NY, USA, 2010; ISBN 978-0-415-49590-5.
79. Butler, J.; Athanasiou, A. *Mülksüzleşme: Siyasaldaki Performatif*; Dispossession: The Performative in the Political (Polity Press, 2013); Ertür, B.T., Ed.; Metis: Istanbul, Turkey, 2017; ISBN 978-605-316-059-5.
80. Decree 10710. *Diário da República*, 2.a Série—N.o 122—28 de Junho de 2019. Available online: http://www.cm-lisboa.pt/fileadmin/VIVER/Urbanismo/urbanismo/REN_de_Lisboa.pdf (accessed on 7 January 2020).