



UNIVERSITÀ  
DEGLI STUDI  
FIRENZE

FLORE

## Repository istituzionale dell'Università degli Studi di Firenze

### **Reforming Housing Policies for the Sustainability of Historic Cities in the Post-COVID Time: Insights from the Atlas World Heritage**

Questa è la Versione finale referata (Post print/Accepted manuscript) della seguente pubblicazione:

*Original Citation:*

Reforming Housing Policies for the Sustainability of Historic Cities in the Post-COVID Time: Insights from the Atlas World Heritage / Giuseppe De Luca, Ahmadrza Shirvani Dastgerdi, Carlo Francini. - In: SUSTAINABILITY. - ISSN 2071-1050. - ELETTRONICO. - 13:(2021), pp. 1-12. [10.3390/su13010174]

*Availability:*

The webpage <https://hdl.handle.net/2158/1219934> of the repository was last updated on 2020-12-28T09:49:38Z

*Published version:*

DOI: 10.3390/su13010174

*Terms of use:*

Open Access

La pubblicazione è resa disponibile sotto le norme e i termini della licenza di deposito, secondo quanto stabilito dalla Policy per l'accesso aperto dell'Università degli Studi di Firenze (<https://www.sba.unifi.it/upload/policy-oa-2016-1.pdf>)

*Publisher copyright claim:*

La data sopra indicata si riferisce all'ultimo aggiornamento della scheda del Repository FloRe - The above-mentioned date refers to the last update of the record in the Institutional Repository FloRe

(Article begins on next page)

## Article

# Reforming Housing Policies for the Sustainability of Historic Cities in the Post-COVID Time: Insights from the Atlas World Heritage

Ahmadreza Shirvani Dastgerdi <sup>1,\*</sup>, Giuseppe De Luca <sup>2</sup> and Carlo Francini <sup>3</sup><sup>1</sup> Department of Natural Resources & the Environment, Cornell University, Ithaca, NY 14853, USA<sup>2</sup> School of Urban and Regional Planning, University of Florence, 50121 Firenze, Italy; giuseppe.deluca@unifi.it<sup>3</sup> Florence World Heritage and UNESCO Relationship Office at the Municipality of Florence, 50123 Firenze, Italy; carlo.francini@comune.fi.it

\* Correspondence: as4257@cornell.edu

**Abstract:** In recent years, finding affordable housing has been a notable challenge for the residents of historic cities in Europe. This paper aims to develop a novel vision for improving housing policies in the post-COVID time to moderate the long-lasting issue of affordable housing in historic cities. The research was developed based on the findings of the Atlas World Heritage in 2019. In this project, five European Art Cities, namely Florence, Edinburgh, Bordeaux, Porto, and Santiago de Compostela, discussed their common management challenges through the shared learning method. Focusing on the case study of Florence and using a mixed-method, we collected data through the municipality of Florence, map analysis, and distribution of a questionnaire among the city residents. Then, we used inductive reasoning to explain how reforming housing policies in the post-COVID time could moderate the long-lasting issue of affordable housing in historic cities. The findings suggest that housing policies need to be supported simultaneously at both international and local levels. From the international perspective, associated cultural heritage organizations, like United Nations Educational, Scientific and Cultural Organization (UNESCO) and its advisory bodies and the World Tourism Organization (UNWTO), need to develop restriction policies that manage tourism flows in historic cities like increasing the airline taxation. At the local level, Florence needs decisive housing policies that ban the growth of illegal tourist accommodation in the city. However, the privilege of establishing new hotels can be awarded in suburban or rural areas to support sustainable tourism goals.

**Keywords:** historic cities; housing policies; tourism management; sustainable urban planning; Atlas World Heritage; COVID-19 pandemic



**Citation:** Shirvani Dastgerdi, A.; De Luca, G.; Francini, C. Reforming Housing Policies for the Sustainability of Historic Cities in the Post-COVID Time: Insights from the Atlas World Heritage. *Sustainability* **2021**, *13*, 174. <https://dx.doi.org/10.3390/su13010174>

Received: 29 November 2020

Accepted: 23 December 2020

Published: 27 December 2020

**Publisher's Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



**Copyright:** © 2020 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 (<https://creativecommons.org/licenses/by/4.0/>).

## 1. Introduction

Tourism is not only an industry with notable economic benefits but also with the potential for strengthening conservation efforts in historic cities [1]. Tourism can help to protect cultural heritage sites, transmit cultural values through education and interpretation, and support research and development of environmental practices [2,3]. Based on a participatory and bottom-up approach to identifying cultural heritage values [4–6], many studies have developed new strategies for promoting cultural tourism in historic cities [7–9]. Cultural tourism is also recognized as a useful conservation tool for the protection of historical minority-dwelled neighborhoods [10,11].

Globally, international tourist arrivals increased from 25 million in 1950 to 278 million in 1980 and 674 million in 2000 [12]. According to United Nations World Tourism Organization (UNWTO) statistics, this growth has almost doubled in the last two decades, noting that 1.5 billion international tourist arrivals were recorded in 2019. A four percent growth in tourism flows in 2020 was also foreseen by the UNWTO [13]. However, the occurrence of the COVID-19 pandemic dismissed this prediction.

Tourism development through the United Nations Environmental, Scientific and Cultural Organization (UNESCO) World Heritage brand has been usually recognized as an economic regeneration tool by the state parties [14]. However, the World Heritage Committee has encountered a series of tourism-related concerns in these sites in terms of physical, social, and environmental issues [3]. Article seven of the World Heritage Tourism Programme states that “if undertaken responsibly, tourism can be a driver for preservation and conservation of cultural and natural heritage and a vehicle for sustainable development. However, if unplanned or not properly managed, tourism can disrupt social, cultural, and economical features of the site, and devastate fragile environments or local communities” [15]. In 2018, the Oxford English Dictionary introduced the word “overtourism” [16]. It refers to a place that hosts excessive numbers of tourists and in which the quality of life or the spatial experience has deteriorated unacceptably [17–19]. Overtourism can be considered the opposite of sustainable tourism, where tourism creates more livable places and more delightful visiting experiences [20]. The development of low-cost transportation services, like cheap flights, can be considered the most influential factor in the emergence of overtourism [21]. It is also claimed that the changing flows of capital into the real estate market combined with overtourism enhance the significance of consumption-oriented activities in residential areas and encourage gentrification [22].

