



Article

From Post-Socialist to Sustainable: The City of Ljubljana

Anđelina Svirčić Gotovac ¹ and Boštjan Kerbler ^{2,*}

- ¹ Institute for Social Research in Zagreb, Frankopanska 22/I, 10000 Zagreb, Croatia; angelinasg@gmail.com
- Urban Planning Institute of the Republic of Slovenia, Trnovski pristan 2, 1000 Ljubljana, Slovenia
- * Correspondence: bostjan.kerbler@uirs.si; Tel.: +386-1-420-13-38

Received: 19 November 2019; Accepted: 7 December 2019; Published: 12 December 2019



Abstract: This article analyzes the process of city center revitalization using the case of the City of Ljubljana. In 2016 it became the first and (so far) only post-socialist city to acquire the European Green Capital Award. In the process of transforming the city over the last ten years, many positive changes were achieved. These are primarily reflected in improvements to the urban quality of life; that is, changes based on the urban sustainability principles. More public spaces with greater accessibility were created in the city center (expansion of pedestrian and bicycle zones, reduction of car traffic and closure of certain streets to cars, a higher number of visits to the city center and hence more cultural and tourist attractions, more green spaces, etc.). The study was conducted using semi-structured interview methods and focus groups with selected experts (spatial experts from various disciplines). The results showed that the revitalization process in Ljubljana had more positive consequences than negative ones, although some experts also criticized the achievements and pointed out certain shortcomings. However, given the definite improvements in citizens' quality of life, it can be argued that Ljubljana has become a post-socialist sustainable city that clearly follows western European urban development patterns, which is a clear deviation from the socio-spatial urban processes that still characterize most post-socialist cities, especially large ones.

Keywords: post-socialist city; sustainable city; green capital; sustainable indicators; Central and Eastern Europe

1. Introduction

In the decades since the collapse of socialism and the subsequent transition period (in economic and political but also social and cultural terms), post-socialist cities have seen a period of marked socio-spatial changes. These primarily involve changes in the urbanization and suburbanization processes [1]. Since the 1990s, these processes have been determined by the transition to market capitalism and the denationalization of property. Market-driven urbanization promotes private construction (business and residential) in all parts of the post-socialist cities, both in the urban centers and in the surrounding or peripheral areas [2]. For example, private construction of residential and business zones (shopping centers, etc.) at the outskirts of cities is intensifying, as well as private residential and commercial construction in many locations within cities [3]. Sykora and Bouzarovski [4] (p. 44) describe this process with the words "post-communist cities are cities under transformation."

During the transition period, the state has gradually lost its former power and control over current spatial changes. A period of rapid, intense change, and short-term solutions have taken over, in which there is no interest in carrying out long-term projects. The spatial or urban planning process has therefore acquired the characteristics of transition and bias, becoming known as transitional urban planning or even "the death of urban planning," and being subject to similar coinages that emphasize the loss of planned control over the appearance and purpose of urban space. As reported by researchers

Sustainability **2019**, 11, 7126 2 of 16

that focus primarily on the cities of the former Yugoslavia [5–8], increased private (commercial or residential) construction or "post-socialist privatism" [9] has various socio-spatial consequences visible in both the cities' altered appearance and identity as well as the quality of life in them [10,11]. As part of the post-Yugoslav milieu, however, Ljubljana stands out in this regard. Specifically, the negative socio-spatial transformation typical of the transition period is increasingly less evident in Ljubljana, with the residents and the city itself moving toward a better quality of life and functionality. Ljubljana is one of the smaller post-socialist capitals (with a population of only 280,000), which has partially facilitated the transition to a better quality of life; in addition, its important geopolitical position in central Europe, close to western European cities (in Austria, Italy, and Germany) has also played a role.

The hypothesis this article proceeds from is that due to its unique development orientation, Ljubljana is no longer a post-socialist city characterized by transitional socio-spatial processes, but a sustainable city (since 2016). The main goal of this article is to explore and highlight the special features of this case study and the best-practice models that have defined Ljubljana's positive development.

2. Post-Socialist Pathways of Ljubljana's Development

There is no universal post-socialist direction of development. In order to define it, individual cities must be compared—that is, their differences and special features must be determined. To this end, this article discusses the socio-spatial processes typical of Ljubljana that led to its transformation into a sustainable city, or its pathways of development that made such changes possible. It focuses on the urban renewal and revitalization of Ljubljana (and especially its center), which followed the green capital model. In this regard, Ljubljana's development differs significantly from that of most post-socialist cities. Since the 1990s (or when Slovenia became independent), Slovenia's political context has had a decisive impact on the development orientation of the country and especially its capital. Most importantly, Slovenia entered the Europeanization process of EU accession negotiations fairly early, becoming an EU member state as early as 2004. This led to incomparable differences in the implementation of Europeanization processes and their adaptation compared to, for instance, Croatia, which remains the only former Yugoslav country that has joined the EU in addition to Slovenia, albeit only in 2013. Hence, in Slovenia the initial processes of privatization, commercialization, and transition to a new economic order and market economy typical of all post-socialist countries, especially the countries of the former Yugoslavia, were confronted and harmonized with the processes of adaptation to EU recommendations and laws much earlier than in other countries. This was evident in all segments of society; however, the most relevant area for the case study in question is spatial and urban planning, which may be most easily discerned in the capital itself, Ljubljana.

In the case of Ljubljana, the transition period could be divided into two periods: the period 2007 and the period after 2007. In 2007 Ljubljana adopted a new development vision statement called *The "Ljubljana 2025" Vision*, which provided a detailed definition of twenty-two strategic projects (from a list of approx. 100 projects) to be realized by year 2025, "linking the three principal development aims of Ljubljana: the 'Ideal city' (i.e., the optimal city size—for living, working, recreation), the 'Sustainable city' (i.e., preserving the natural and urban environment in the city and urban region), and the 'Slovenian metropolis' (European competitive capital city)" [12] (pp. 822–823). The vision statement very ambitiously outlined the city's sustainable transformation. According to Koželj [13], the sustainable guidelines from the city's long-term development vision provided the basis for preparing a municipal spatial plan, which in its strategic section clearly specified that in the future the city would develop on the inside through densification of existing built-up areas. Its operational section specified several sustainable development operational tactics referring to the sustainable renewal of the city center, sustainable mobility, construction on already urbanized and degraded land, construction along public transport lines, renewal of large residential neighborhoods, densification of dispersed construction in the suburbs and peri-urban areas, and protection and expansion of green areas.