## 2. Literature Review

### 2.1. *Historic Cities and Challenges of Overtourism*

Overtourism is a complicated and multi-dimensional phenomenon that threatens the residents' quality of life in historic sites. In recent years, the uncontrolled growth of international tourism has increased the physical pressure on transportation services, public spaces, and museums [23]. This phenomenon has led to the emergence of various problems in World Heritage Sites in terms of security concerns, city accessibility, and environmental sustainability [24]. UNESCO World Heritage Cities have a limited capacity to adapt to overtourism pressure and are fragile to the consequences of globalization. Overtourism can easily affect the social, economic, and environmental conditions of these places, and in worsening scenarios, it can lead to conflicts between residents and tourists. Thus, novel heritage policies in the post-COVID-19 time must pay attention to the strategies that boost the residents' quality of life and mitigate the overtourism impacts on World Heritage Sites [20].

A survey of 26,000 residents in Europe in 2017 revealed that approximately two in five believed that overtourism poses a severe threat to the conservation of cultural heritage sites. Some residents stated that the rapid growth of tourist accommodations due to overtourism had disrupted their daily activities and influenced the identity of their cities [25,26]. A study by Diaz-Parra and Jover in Seville (2020) showed that the overtourism and lifestyle migrants could potentially shrink or even deprive a social right to the city [27].

In Barcelona, overtourism has driven real estate prices much higher in the property market. It means that city residents are obliged to borrow a higher amount in loans to buy a house or to pay more expensive rents for their accommodations due to high demand by tourists [28]. Research conducted by Horn and Merante (2017) in Boston showed that a one standard deviation increase in Airbnb listings is associated with an increase in asking rents of 0.4% [29]. A study on New York City revealed that Airbnb had opened a new potential income flow into housing markets, which is systematic but geographically uneven, creating a new form of rent gap in culturally popular and internationally recognizable areas [30].

Considering the social and political context of overtourism in Barcelona [31], Alvarez-Sousa (2018) suggests that sustainable tourism planning must be carried out before conflicts and violence occur in historic cities. It also highlights the important role of local governments in the planning process, as they are most familiar with local communities' interests and problems [32,33]. By analyzing the implementation level of smart solutions, Hernández et al. (2019) showed that Spanish local governments had developed no technological solutions to address overtourism issues in the four destinations of Donostia-San Sebastián,

Madrid, Málaga, and Valencia [34]. Furthermore, it has been stated that a difference exists between the perception of residents and management organizations about overtourism [35].

According to UNWTO (2018), “it is critical to understand residents’ attitude towards tourism to ensure the development of successful sustainable tourism strategies” [36]. In a survey on the historic city of Toledo, Escudero Gómez (2019) also encourages the site managers and planners to understand the perspective of the residents in playing down the potential negative impact of tourism and to achieve support from the host community in regards to tourism [37].

## 2.2. *The Identification of Overtourism in Florence*

In 2012, the UNESCO relationship office in the Municipality of Florence was requested to review and comment on the notes made by the advisory bodies—International Council on Monuments and Sites (ICOMOS), the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM), and the International Union for Conservation of Nature (IUCN)—regarding the revision and update of the Statement of Outstanding Universal Value of the Historic Centre of Florence according to the new format. In June 2014, during the 38th session of the World Heritage Committee, after examining the document WHC-14/38 COM/8E, the Committee accepted and adopted the Retrospective Statement of Outstanding Universal Value of the Historic Centre of Florence. The new statement of Outstanding Universal Value clearly identifies some of the most significant threats to the integrity of the World Heritage Site: “many of the threats to the Historic Centre of Florence relate to the impact of overtourism, such as urban traffic pollution, and of the decreasing number of residents” [38].

In the Site Management Plan’s update of 2016, the threat of overtourism was clearly identified and addressed [39]. Moreover, in the subsequent management plan of 2018—within the actions defined to cope with the threats to the integrity of the “outstanding universal value”—a series of projects have been identified to tackle the overtourism issue, for example, the project “Study on the Load Capacity of the Historic Centre of Florence,” which started in 2017 and is still ongoing, in collaboration with the joint laboratory Heritage Research Lab at the University of Florence and the UNESCO relationship Office at the Municipality of Florence. This project proves our full awareness of the threat induced by overtourism to the outstanding universal value of the Historic Centre of Florence site, as well as the launch of mitigation and regulatory measures [40].

## 2.3. *Suspension of Overtourism Due to the COVID-19 Pandemic*

By the end of December 2019, many samples of pneumonia were reported in Wuhan in China. On January 9, 2020, a new coronavirus was explored as the causative infective agent and termed COVID-19 [41,42]. The virus was never identified before it was reported in Wuhan in December 2019. The new coronavirus is a respiratory virus that spreads primarily through close contact with an infected person (droplets of saliva, coughing, and sneezing) or touching a surface contaminated with the virus, and then touching mouth, nose, or eyes before washing the hands [43]. The spread of severe acute respiratory syndrome COVID-19 was announced as a global pandemic by the World Health Organization, hitting over 100 countries in a matter of weeks [44].

The pandemic has led to a recession in the world economy and suspended tourism activities in Europe. In this instance, Italy was associated with overtourism for many years due to its outstanding cultural features and UNESCO World Heritage Sites. Many tourism specialists are debating now if tourism businesses could ever be fully recovered in Italy after the national lockdown [45]. While most of the attention is on recovery methods of tourism in post-COVID time, there is a need for more effective tourism development plans to go beyond the business case and consider outside the box to guarantee both an excellent experience for the tourist and sustainability for the destination [46]. The research hypothesis is that the continued growth of illegal housing in the post-COVID period not only exacerbates the housing problem but also endangers public health in historic cities.

This study explores how the long-lasting issue of affordable housing in historic cities can be moderated in post-COVID time through the reformation of housing policies.

### 3. Materials and Methods

#### 3.1. Method

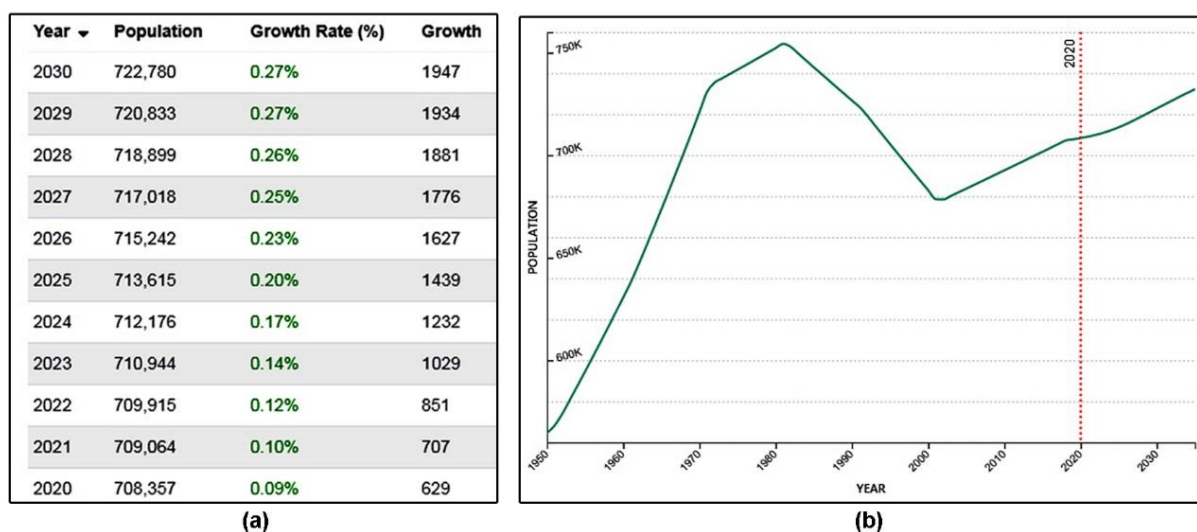
The research was developed based on the finding of Atlas World Heritage in 2019 [20]. In this project, five European Art Cities, Florence, Edinburgh, Bordeaux, Porto, and Santiago de Compostela, discussed their common management challenges through the shared learning method. This study focuses on Florence's experience, as the city has suffered remarkably from the unusual growth of low-quality and illegal tax-system tourist accommodations [47]. The Atlas project was developed based on a shared learning methodology. Shared learning refers to the process of working as a team and sharing knowledge to achieve better results for complex problems under conditions of uncertainty [48]. We collected data through a mixed-method that promotes quantitative and qualitative data within single research [49], including the Municipality of Florence statistics, map analysis, and distribution of a questionnaire among the city residents.

The questionnaire was designed in the Department of Architecture at the University of Florence in November 2018 to understand individuals' perception of the Historic Center of Florence. It consisted of 18 closed-ended plus two open-ended items. The questionnaire's validity was controlled using related research in this field [50] and approved by the department panel of experts. Using the Cochran formula and an error level of 5%, a sample size of 384 people were selected randomly in the Historic Centre of Florence. Then, the filled questionnaires were analyzed by descriptive statistics and logistic regression tests [51].

Quantitative data were examined through narrative analysis. By addressing some speculations about the outbreak of the COVID-19 virus in Italy, we point out the link between illegal tourist accommodation and public health concerns in the post-COVID time. Finally, we use inductive reasoning to infer how reforming housing policies can moderate the challenge of affordable housing in historic cities in the post-COVID time.

#### 3.2. Case Study

Florence is the capital of the Tuscany region, with nearly 382,000 residents (Figure 1), and a metropolitan hinterland with almost 708,000 inhabitants in 2020. The city has a total surface area of approximately 102.4 square kilometers. Considering the city's inhabitants were 383,083 in 2016, the population density comes to about 3700 individuals residing per square kilometer [52].



**Figure 1.** (a) Forecast of Florence's population growth in the next decade; (b) Florence's demographic changes over the past decades [52].

Florence is the symbol of the Renaissance and rose to economic and cultural pre-eminence under the Medici in the 15th and 16th centuries. Its 600 years of outstanding artistic activity can be observed above all in the 13th-century cathedral (Santa Maria del Fiore), the Church of Santa Croce, the Uffizi, and the Pitti Palace, and the work of great masters such as Giotto, Brunelleschi, Botticelli, and Michelangelo. With an area of 505 hectares, the Historic Centre of Florence (N43 46 23.016 E11 15 21.996) was inscribed on the UNESCO World Heritage List as a remarkable World Heritage Site in 1982 [53]. Florence is an Art City that people like to visit to experience the classic Italian lifestyle, but it is also home to a resident population that increases in number each year. The current population is 382,808 people, with 53% of the population female and 47% male. Florence's current growth rate is 3.22%, with the average Italian growth rate at 3.56% [52]. The UNESCO relationship office at the Municipality of Florence, as the party responsible for the site, has created an ad hoc office responsible for the Management Plan and to carry out tasks for the site's conservation and development. The Management Plan works to safeguard and conserve the urban structure and maintain and increase the relationship between traditional social-economic practices and the city's cultural heritage [53].

#### 4. Results

##### 4.1. Tourist Accommodation Growth before the COVID-19 Pandemic

Although tourist presence can contribute to the sustainable development of economic and social conditions for the residents, it can also provoke the rise of environmental pressures. If the adverse consequences exceed the advantages, historic centers suffer from altering their environmental, economic, and social structure. According to the Municipality of Florence, the city has experienced a growth of 28% in the tourist presence from 2012 to 2017. The number of presences has always grown over these years, and by as much as eight percent between 2016 and 2017 (Figure 2).