Ljubljana prepared this vision just at the right time—that is, before the world economic crisis that followed. It turned out that it was designed to overcome the financial and social crisis that Ljubljana,

Sustainability **2019**, 11, 7126 3 of 16

as well as the rest of Europe and the world, found themselves in, therefore it was important to secure the required investment and launch certain projects. "Since 2008, Ljubljana—and Slovenia—have been in crisis: financial, economic, political, social, etc. As a consequence, not many large strategic projects have been completed in accordance with municipal spatial and land use plans, and national and regional development programmes, due mainly to a lack of capital investment, and in some cases opposition from local residents. However, many other urban revitalization projects have taken place or are under way, especially in the center of Ljubljana, e.g., traffic calming, upgrading of the Ljubljanica River and its embankments with communal infrastructure, new urban park(s), bridges, pedestrian areas, retrofitting of buildings, etc. They are all important investment projects towards building green infrastructure and urban sustainability in Ljubljana" [14] (p. 54).

2.1. Urban Sustainability

Ljubljana thus began following the positive western European spatial and global trends. Modern urban and development trends are concepts that the EU promotes. They are covered by the term urban sustainability, and individual EU member states have adopted and adapted them to various national or local levels. Urban sustainability is based on efforts to reduce the impact of negative urbanization processes, such as the decay and depopulation of urban centers, intensive suburbanization processes, and urban sprawl, allowing development to take place in line with the compact city model, which is oriented towards more sustainable urban development [15]. Today's urban revitalization truly incorporates the concepts of urban sustainability, green infrastructure, and community participation—that is, community-led projects are being implemented and they are more or less included in the spatial and urban planning processes, or urbanism, of the twenty-first century. The new form of urbanism is perhaps best integrated in the Scandinavian and Danish urban development model. This has to do with the urban planning and humanist approach introduced by Jan Gehl which leads to pedestrianism and returning urban centers to their residents, unlike the twentieth-century modernism and long-standing subordination of cities to traffic. "The pattern in the city center is now being repeated in outlying districts where in recent years many streets and squares have been converted from traffic islands into people-friendly squares. The conclusion from Copenhagen is unequivocal: if people rather than cars are invited into the city, pedestrian traffic and city life increase correspondingly" [16] (p. 13).

The numerous sustainable and environmentally friendly theoretical approaches known today are based primarily on the human dimension [16] in urban transformation. For example, eco-urbanism [17] inextricably depends on the concepts of sustainable development and the ecological paradigm, which entail a reduction in the urban "consumption" to date and a change in the lifestyles of urban residents; it therefore proclaims the need for a new daily routine for individuals and is considered a type of best-practice example. The new urban lifestyle models lean toward post-carbon cities [18] or landscape urbanism, green or low-impact development, bicycle infrastructure, and considerable focus on compact and walkable transit-oriented development [19] or for a sustainable city [20]. Together these concepts promote a more human approach to the urban lifestyle, which up until now has only been random, and projects based on them are being launched for enhancing urban planning at the local level within a community or neighborhood with independent economic power or within the cultural framework of a specific country.

In this regard, the participation of urban residents is crucial because it involves emphasizing the public needs (e.g., for public or green areas) that can change the residents' quality of life and improve the perception of the local and urban environment. Living in a local community or neighborhood is thus the basic area that these concepts highlight, which should be influenced and focused on in order to achieve better daily quality of life of the broadest possible segment of the urban population. Residential areas, especially on the outskirts, are often ignored in the planning process. In this sense, approaches based on the human dimension also envisage a revitalization of remote parts of the city and residential areas, whereby great attention is directed towards the city center. Therefore, the "new"

Sustainability **2019**, 11, 7126 4 of 16

type of planning, which includes urban residents and pays heed to their needs in the local community: "citizen-led planning entails a fundamental shift in the planning paradigm with the focus on facilitating communities in creating a concept for their future needs and wishes, while seeking to work with planning stakeholders on an egalitarian level. This can mean becoming more open to actors outside traditional disciplines, therefore de facto refers to the inclusion of cultural, as well as other forms of knowledge (Fry, 2001), thus pointing to the various social, environmental and economic benefits that can be derived from exploring collaborative processes" (Collier et al., 2013)" [14] (p. 53).

"All of these approaches share an implicit, if not explicit goal—behaviour modification through planning and design—in order to build community and teach sustainable ways of urban life" [19] (p. 24). However, any attempt at implementation also contributes to urban policy adjustments in laws and specific regulations, without which no true change can be achieved. According to Tosics [15] (p. 71) "any concept of sustainable urban development must be based on overarching policies related to governance, finance and taxation, and regional and urban development." Pacione [21] also argues that urban sustainability is fundamentally a political process rather than a technological or design problem. Ljubljana thus also sought to base its revitalization on the approaches mentioned above, in which project planning and implementation were guided by the urban policy, which proved successful.

2.2. Ljubljana as a Green Capital

Ljubljana's orientation towards sustainable development proved to be the right choice, which was also confirmed by the European Green Capital Award, for which the city competed and won in 2016. Ljubljana became the first post-socialist city to have achieved this. It was this achievement in particular that has led to this case study and the establishment of the specific special features and socio-spatial causes that contributed to this success. Ljubljana can thus serve as an example showing in which direction a city can go, depending on the policy and urban planning framework chosen. After only ten years of transformation, this (correct) choice in Ljubljana has yielded exceptionally ambitious results. The path leading to Ljubljana being designated a European Green Capital by the European Commission (Figure 1) was not spontaneous, but precisely the opposite: extremely well-planned and interdisciplinary. Its long-term development was directed towards improving the residents' quality of life and the city's cultural, touristic, and economic character and identity. It was crucial that this development was supported by the city authorities and administration, especially the mayor, which accelerated the planned projects and enhanced cooperation between experts and politicians. Urban regeneration and spatial planning focused primarily on the city center and sustainable and green infrastructure in the sense of reducing traffic, building additional cycle paths, expanding pedestrian areas and public spaces, and opening the city center to its residents and others (visitors, tourists, etc.). The age and neglect of the city center are a constant that prompts every city to seek new solutions and improvements, and Ljubljana opted for a positive and sustainable social, ecological, and urban-planning transformation.