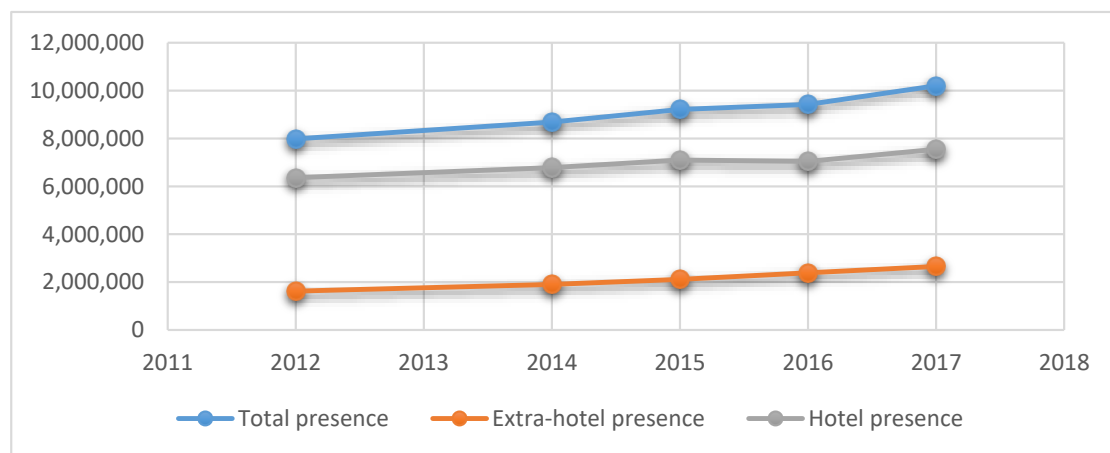
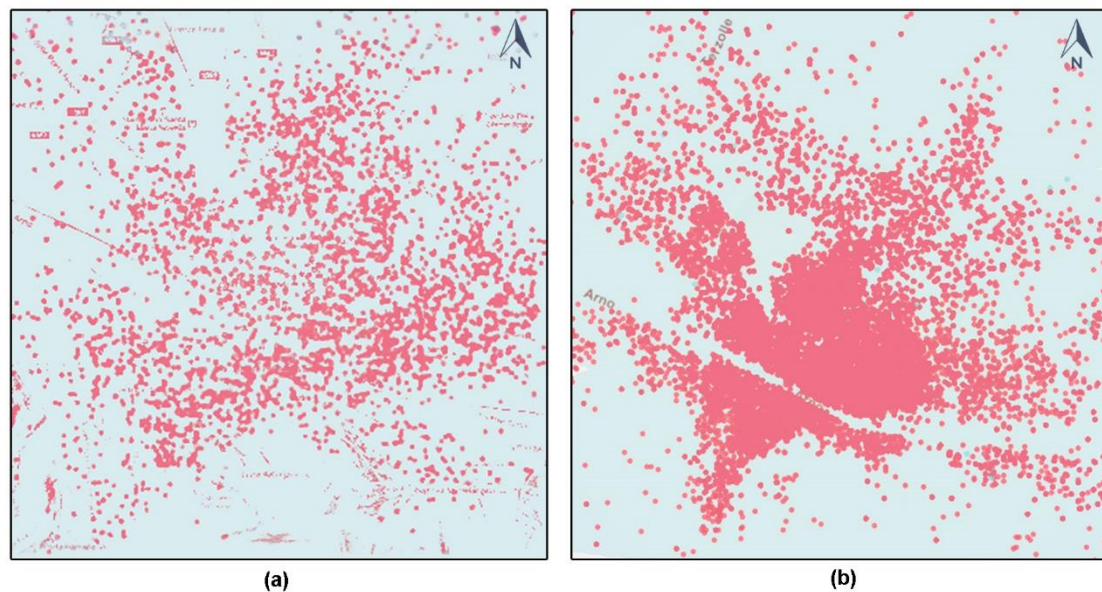


Figure 2. The increment of tourist presence in Florence from 2012 to 2017 [54].

The unusual process of transforming Florence's residential houses into tourist dormitories is shown in Figure 3. These properties include hostels, temporary rooms, farmhouses, and holiday homes that are rented through online booking websites by owners of buildings. The presence in these structures grew by 64% from 2012 to 2017. The comparison between the 2017 and 2018 maps shows the development of a commodification and gentrification process. This trend not only raises the challenge of affordable housing in the city but also threatens the integrity and authenticity of the Historic Centre. Therefore, it is essential to move towards novel housing policies that control the growth of illegal tourist accommodations in the post-COVID time.



**Figure 3.** The unusual process of transforming residential houses into tourist dormitories in Florence. Red points show the frequency of tourist accommodations in the Historic Centre of Florence. (a) Florence’s tourist accommodations in 2017; (b) Florence’s tourist accommodations in 2018 [55].

In order to understand the residents’ point of view about this process, a questionnaire was designed at the Department of Architecture at the University of Florence in December 2018 [51]. The primary analysis of the collected questionnaires revealed that 177 out of 384 respondents were Florentine residents. The findings related to the resident groups also revealed that 70% of the participant were believed that finding affordable housing is “difficult” in the city due to the high tourists’ demands (Table 1).

**Table 1.** Descriptive statistics for the residents of Florence.

Subject	Size	Frequency	Frequency Percentage
Residents’ tendency to stay	Yes	119	69.0
	No	58	31.0
	Total	117	100
Finding affordable housing	Not easy	124	70.0
	Easy	53	30.0
	Very easy	0	0
	Total	117	100

They also agreed that many job opportunities create for serving tourists, and seasonal changes in visitor flows make it “difficult” to find a stable job in this Art City [51]. Therefore, it was deduced that the tourist orientation of the city has not been successful in satisfying the social expectations of the studied group.

#### 4.2. Speculations for Challenging COVID-19 Outbreak in Italy

There are a few speculations about the high volume of affections and death rates due to the COVID-19 pandemic in Italy. Del Buono et al. [56] discuss some potential reasons for the unusual outbreak of the virus in Italy, namely population aging, health system overload, lack of personal protective equipment, viral mutation, lack of disaster response plan, fiduciary quarantine, and a lower rate of testing. They also consider the social mobility associating with the headquarter industries and tourist flows as additional

reasons for the spread of the virus among the regions in Italy. Murgante et al. (2020) analyze this issue from the medical, geographical, and planning perspectives. In addition to fast railway transportation, they introduced nitrogen-related air pollutants and the rise of land take—particularly in the Po Valley area—as potential factors for the virus outbreak in Northern Italy, and gradually, its diffusion in other parts of the country [57]. To limit contagion, the World Health Organization and national health authorities have set out detailed recommendations, among them the need to ensure minimum separation distances between people. However, it should be noted that mobility in cities emerging from confinement will be different from what it was before the lockdown [58]. The experience of national quarantine in the pandemic highlights these points:

- The source of the virus and how it is infected can be unknown for a long time;
- infectious diseases know no geographical boundaries and can infect more areas;
- failure to comply with health protocols raises the incidence of the disease; and
- preventive measures play an essential role in reducing casualties.

#### 4.3. *The COVID-19 Pandemic and Speculations for UNESCO World Heritage Cities*

Many countries around the world are now experiencing different measures in an effort to implement social distancing to slow the spread of Covid-19. They range from ending mass gatherings, closing public spaces like leisure centers, pubs, and clubs to closing schools and in some places, like Italy, a total lockdown with people forced to stay indoors [59]. The emergence of the COVID-19 pandemic warns about the importance of social distances to prevent the wide spread of infectious diseases.

The progression of the pandemic, and thus de-confinement strategies and timelines, are associated with uncertainty. The UNESCO World Heritage Cities should adopt new heritage policies that avoid a spike in new infections. Many of the safety and health measures currently in place will remain for a period. The pathway out of the pandemic will not affect the urban density back to the old “normal.” Instead, it will lead to a qualitatively new reality for the foreseeable future that is physically spaced, hyper-sanitized, hygienic-masked, and crowd-averse. Public authorities have reacted to the COVID-19 crisis by calling on citizens to minimize their movements to the strict minimum to lessen transmission risks [58]. In this instance, keeping social distance between residents, and consequently securing public health, would be challenging when it comes to overcrowded historic centers in UNESCO World Heritage Cities (Figure 4).



**Figure 4.** October 2019, the street of Por Santa Maria in Florence. Lack of social distancing due to overtourism and increasing the possibility of the COVID-19 virus outbreak.

Before the COVID-19 pandemic, Florence developed some management tools to control the overtourism pressures on the city's quality of life. In this instance, a few regulations apply some limitations or prohibitions for the opening of new activities at the Historic Centre of Florence. More specifically, this measure puts a three-year pause for the opening of food and beverage services and fixed retail outlets of foodstuff. As a promotional tool, the Firenze Card was introduced as an official ticket for visiting museums in Florence. The card was formulated to advance an integrated system of cultural services that allows entrance to 72 museums, historical monuments, villas, and gardens [20]. Despite the progress made, the post-COVID time demands new heritage policies that significantly decrease the number of visitors in World Heritage Sites in favor of residents' health, security, and social welfare.

Overtourism has been a critical driver for transforming residential buildings into tourist accommodations in Florence. Many of these rooms have been established based on the illegal tax system and deficient quality conditions. Therefore, the activity of many of these accommodations cannot adequately be supervised by hygiene organizations. An analysis of Oltrarno's historic urban area, which was made for a degree thesis [60], showed that near 35% of the buildings' space is allocated to tourist dorms (Figure 5). Taking the COVID-pandemic into consideration, if hygiene organizations will not monitor the activities of these dormitories, it puts not only the residents of each building at the risk of diseases but also citizens.



**Figure 5.** Some urban facades of dei Serragli, Romana, Maggio Streets in the Historic Centre of Florence. Red rectangles show the frequency of tourist accommodations in each residential block [60].

## 5. Discussion

Before the COVID-19 pandemic, UNWTO statistics positioned Italy in fifth place in terms of international tourist arrivals [61]. Tourism development has been discussed as a valuable and available economic resource for protecting historical settlements in Mediterranean areas. In Italy, the “Diffuse Hotel” has been considered an affordable and concept that enables travelers to experience Italy through a typical, historical, and comfortable hotel. The European Community also supports the development of “Spread Hotels” projects in order to improve the economic capacity of depressed areas by financing refurbishment programs [62]. Nevertheless, this narrative is entirely different and challenging in World Heritage Cities. The availability of low-cost flights has been effectively attracting international tourism flows to these destinations and has caused notable social consequences such as housing issues. Many prominent Italian cities, like Florence, Venice, Pompeii, and Rome, planned to set a daily limit on the number of tourists' arrivals. However, they have concluded that such restrictions would be almost impossible to implement. Promoting less well-known parts of the country and directing the visitor flows to these sites has been considered a solution for the overtourism problems [63]. However, this strategy has not been sufficient and overtourism pressure still exists in the UNESCO World Heritage Cities. In Florence, for instance, many residents believe that finding affordable housing is “very difficult.” Some Italian scholars have discussed that overcoming tourist accommodation oversupply generated by the UNESCO World Heritage List requires a new policy design [64]. After the emergence of the first cases of the COVID-19 disease on January 30, 2020, the government of Italy imposed a national quarantine on March 9, 2020, restricting the mobility of the population except for food necessity, permitted work, and health cir-

cumstances, in response to the growing the COVID-19 pandemic in the country [65]. There are various speculations about the reasons for the high affections and death rates due to the virus in Italy. For instance, Del Buono et al. [56] discuss some potential factors for the unusual outbreak of the virus in Italy, namely population aging, health system overload, lack of personal protective equipment, viral mutation, lack of disaster response plan, fiduciary quarantine, and a lower rate of testing. They also consider the social mobility associated with the headquarter industries and tourist flows as additional reasons for the spread of the virus among the regions in Italy. Nitrogen-related air pollutants and the rise of land take are other speculations for the hard spread of the virus in the country. In addition to the reasons for the COVID-19 outbreak, quarantine and locking down of business activities by the Italian government contained a cultural message that the citizens' health is superior to economic profitability.