Urban sustainability may be described as a vision of ecologically, economically, and socially responsible urban planning, a holistic vision, or a triangular model that enables sustainable urban development through the reconciliation of the different (ecological, economic, and social) interests in a city [23,24]. Sustainable development is considered a holistic concept that includes four dimensions or pillars: environmental, economic, social, and governance [25]. As the fourth dimension, governance is crucial for implementing changes, which is also evident from the case study at hand. Only when all four dimensions are included can real change and project realizations happen. Of these, the environmental dimension is fundamental, because it improves the quality of life and satisfaction of inhabitants at the local level by increasing public and green spaces in neighborhoods (communities). Therefore, the European Green Capital Award is an annual award that recognizes an outstanding commitment to environmental practices in a single European city [26] (The European Green Capital Award has run since 2008, with the first winner being selected in 2010. Cities are required to have at least 100,000 inhabitants to participate, but there is no upper limit [27]). The European Green Capital

Sustainability **2019**, *11*, 7126 5 of 16

Award (EGCA) is an example of an explanatory tool where a well-defined set of indicators has been collated in order to evaluate the current state of the environmental dimension of sustainability in a city or urban area. Emphasis is placed on long-term strategies for the cities' future, and concrete strategies that have been prepared in a holistic way with all stakeholders and departments involved. The twelve indicators that cover environmental categories of urban environmental sustainability are: 1. Climate change: mitigation 2. Climate change: adaptation 3. Sustainable urban mobility 4. Sustainable land use 5. Nature and biodiversity 6. Air quality 7. Noise 8. Waste 9. Water 10. Green growth and eco-innovation 11. Energy performance 12. Governance [27].



Figure 1. 2016 European Green Capital Award. source: [22].

Most of the twelve indicators for improving the quality of life and applying for the Green Capital Award were met in the case of Ljubljana. "Ljubljana impressed the Jury by the significant transformation which has been made by the city in sustainability over the previous 10–15 years" [22]. In ten years, Ljubljana had to meet and complete many challenging tasks and requirements that European cities seeking to achieve greater sustainability are faced with. Among all the tasks completed, the jury was most impressed with Ljubljana's transport transformation: "This transformation has been achieved in areas including local transport and the pedestrianizing of the city center. From being a city which was previously dominated by car transport, the focus is now on public transport and on pedestrian and cycling networks. The most significant measure that has been taken has been the modification of the traffic regime on the main traffic artery, Slovenia Street (*Slovenska cesta*)" [22] (Figure 2). On the basis of such a transformation:

- There is a more sustainable transportation system within the city enabled by reducing motorized traffic in the city center;
- There is a public rent-a-bike system, several new "park and ride" areas, updated public transport, and an improved network of cycle and pedestrian routes;
- A small number of electric vehicles called "Cavaliers" that offer free transportation within the city center (Figure 3).

Sustainability **2019**, 11, 7126 6 of 16



Figure 2. Slovenia Street (Slovenska cesta) closed for traffic (photo: Dunja Wedam). Source: [28].



Figure 3. Free Ride with the City Center "Cavalier" (photo: Dunja Wedam). Source: [28].

In addition to reducing traffic, expanding pedestrian areas, and transforming the area along the Ljubljanica River (Figure 4), an important task in revitalizing the city center was expanding the green areas. Today a third of Ljubljana's total area is green and the city is one of the highest-ranked EU cities for this indicator. In addition to the existing large urban parks, including the oldest, Tivoli Park, and the Trail of Remembrance and Comradeship (a green ring encircling the city), Ljubljana built five new parks before running for the Green Capital Award. These five new parks were built on degraded land (overgrown riverbanks, abandoned industrial areas, etc.), which amounts to an increase of 40 hectares in four years [29]. Therefore, the jury found that: "Progress has been made in preserving and

Sustainability **2019**, 11, 7126 7 of 16

protecting the green areas which characterize the city and, in the revitalization and transformation of brownfield spaces:

- Today green areas make up nearly three-quarters of the entire territory of the City of Ljubljana (approximately 560 m² of green area per inhabitant or 542 m² of public green space; in the compact city 106 m² of green area per inhabitant or 66 m² of public green space);
- Official documents were made that respect sustainable development;
- Urban green space policy is increasingly being used as a tool to enhance urban resilience;
- This policy enabled city to reduce its urban ecological footprint" [29].



Figure 4. Pedestrian areas along the Ljubljanica River (photo: Dunja Wedam). Source: [28].

Preserving, protecting, and enlarging green areas and modifying the traffic regime in the city core increased the share of public spaces in Ljubljana, which is very important. Considering the vulnerability of public spaces, especially in large cities, the case of Ljubljana was that much more valued. It is through public spaces and returning the city to its residents, who have "the right to the city" [30,31], that a city shows how it is working towards becoming more livable and sustainable despite the commercialization of the space or globalization. "However, the global neoliberal trend posed a major challenge to public goods everywhere, as partly evident in threats facing public space, which has resulted from the restless process of globalization" [32] (p. 5). Meeting most of the twelve criteria set showed that Ljubljana's initial urban vision was not so unrealistic, but was rather in line with the trends of human and healthy cities that ushered in a new era of urbanism, and that in a relatively short time Ljubljana achieved what some western European cities have continued to seek ever since the end of the twentieth century. "Achieving the vision of a lively, safe, sustainable, and healthy cities has become a general and urgent desire. All four key objectives—lively cities, safety, sustainability and health—can be strengthened immeasurably by increasing the concern for pedestrians, cyclists, and city life in general" [16] (p. 6). These goals are included in urban sustainability as the leading trend and method of improving life in cities. Therefore, cities that win the European sustainable or green city title are model cities not only in the EU, but also across the globe, serving as examples of how radical change can truly be achieved.