Our analysis of the state of tourist accommodations in the city of Florence identifies a few significant points. First, the high volume of tourist demand and the unusual growth of tourist accommodations have affected the social welfare of residents to find affordable housing in the city. Second, many of these dormitories are operating under the illegal tax system, and the legislation for organizing these bedrooms are still under development. Due to the high volume and type of activity, large-scale hygiene monitoring cannot be applied to these bedrooms. Finally, by accommodating a large number of tourists, social distancing in historic centers will be impossible. Hence, according to the pandemic lessons, one can consider how the continuation of overtourism can make UNESCO World Heritage Cities vulnerable to infectious diseases.

From the authors' point of view, two simultaneous actions should be performed at the local and international levels to improve the housing challenge and solve the health concerns in UNESCO cities in the post-COVID time. The Italian government's action to prioritize the citizens' health over economic interests could be imitated as a conservation model for promoting social welfare and ensuring health in World Heritage Cities. In this respect, related international organizations should initiate legislation that restricts cheap flights to areas encountering overtourism. Although the advantage of this legislation can significantly reduce international tourist arrivals, given the recession, it is unclear to what extent airlines and the tourism industry are willing to accept such regulations. On the local scales, UNESCO World Heritage Cities need stricter rules on allowing tourist accommodation to continue their activities. Such a restriction by itself has a critical role in determining the volume of international tourism arrivals. It means that the lower the number of hotels, the higher the rent. Such a price increase will be accompanied by higher taxes and more, better quality service. In addition to improving housing and turning illegal dormitories into urban homes, this could increase social health levels in UNESCO World Heritage Cities. However, it is unclear to what extent property owners are willing to devote economic interests to public welfare. Following the Spread Hotel concept, facilitating hotel establishment on the city outskirts or in other parts of the country may be considered as an effective policy for solving this problem.

## 6. Conclusions

Before the emergence of the COVID-19 pandemic, overtourism was accepted as a common management challenge by many World Heritage Cities, especially in Europe. With an unprecedented increase in tourist accommodation, overtourism has appeared as a complex phenomenon that raises the issue of affordable housing in historic cities. While many tourism specialists develop strategies for the economic loss recovery in historic cities due to the COVID-19 pandemic, this study considers the pandemic as an opportunity to understand the current and future social challenges in UNESCO World Heritage Cities. By examining the unusual growth of tourist dormitories in Florence, we explained how the continuity of this process could affect not only the residents' social welfare but also threaten public health in UNESCO World Heritage Cities. Our findings suggest that overcoming the housing challenge in historic cities requires the adoption of restrictive legislation at both

international and local levels. However, the privilege of establishing new hotels can be awarded in suburban or rural areas. Such a vision helps us to benefit from the COVID-19 pandemic experience as a tool to improve social welfare and increase the level of public health in UNESCO World Heritage Cities.

**Author Contributions:** Conceptualization A.S.D., G.D.L., and C.F.; methodology, A.S.D. and G.D.L.; writing—original draft preparation, A.S.D. and G.D.L.; writing—review and editing, G.D.L., A.S.D., and G.D.L. All authors have read and agreed to the published version of the manuscript.

**Funding:** This manuscript was developed in the Frame of Atlas World Heritage, funded by INTER-REG Atlantic Area Program (AtlaSWH EAPA\_631/2016).

**Institutional Review Board Statement:** Not applicable.

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** Data sharing not applicable.

**Acknowledgments:** The authors wish to express their special thanks to the European partners of the project for their precious collaboration; in particular, the Heritage Research Lab's team of Florence: C. Bocchio, E. Ghibauda, P. Guerriero, and L. Santetti.