Sustainability **2019**, 11, 7126 8 of 16

3. Materials and Methods

The case study of Ljubljana as a green capital employed qualitative methods, including semi-structured interviews, focus groups, and participatory observation methods (with photographs). The study was conducted in Ljubljana between 2017 and 2018 on a sample of twenty professional actors (fifteen experts involved in interviews and five in focus groups) specializing in spatial and urban planning or studying spatial change within the city. Interviews and focus groups were held in Ljubljana during 2017 and 2018. Questions and answers were exchanged through e-mail with certain respondents who were unable to attend face-to-face interviews (four of them). Using these methods, the course of the revitalization of Ljubljana's center was able to be thoroughly analyzed to establish and document all the special features of this process. Through interviews with targeted respondents (i.e., experts such as architects, traffic engineers, urban sociologists, art historians, and geographers) appropriate information relevant for the context and subject of this study was obtained about Ljubljana's transformation into a sustainable city. The expert sample included six architects, two urbanists, five sociologists, three traffic engineers, two art historians, and two geographers. All of them are employed at various institutions in Ljubljana professionally related to spatial topics and familiarizing people with the topic of green capital. Their answers were left anonymous for research purposes. Interviews and focus groups consisted of a protocol of questions divided into six categories: 1. The urban revitalization process – documents and actors, 2. The participation process and civil sector, 3. Transportation and public spaces, 4. Green spaces and the green system, 5. Advantages and disadvantages of winning the European Green Capital Award, and 6. Housing. Each of these categories included a set of questions on the basis of which one aspect of Ljubljana's urban revitalization was addressed. From the answers obtained, key translators' statements for each of the categories examined were selected by the transcription method and "traditional" interpretation, which for the purposes of analysis were divided and coded into four basic themes presented and addressed through Sections 4.1–4.4 (the urban revitalization process, the role of social actors, resident participation, and advantages and disadvantages of winning the European Green Capital Award).

4. Results

The results obtained through interviews and focus groups were divided or combined into four themes in terms of the content of individual statements provided by the respondent and the discipline the respondent engaged in.

4.1. The Urban Revitalization Process

Some statements provided by the experts are connected with the revitalization process itself and can thus be classified under the "urban revitalization process" theme, which focuses on individual stages of the revitalization process development and the main achievements and consequences. The experts were asked about positive transformations that benefit both the residents and the entire city in the recent revitalization process, and to point out some projects in Ljubljana's city center that they find the most important.

The positive effects of changes are different for different groups. From the residents' perspective, the quality of life in the city has improved as has the ease of access to the city center (increased variety of available services and it is easier to find parking, but more difficult to access a building by car). (Traffic engineer)

The most important for urban revitalization and renewal of the city? Pedestrian zones and renewal of public spaces (squares, streets) in the medieval center (Old Ljubljana). The renewal of river banks along the Ljubljanica and the closure of Slovenia Street to car traffic. (Architect 4)

Sustainability **2019**, 11, 7126 9 of 16

Various activities (not only parking, which was the case before) are taking place in the city squares, which makes life in the city more active. The quality of air in the city has improved and noise pollution has decreased. (Traffic engineer)

Important improvements have also been achieved in the city's social life, with numerous events being held in public spaces, squares, and streets in the city center. This began to take place after the transformation in order to activate and include residents. (Traffic engineer)

The beginnings were very hard. Up until 2007 Ljubljana was unable to slip from the grasp of the old traffic paradigm, which conceived traffic primarily as car traffic (and focused on its flow) and resolved traffic issues in a manner that is completely outdated today. It was very important to follow the best-practice models from other cities, such as Vienna or Copenhagen, and cooperate with their experts (for instance, with the architect Jan Gehl, who visited Ljubljana in 2009). When the first measures were received extremely positively among the residents and visitors, the process could no longer be stopped. Public support was high and the number of visitors increased significantly. It soon became clear that we were on the right path. (Sociologist 3)

The improvements mentioned above are part of the revitalization process as part of the process of learning new best practices and the environmentalist approach, which included a healthier lifestyle and better quality of life for various population groups in the city. This was not a simple process and it took a while for all the involved parties to adjust to the new behaviors and traffic regulation, and for the preference for car traffic to give way to the benefit of cyclists and pedestrians. In addition, Ljubljana made great efforts to identify with the developed western European cities with which it was historically and traditionally connected and positioned itself as a constituent part of these. It sought to meet the sustainability requirements arising from the Green Capital Award with great precision and thus demonstrate as quickly as possible its role within the context of central European cities or even its role as a model city in certain issues, such as closing streets to traffic and opening them to pedestrians (e.g., Slovenia Street as the main pedestrian street in the city center), and increasing the share of green urban areas.

If 'European Cities' is meant as a general term, Ljubljana has always been one even if it is peripheral in its position compared to other European urban nodes. The latest developments improved its recognizability and gained it the status of a model city in some branches of sustainable development (mobility, waste management, green system and urban greenery, even some policies of social sustainable development). (Architect 1)

4.2. The Role of Social Actors

Within the context of the changes described here, the study further examined which actors were involved in, and influenced, the revitalization. The experts were asked which social actors (political, professional, civil, and economic) have most helped Ljubljana become the green capital. Policy and expert actors proved to be the most important because they promoted cooperation with other important actors, such as experts and citizens, in the implementation of the planned activities. According to respondents, the key actors included Mayor Zoran Janković, the chief city architect Janez Koželj, all the City of Ljubljana departments, the University of Ljubljana, local companies, and partly also national authorities and non-governmental organizations (NGOs—civil organizations from Ljubljana engaged in the protection of public spaces and the quality of life in neighborhoods). The most frequently mentioned, however, was the cooperation between the mayor and the city architect and deputy mayor Janez Koželj, which proved to be a formula for the success of the planned projects.