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

- Pedersen, A. *Managing Tourism at World Heritage Sites: A Practical Manual for World Heritage Site Managers*; UNESCO World Heritage Centre: Paris, France, 2002.
- Di Giovine, M.A. *The Heritage-scape: UNESCO, World Heritage, and Tourism*; Lexington Books: Minneapolis, MN, USA, 2008; ISBN 9781461662662.
- Bandarin, F. *World Heritage: Challenges for the Millennium*; UNESCO World Heritage Centre Paris: Paris, France, 2007.
- Dastgerdi, A.S.; De Luca, G. Specifying the Significance of Historic Sites in Heritage Planning. *Conserv. Sci. Cult. Herit.* **2018**, *18*, 29–39.
- Dastgerdi, A.S.; Sargolini, M.; Allred, S.B.; Chatrchyan, A.; Drescher, M.; DeGeer, C. Participatory Climate Change Adaptation in Cultural Landscapes: Insights from Cinque Terre and Wellesley. *Sustainability* **2021**.
- Heras, V.C.; Moscoso Cordero, M.S.; Wijffels, A.; Tenze, A.; Jaramillo Paredes, D.E. Heritage values: Towards a holistic and participatory management approach. *J. Cult. Herit. Manag. Sustain. Dev.* **2019**, *9*, 199–211.
- Dastgerdi, A.S.; De Luca, G. Strengthening the city's reputation in the age of cities: An insight in the city branding theory. *City Territ. Archit.* **2019**, *6*, 1–7.
- Dastgerdi, A.S.; De Luca, G. Boosting city image for creation of a certain city brand. *Geogr. Pannonica* **2019**, *23*, 23–31.
- Seraphin, H.; Yallop, A.C.; Capatrina, A.; Gowreesunkar, V.G. Heritage in tourism organisations' branding strategy: The case of a post-colonial, post-conflict and post-disaster destination. *Int. J. Cult. Tour. Hosp. Res.* **2018**, *12*, 89–105.
- Dastgerdi, A.S.; De Luca, G. Improving Cultural Heritage Policy for the Preservation of Historic Minority Quarters. *Int. J. Minor. Gr. Rights* **2019**, *26*, 1–17.
- Dastgerdi, A.S.; De Luca, G. Religious differences and radical spatial transformations in historic urban landscapes. *Conserv. Sci. Cult. Herit.* **2019**, *19*, 1–13.
- World Tourism Organization (UNWTO). *UNWTO Tourism Highlights: 2017 Edition*; World Tourism Organization (UNWTO): Madrid, Spain, 2017; ISBN 9789284419029.
- UNWTO International Tourism Growth Continues to Outpace the Global Economy. Available online: <https://www.unwto.org/international-tourism-growth-continues-to-outpace-the-economy> (accessed on 25 April 2020).
- Ryan, C.; Chaozhi, Z.; Zeng, D. The impacts of tourism at a UNESCO heritage site in China—a need for a meta-narrative? The case of the Kaiping Diaolou. *J. Sustain. Tour.* **2011**, *19*, 747–765.
- World Heritage Committee. *Convention Concerning the Protection of the World Cultural and Natural Heritage*, 5th ed.; World Heritage Tourism Programme: Saint Petersburg, Russia, 2012.
- Minihane, J. Destination Trouble: Can Overtourism be Stopped in its Tracks? Available online: <https://edition.cnn.com/travel/article/how-to-stop-overtourism/index.html> (accessed on 20 February 2020).
- Dodds, R.; Butler, R. The phenomena of overtourism: A review. *Int. J. Tour. Cities* **2019**, *5*, 519–528.
- Dastgerdi, A.S.; De Luca, G. The Riddles of Historic Urban Quarters Inscription on the UNESCO World Heritage List. *Int. J. Archit. Res. ArchNet* **2018**, *12*, 152–163.
- Goodwin, H. *The Challenge of Overtourism*; Millennium Destinations: Seoul, Korea, 2017.
- De Luca, G.; Dastgerdi, A.S.; Francini, C.; Liberatore, G. Sustainable Cultural Heritage Planning and Management of Overtourism in Art Cities: Lessons from Atlas World Heritage. *Sustainability* **2020**, *12*, 3929.

21. Alderighi, M.; Gaggero, A.A. Flight availability and international tourism flows. *Ann. Tour. Res.* **2019**, *79*, 102642.
22. Gotham, K.F. Tourism Gentrification: The Case of New Orleans' Vieux Carre (French Quarter). *Urban Stud.* **2005**, *42*, 1099–1121.
23. Koens, K.; Postma, A.; Papp, B. Is Overtourism Overused? Understanding the Impact of Tourism in a City Context. *Sustainability* **2018**, *10*, 4384.
24. Pechlaner, H.; Innerhofer, E.; Erschbamer, G. *Overtourism: Tourism Management and Solutions*; Routledge: Abingdon, UK, 2019; ISBN 9780367187439.
25. Gurran, N.; Phibbs, P. When Tourists Move In: How Should Urban Planners Respond to Airbnb? *J. Am. Plan. Assoc.* **2017**, *83*, 80–92.
26. Doxey, G.V. A Causation Theory of Visitor-resident Irritants: Methodology and Research Inferences. In Proceedings of the Travel and Tourism Research Associations Sixth Annual Conference, San Diego, CA, USA, 8–11 September 1975; pp. 195–198.
27. Diaz-Parra, I.; Jover, J. Overtourism, place alienation and the right to the city: Insights from the historic centre of Seville, Spain. *J. Sustain. Tour.* **2021**, *29*, 158–175.
28. Leadbeater, C. Anti-tourism Protesters in Barcelona Slash Tyres on Sightseeing Buses and Rental Bikes. Available online: <https://www.telegraph.co.uk/travel/news/bus-attack-in-barcelona-adds-to-fears-as-tourism-protests-grow/> (accessed on 2 December 2018).
29. Horn, K.; Merante, M. Is home sharing driving up rents? Evidence from Airbnb in Boston. *J. Hous. Econ.* **2017**, *38*, 14–24.
30. Wachsmuth, D.; Weisler, A. Airbnb and the rent gap: Gentrification through the sharing economy. *Environ. Plan. A Econ. Sp.* **2018**, *50*, 1147–1170.
31. Ardura Urquiaga, A.; Lorente Riverola, I.; Mohino Sanz, I.; Ruiz Sanchez, J. “No estamos tan mal como Barcelona”: Análisis de la proliferación y regulación de las viviendas de uso turístico en Madrid y Barcelona. *Boletín Asoc. Geógrafos Españoles* **2019**, *83*, 1–47.
32. Alvarez-Sousa, A. The Problems of Tourist Sustainability in Cultural Cities: Socio-Political Perceptions and Interests Management. *Sustainability* **2018**, *10*, 503. [CrossRef]
33. Organización Mundial del Turismo. *Indicadores de Desarrollo Sostenible para los Destinos Turísticos—Guía Práctica*; Organización Mundial del Turismo: Madrid, Spain, 2005.
34. García Hernández, M.; Baidal, J.I.; Mendoza de Miguel, S. Overtourism in urban destinations: The myth of smart solutions. *Boletín Asoc. Geógrafos Españoles* **2019**, *83*. [CrossRef]
35. Zerva, K.; Palou, S.; Blasco, D.; Donaire, J.A.B. Tourism-philia versus tourism-phobia: Residents and destination management organization's publicly expressed tourism perceptions in Barcelona. *Tour. Geogr.* **2019**, *21*, 306–329. [CrossRef]
36. World Tourism Organization. *'Overtourism'?—Understanding and Managing Urban Tourism Growth beyond Perceptions, Executive Summary*; World Tourism Organization (UNWTO): Madrid, Spain, 2018; ISBN 9789284420070.
37. Escudero Gómez, L.A. Residents' Opinions and Perceptions of Tourism Development in the Historic City of Toledo, Spain. *Sustainability* **2019**, *11*, 3854. [CrossRef]
38. World Heritage Committee. *Adoption of Retrospective Statements of Outstanding Universal Value*, 38 COM 8E; UNESCO: Paris, France, 2014.
39. Francini, C. *The Management Plan of the Historic Centre of Florence*; UNESCO: Florence, Italy, 2016.
40. Francini, C.; Bocchio, C. *Monitoring of the Management Plan of the Historic Centre of Florence*; UNESCO: Florence, Italy, 2018.
41. Shah, A.; Kashyap, R.; Tosh, P.; Sampathkumar, P.; O'Horo, J.C. Guide to understanding the 2019 novel coronavirus. In *Mayo Clinic Proceedings*; Elsevier: Amsterdam, The Netherlands, 2020.
42. Tan, W.; Zhao, X.; Ma, X.; Wang, W.; Niu, P.; Xu, W.; Gao, G.F.; Wu, G.Z. A novel coronavirus genome identified in a cluster of pneumonia cases—Wuhan, China 2019–2020. *China CDC Wkly* **2020**, *2*, 61–62. [CrossRef]
43. Ministero della Salute. What is a Novel Coronavirus? Available online: <http://www.salute.gov.it/portale/malattieInfettive/dettaglioFaqMalattieInfettive.jsp?lingua=italiano&id=230> (accessed on 5 May 2020).
44. Remuzzi, A.; Remuzzi, G. COVID-19 and Italy: What next? *Lancet* **2020**, *395*, 1225–1228. [CrossRef]
45. The Local Will Italy's Tourism Businesses Ever Fully Recover from the Coronavirus Shutdown? Available online: <https://www.thelocal.it/20200409/will-italys-tourism-businesses-ever-recover-from-the-coronavirus-shutdown> (accessed on 28 April 2020).
46. Misrahi, T. Wish You Weren't Here: What Can We Do about Over-tourism? Available online: <https://www.weforum.org/agenda/2017/09/what-can-we-do-about-overtourism/> (accessed on 20 December 2020).
47. HeRe Lab. Thematic Stud on common challenges. Available online: <http://www.firenzepatrimoniomondiale.it/wp-content/uploads/2018/03/THEMATIC-STUDY-ON-COMMON-CHALLENGES.pdf> (accessed on 25 April 2020).
48. Gordon, S. What is Shared Learning? Available online: <https://vidreach.io/what-is-shared-learning/> (accessed on 4 March 2020).
49. Shorten, A.; Smith, J. Mixed methods research: Expanding the evidence base. *Evid. Based Nurs.* **2017**, *20*, 74–75. [CrossRef]
50. Loda, M. Analizzare l'immagine dei luoghi: Firenze visitata e vissuta. *Ric. Empirica Lav. Geogr.* **2010**, *41*, 4–8.
51. Dastgerdi, A.S.; De Luca, G. Joining Historic Cities to the Global World: Feasibility or Fantasy? *Sustainability* **2019**, *11*, 1–14.
52. World Population Review Florence Population 2020. Available online: <https://worldpopulationreview.com/world-cities/florence-population> (accessed on 20 December 2020).
53. World Heritage Centre Historic Centre of Florence. Available online: <https://whc.unesco.org/en/list/174/> (accessed on 25 April 2020).

54. Municipality of Florence Statistica del Turismo. Available online: <http://www.cittametropolitana.fi.it/turismo/statistica-del-turismo/> (accessed on 4 May 2019).
55. Inside Airbnb Florence. Available online: <http://insideairbnb.com/florence/> (accessed on 5 January 2020).
56. Del Buono, M.G.; Iannaccone, G.; Camilli, M.; Del Buono, R.; Aspromonte, N. The Italian Outbreak of COVID-19: Conditions, Contributors, and Concerns. *Mayo Clin. Proc.* **2020**, *95*, 1116–1118. [[CrossRef](#)]
57. Murgante, B.; Borruso, G.; Balletto, G.; Castiglia, P.D. Why Italy First? Health, Geographical and Planning aspects of the Covid-19 outbreak. *Preprints* **2020**. [[CrossRef](#)]
58. International Transport Forum. *Re-spacing Our Cities for Resilience*. Available online: <https://www.itf-oecd.org/sites/default/files/respacing-cities-resilience-covid-19.pdf> (accessed on 27 December 2020).
59. Beall, A. *COVID-19: Why Social Distancing Might Last for Some Time*; London, UK, 2020. Available online: <https://www.bbc.com/future/article/20200324-covid-19-how-social-distancing-can-beat-coronavirus> (accessed on 27 December 2020).
60. Ridolfi, V. Tra Globale e Locale, Come Cambia lo Spazio Urbano per Effetto della Turistificazione Deregolamentata. Il Caso del Quartiere Oltrarno a Firenze. Ph.D. Thesis, Università di Firenze, Firenze, Italy, 2018.
61. UNWTO International Tourism Highlights, 2019 Edition. Available online: <https://www.e-unwto.org/doi/pdf/10.18111/9789284421152> (accessed on 27 April 2020).
62. Tagliabue, L.C.; Leonforte, F.; Compostella, J. Renovation of an UNESCO Heritage Settlement in Southern Italy: ASHP and BIPV for a “Spread Hotel” Project. *Energy Procedia* **2012**, *30*, 1060–1068. [[CrossRef](#)]
63. Borodovskaya, A.C.; Gaiduk, L.D. *New Approach of Solving the Problem of Overtourism in Italy*; Belarusian State Economic University: Minsk, Belarus, 2019.
64. Cuccia, T.; Guccio, C.; Rizzo, I. The effects of UNESCO World Heritage List inscription on tourism destinations performance in Italian regions. *Econ. Model.* **2016**, *53*, 494–508. [[CrossRef](#)]
65. Italian Ministry of Health Containment Measures in Italy. Available online: <http://www.salute.gov.it/portale/home.html> (accessed on 1 May 2020).