Many strategies and plans had been carried out prior to the start of the regeneration processes under Jankovic & Kozelj. What was crucial was the managerial ability of the city under the newly elected mayor and his team—he managed to re-organize the city administration to effectively implement the plans. (Architect 1)

The beginning of positive changes in the city's development was based on Janković's pre-election campaign "Za Ljubljano z nasmehom" (For Ljubljana with a Smile), which took place in October 2006. The campaign expressed a clear political will and promise to implement numerous development projects, with a professional team appointed that was capable of preparing the required expert solutions. (Architect 3)

The key role was played by the mayor's team, composed of politicians and experts of various profiles. Companies, too, probably played a certain role (expressing various desires to change the traffic regime), but this was not discussed much in public. (Sociologist 3)

The respondents all agree that the mayor's role was key. It should be noted that highlighting his slogan (i.e., Ljubljana as the most beautiful, greenest, and orderly city in the world) was very important for the residents, who paid great heed to the mayor's promises. They wanted them to be fulfilled and hence also supported them heavily. Support for the mayor also meant support for the expert community, because from the very beginning of the revitalization process, Janković continuously cooperated with experts, especially architects and, first and foremost, the chief city architect Janez Koželj. No project could be carried out without the cooperation between experts and politicians.

Ljubljana has always been green. Yes, certain infrastructure decisions were made by the mayor and the city government, but the people themselves wanted more and more for their city to be green. The people planted trees and gardens or simply didn't bother to trim the existing vegetation and simply let it grow freely. There weren't any major tectonic movements in moving Old Ljubljana towards being a green Ljubljana. The most important step was closing the old town of Ljubljana by the mayor and the willing participation of citizens of the "most beautiful city in the world" and "the most beloved one of all." Jankovič just put a title to what was more or less already there: Ljubljana—the green capital of Europe. (Art historian)

The residents of Ljubljana renounced the old car tradition relatively easily to the benefit of new development and sustainability trends because they were supported by experts. It was even easier to expand the green areas, of which Ljubljana already had many and for which experts claim are traditionally connected with and embedded in urban life. For decades, Ljubljana residents have been enjoying the nearby wooded and hilly areas and spending time in outdoor green areas, where they go for walks and socialize. Slovenians like to spend their free time this way and this has not changed, which is why Ljubljana residents heavily supported the projects of expanding and preserving urban greenery.

4.3. Resident Participation

For this theme, experts were asked whether the city administration has organized workshops, meetings, and fieldwork with citizens in recent years to encourage the participation process. According to respondents, the inclusion of the public or residents in the process (i.e., participation) was done more at the level of political and media promotion than systematically. Politicians tried to become involved and include the residents, but first and foremost they wanted to obtain approval for new projects. Ambitious promotions were tailored by the city offices and the City of Ljubljana, but no actual long-term stage of participatory planning took place. There is some participation, but this remains insufficient or is not respected and thus needs to be improved.

The approach to participatory urban planning has been fragmented and not made part of the mainstream. The City of Ljubljana has some programmes and schemes that support citizen participation, but these activities are not set into a comprehensive approach with added final values. This support is most often one-time and/or concrete project oriented, while the city still has to develop more sustainable forms of participatory city making. There is still a weak consensus that the participatory process is a long-term activity and has to be developed gradually. (Architect 1)

Sustainability **2019**, 11, 7126 11 of 16

Programming and implementing the renewal of residential neighborhoods and planning public spaces is a long-term and distinctly interdisciplinary process, which requires the ongoing participation of the residents. This project actually has no concrete political support and also lacks an ongoing interdisciplinary approach. The paralysis is further enhanced by the territorial organization of residents into neighborhood communities, which bring together highly diverse former residential neighborhoods. (Architect 3)

No, there was very little participation of the civil society in these changes, the needs of downtown residents for delivery access and parking were mostly ignored, and the residents were not informed of the changes. The beginning of the transformation of the immediate city center into a pedestrian zone was in fact only partly legal, with a temporary closure of Wolf Street [a narrow street in the heart of the city center], which soon turned into a permanent closure. (Sociologist 3)

Cooperation between the city administration, residents, and NGOs is crucial for high-quality bottom-up revitalization. However, as reported by respondents, there has never been any real participation in Ljubljana, either partial or full, and residents have never been included in an appropriate manner. The city authorities did not even address certain key issues, such as the closure of individual roads and streets, to the residents. It is true that the city administration was key in implementing the revitalization plan, especially for the city center, but in the long run decisions in this regard were primarily political. Nonetheless, these decisions were ultimately positive because expanding the pedestrian zones was definitely in line with the aforementioned vision of the city development, which also resulted in relatively strong support from the residents. The same was true of the arrangement of new public spaces.

4.4. Advantages and Disadvantages of Winning the European Green Capital Award

Winning the European Green Capital Award showed that the urban sustainability efforts had been the right choice and had significantly helped improve the residents' quality of life. The experts were asked which social and economic changes have been crucial for the improvement to Ljubljana to become the Green Capital. This also means emphasizing the advantages and disadvantages for the city center and the quality of life. In addition to the positive effects of revitalization mentioned above, most experts drew attention to certain shortcomings that still exist and need to be considered. These include the inadequate participatory process and superficial changes or the "beautification" of the city, which attracts increasingly more tourists and results in the city center being adapted only to the needs of tourists and visitors, and not residents. This involves "touristification," which today affects more and more European cities, causing ever more negative consequences for the city centers and living conditions in them. In addition, the experts interviewed highlight certain important projects that have not yet been realized, such as the regulation of public transport (bus and rail) or the renovation of both main bus and railway stations, which are close to the city center, but have not yet been included in the renewal.

The center has witnessed a successful "beautification," which appeals to both locals and tourists. The projects at the periphery have mostly been infrastructural (new sewer lines and waste treatment, new water pipes, etc.). PPP [public-private partnership] projects have mostly failed—the Emonika [Ljubljana travel center with train and bus station], Stožice [sports and commercial center], Kozolec II parking garage, etc. And the participation process was hardly ever implemented. (Architect 4)

The 2016 European Green Capital Award definitely proves that the city is no longer a follower, but a leading city. In terms of sustainable mobility, it is primarily necessary to improve public transport, even though certain important steps have already been taken. (Architect 1)

International recognition that the measures taken have been appropriate, presenting Ljubljana as a best-practice example across Europe (which provided new impetus for politicians to implement

similar measures): for example, selecting Ljubljana as a CIVITAS Forum Conference host, etc. (Traffic engineer)

Income has definitely gone up, the people have more high-quality public spaces, the air quality has improved, and there is less traffic noise. However, the issue of logistics and delivery in the city center has still not been satisfactorily resolved, because conflicts between pedestrians/cyclists and delivery vehicles continue to arise in this area in the morning. Residents' access to their housing is still pretty impractical because the same rules apply to them as for businesses. The population in the city center continues to decline and increasingly more owners choose to rent their properties through AirBnB, which further increases the housing prices and accelerates relocation. The city center is experiencing touristification: increasingly more businesses are primarily intended for tourists and there is increasing noise from the streets, which is decreasing the quality of life. (Sociologist 3)

City representatives and the expert community are exclusively paying attention to the planned commercial development (especially the Emonika high rise), whereas the public urban redevelopment has not been concretely presented, nor has any information been provided about planning their implementation. Attention is constantly being redirected towards commercial developers, whereas the public urban plans and the City of Ljubljana's tasks have not even been revealed. In addition, there is no update on designing the national spatial plan for the Ljubljana Railway Hub; the government last discussed this topic in 2010. Both projects should be planned in a complimentary manner. They are of strategic importance for the city and it is urgent to at least implement the basic traffic changes and improvements, including the renovation of the bus station, which is a huge disgrace for the city. (Architect 3)

Another major problem is the chemical waste dump along the Ljubljanica River, because whatever seeps from it into the river also arrives in the city with the river. The entire freight [railway] transport also runs through the center of Ljubljana and is a catastrophe. The air quality is another problem, because in winter the air remains polluted for one hundred days due to the valley and the surrounding hills, which is bad for a green capital. (Sociologist 1)

Money is spent on beautifying the city to make it pretty, and from the three criteria defined by Louis Wirth [an American sociologist] only one thing essential for the life in the city stands out. Therefore, a green capital is something that's in fashion. The green color gives it form, everything else is pro forma. (Sociologist 2)

Based on these expert statements, it is clear that substantial efforts have been made to improve the quality of life in the city but also that many changes still await Ljubljana. However, given the criteria Ljubljana had to meet and despite all the criticism expressed by individual respondents, the majority of the criteria were fulfilled, and positive effects are visible on a daily basis. As pointed out by some of the experts, Ljubljana has become a leading city in certain urban sustainability issues, especially mobility and the green system.

5. Discussion and Conclusions

The overview of Ljubljana's (spatial) development and interviews and focus groups conducted with experts confirmed the hypothesis that the revitalization of Ljubljana's center is directed towards western European and globalization development patterns and that in ten years revitalization efforts have transformed Ljubljana from a post-socialist city into a sustainable city. These tendencies were connected with Slovenia's entry into the EU and into western European spatial and global trends, which already at that time were guided by the principles of sustainability, green infrastructure, and better quality of life in EU cities [33,34]. By entering the EU, many cities in the former central and eastern European socialist countries, including Ljubljana, sought to solve these problems by relying on Europeanization and internationalization processes, which were defined as new socio-spatial trends

because they proceed from the principles of urban sustainability. However, Ljubljana's successful path of development differs from that of other post-socialist cities. The reasons for this clearly lie in the different approaches to urban space development, which in the case of Ljubljana relied on planning revitalization processes that will benefit the city and its residents in the long run, rather than only on short-term goals and partial interests of certain political and economic actors, which remains typical of certain post-socialist cities. For this reason, the case of Ljubljana makes an important contribution to the knowledge of the successful transition from a post-socialist city to a sustainable city.

After 2004, Ljubljana entered a phase that saw the adoption of new spatial documents, especially those that offered a new development direction in line with the urban sustainability guidelines on which Ljubljana's new urban projects were to be based. These projects are successful best-practice examples that can be defined as a deviation from the post-socialist context of stagnation or lagging behind. Because most conditions for winning the European Green Capital Award set by the European Commission were very difficult to meet in the city's everyday life, the case of Ljubljana is more important, having trodden this path during the period of its transition from the former regime. The long-term urban planning vision adopted by the mayor and the City of Ljubljana was the first important step toward change, which they have been implementing together over the past ten years. Since 2007 and the adoption of the first major planning document (i.e., the Vision of the City of Ljubljana by 2025), Ljubljana has been dubbed a sustainable and ideal city. In this context, twenty-two major projects have been defined for completion by 2025, largely determining Ljubljana's course of development. The mayor received support in this process because he himself highlighted the importance of experts and therefore they played the primary role together. It referred to the extensive and integrated promotion that the city administration carried out for many years, trying to include the residents and persuade them to support the positive and distinctly visionary changes. Most experts interviewed also highlighted the successful role of politics in the case of Ljubljana, reporting that the advantages prevailed over the disadvantages. Winning the European Commission's 2016 European Green Capital Award was definitely the most important advantage of the revitalization process.

It is important to highlight the projects connected with mobility, sustainability, health, and improving the quality of life in the city. The city center was gradually converted into a pedestrian zone in line with the new traffic paradigm, which reduced traffic and expanded the pedestrian and bicycle zones. Expanding the streets as public spaces also led to an expansion of urban greenery and the opening of new urban squares. In terms of green areas per resident, Ljubljana ranks among the leading European cities. These changes provided new opportunities for the cultural and economic role of the city center, which has now been altered and attracts more residents, with many new restaurants, cafes, and hotels being opened and new promenades arranged along the Ljubljanica River. All of this makes the city very attractive to both the locals and foreign visitors (tourists). However, increased visits to the city are often accompanied by certain negative consequences highlighted by some of the experts, such as the city center being overcrowded with guests, renting housing in the city center to tourists, and the loss of the center's residential role, which is often the case with tourist cities in Europe and elsewhere. This potential loss of urban identity is bad for all such cities and Ljubljana's urban policy will also have to address this aspect of the city center's revitalization. A certain share of the experts interviewed also expressed criticism towards the heavy beautification of the city center, which only displays the external or surface character of the city and conceals larger and more important problems that have remained unsolved for many years (e.g., railway freight transport running through the city center and the outdated railway and bus stations near the city center). In addition to this shortcoming, there was also no real citizen or resident participation in this process, except at the formal planning level, as shown by the results of this study.

Regardless of its shortcomings, winning the European Green Capital Award created a positive public opinion in Ljubljana about the city's transformation, which is an important contribution to raising the residents' awareness about the importance of sustainable transformation and changes in behavior and actions at all levels of society. A big step forward has been achieved, because for

its residents the city has also become a source of pride and desire for further planning and change through which Ljubljana would remain a model city in terms of urban sustainability and improving the urban residents' quality of life. This is because, as the results have shown, the biggest advantages of this development include improving the quality of life for most residents, strengthening public interests, and fulfilling public needs. This can be clearly seen in the case of Ljubljana, but it is (or will) be difficult to achieve in many other post-socialist cities of central and eastern Europe. According to Pichler-Milanović et al. [35] (p. 125), the consequences of urban growth in post-socialist cities are predominantly economic and social, "Emerging economic reforms, such as demand for global and European integration, are also diminishing social cohesion and increasing social and spatial differences between ethnic and socio-economic groups in Central and Eastern European cities." Especially the capitals that used to be closely connected with Ljubljana—that is, the capitals of the other former Yugoslav countries, such as Zagreb (Croatia), Belgrade (Serbia), Skopje (Northern Macedonia), Sarajevo (Bosnia-Herzegovina), Pristina (Kosovo), and Podgorica (Montenegro) are experiencing a completely different urban transformation in comparison to Ljubljana, mostly a neoliberal and transitional form, which shows very clear and often negative consequences for the urban environment. In these cities, the consequences of transitioning from a socialist to post-socialist city can be briefly summarized as problems related to denationalization of property and production, the decline of former companies, the stagnation of the largest state-owned companies, deindustrialization, increased unemployment, and negative demographic trends, especially emigration and increasing differences between social classes with new lifestyles, which are consumer-driven. In the future it would therefore make sense to conduct a comparative analysis of urban development in these cities, approaching these cities through examples of good practice and principles of urban sustainability. Ljubljana can serve as a perfect model city for them.

Author Contributions: Both named authors (A.S.G. and B.K.) have (a) made substantial contributions to the concept and design and to the analysis and interpretation of data, (b) participated in drafting the article and revising it critically for important intellectual content, and (c) given final approval to the version to be published.

Funding: This article is based on the findings of a research project (grant no. BI-HR/18-19-029) financially supported by the Slovenian Research Agency (ARRS, *Javna agencija za raziskovalno dejavnost RS*) and Ministry of Science and Education (MZO, *Ministarstvo znanosti i obrazovanja*).

Acknowledgments: The authors are grateful to Donald Reindl for providing language help, writing assistance, and proofreading. The research was financially supported by the Slovenian Research Agency (ARRS, *Javna agencija za raziskovalno dejavnost RS*) and Ministry of Science and Education (MZO, *Ministarstvo znanosti i obrazovanja*), grant no. BI-HR/18-19-029.

Conflicts of Interest: The authors declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Ethics Statement: This study did not raise any ethical issues.

References

- 1. Sykora, L.; Stanilov, K. The Challenge of Postsocialist Suburbanization. In *Confronting Suburbanization: Urban Decentralization in Postsocialist Central and Eastern Europe*, 1st ed.; Stanilov, K., Sykora, L., Eds.; John Wiley & Sons: Hoboken, NJ, USA, 2014; pp. 1–32.
- 2. Stanilov, K. Political Reform, Economic Development, and Regional Growth in Post-Socialist Europe. In *The Post-Socialist City: Urban Form and Space Transformations in Central and Eastern Europe after Socialism*, 1st ed.; Stanilov, K., Ed.; Springer: Dordrecht, The Netherlands, 2007; pp. 21–34.
- 3. Enyedi, G. Urbanization under Socialism. In *Cities after Socialism: Urban and Regional Change and Conflict in Post-Socialist Societies*, 1st ed.; Andrusz, G., Harloe, M., Szelenyi, I., Eds.; Blackwell Publishers: Oxford, UK, 1996; pp. 100–118. [CrossRef]
- 4. Sykora, L.; Bouzarovski, S. Multiple Transformations: Conceptualising the Post-communist Urban Transition. *Urban Stud.* **2012**, *49*, 43–60. [CrossRef]

Sustainability **2019**, 11, 7126 15 of 16

5. Pušić, L. Rasprodaja gradova u Srbiji kao posledica društvenih promena u prostoru. In *Akteri Društvenih Promjena u Prostoru: Transformacija Prostora i Kvalitete Života u Hrvatskoj*, 1st ed.; Svirčić Gotovac, A., Zlatar, J., Eds.; Institute for Social Research in Zagreb: Zagreb, Croatia, 2012; pp. 83–99.

- 6. Vujović, S. Akteri preduzetničkih gradova u igri moći—primer Srbije. In *Akteri Društvenih Promjena u Prostoru: Transformacija Prostora i Kvalitete Života u Hrvatskoj*, 1st ed.; Svirčić Gotovac, A., Zlatar, J., Eds.; Institute for Social Research in Zagreb: Zagreb, Croatia, 2012; pp. 51–63.
- 7. Seferagić, D. Pyramidal Network of Towns. Sociologija Sela 2005, 43, 579–617.
- 8. Svirčić Gotovac, A.; Zlatar, J. Urban Processes in Zagreb. Residential and Commercial Developments. *Geografski Geografski Glasnik* **2015**, 77, 29–45. [CrossRef]
- 9. Hirt, S. *Iron Curtains: Gates, Suburbs and Privatization of Space in the Post-Socialist City,* 1st ed.; John Wiley & Sons: Hoboken, NJ, USA, 2012.
- 10. Offe, C. Microaspects of Democratic Theory: What Makes for the Deliberative Competence of Citizens? In *Democracy's Victory and Crisis*; Hadenius, A., Ed.; Cambridge University Press: Cambridge, UK, 1997; pp. 81–104.
- 11. Tsenkova, S.; Nedović-Budić, Z.; Marcuse, P. The Urban Mosaic of Post-Socialist Europe. In *The Urban Mosaic of Post-Socialist Europe. Space, Institutions and Policy,* 1st ed.; Tsenkova, S., Nedović-Budić, Z., Eds.; Physica: Heidelberg, Germany, 2006; pp. 3–21.
- 12. Pichler-Milanović, N.; Zavodnik Lamovšek, A. Urban Land Use Management in Ljubljana: From Competitiveness to Sustainability—or Vice Versa? In *Liveable, Healthy, Prosperous Cities for Everyone, Proceedings of the 15th International Conference on Urban Planning, Regional Development and Information Society, Vienna, Austria, 18–20 May 2010*; Schrenk, M., Ed.; Competence Center of Urban and Regional Planning: Schwechat-Rannersdorf, Austria, 2010; pp. 817–825.
- 13. Koželj, J. The Vison of Ljubljana. In *Ljubljana: Portrait of a City*, 1st ed.; Mihelič, B., Kerbler, B., Eds.; Urban Planning Institute of the Republic of Slovenia: Ljubljana, Slovenia, 2014; pp. 56–69.
- 14. Pichler-Milanović, N.; Foški, M. Green Infrastructure and Urban Resilience in Central Europe: A Solution for Environmental and Spatial Challenges in the Inner-City of Ljubljana, Slovenia. *Urbani Izziv* **2015**, *26*, S50–S64. [CrossRef]
- 15. Tosics, I. European Urban Development: Sustainability and the Role of Housing. *J. Hous. Built Environ.* **2004**, 19, 67–90. [CrossRef]
- 16. Gehl, J. Cities for People, 1st ed.; Island Press: Washington, DC, USA, 2010.
- 17. Hodson, M.; Marvin, S. Urbanism in the Anthropocene: Ecological Urbanism or Premium Ecological Enclaves? *City* **2010**, *14*, 298–313. [CrossRef]
- 18. Chatterton, P. Towards an Agenda for Post-Carbon Cities: Lessons from Lilac, the UK's First Ecological, Affordable, Cohousing Community. *Int. J. Urban Reg. Res.* **2013**, *37*, 1654–1674. [CrossRef]
- 19. Wolfe, C.R. *Urbanism without Effort. Reconnecting with First Principles of the City*, 1st ed.; Island Press: Washington, DC, USA, 2019.
- 20. Girardet, H. Creating Sustainable Cities, 1st ed.; Green Books: Totnes, UK, 1999.
- 21. Pacione, M. Sustainable Urban Development in the UK: Rhetoric or Reality? *Geography* 2007, 92, 248–265.
- 22. European Commission. European Green Capital, Winning cities, 2016—Ljubljana. 2016. Available online: https://ec.europa.eu/environment/europeangreencapital/winning-cities/2016-ljubljana/ (accessed on 9 December 2019).
- 23. Campbell, S. Green cities, growing cities, just cities? Urban planning and the contra-dictions of sustainable development. *J. Am. Plan. Assoc.* **1996**, *62*, 296–312. [CrossRef]
- 24. Brand, P. Green subjection: The politics of neoliberal urban environmental management. *Int. J. Urban Reg. Res.* **2007**, *31*, 616–632. [CrossRef]
- 25. Hiremath, R.B.; Balachandra, P.; Kumar, B.; Bansode, S.S.; Murali, J. Indicator-Based Urban Sustainability—A Review. *Energy Sustain. Dev.* **2013**, *17*, 555–563. [CrossRef]
- 26. Berrini, M.; Bono, L. Measuring Urban Sustainability: Analysis of the European Green Capital Award 2010 & 2011 Application Round, 1st ed.; Ambiente Italia: Milan, Italy, 2010.
- 27. Science Communication Unit. *Science for Environment Policy: Indicators for Sustainable Cities*, 1st ed.; University of the West of England: Bristol, UK, 2018.
- 28. Ljubljana Tourism. Ljubljana City Life. 2019. Available online: https://www.visitljubljana.com/en/media/photo-library/ljubljana-city-life/ (accessed on 9 December 2019).

Sustainability **2019**, 11, 7126 16 of 16

29. Green Urban Areas. Available online: https://ec.europa.eu/environment/europeangreencapital/wp-content/uploads/2014/07/Indicator_3_Ljubljana_2016.pdf (accessed on 18 October 2019).

- 30. Lefebvre, H. The Production of Space, 1st ed.; Blackwell: Oxford, UK, 1991.
- 31. Harvey, D. The right to the city. In *Rebel Cities: From the Right to the City to the Urban Revolution*, 1st ed.; Harvey, D., Ed.; Verso: London, UK, 2012; pp. 3–25.
- 32. Madanipour, A. Whose Public Space?: International Case Studies in Urban Design and Development, 1st ed.; Routledge: Abington, UK, 2010.
- 33. Nijkamp, P.; Perrels, A. Sustainable Cities in Europe: A Comparative Analysis of Urban Energy-Environmental Policies, 1st ed.; Earthscan: London, UK, 1994.
- 34. Beatley, T. Green Urbanism: Learning from European Cities, 1st ed.; Island Press: Washington, DC, USA, 2000.
- 35. Pichler-Milanović, N.; Gutry-Korycka, M.; Rink, D. Sprawl in the Post-Socialist City: The Changing Economic and Institutional Context of Central and Eastern European Cities. In *Urban Sprawl in Europe Landscapes, Land-Use Change & Policy,* 1st ed.; Couch, C., Leontidou, L., Petschel-Held, G., Eds.; Wiley-Blackwell: Hoboken, NJ, USA, 2007; pp. 102–133.



© 2019 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).