

Open Access Journal

## Is Covid-19 going to change our relationship with space? A paradigm from Greece

Eleni Komninou

University of Thessaly, Greece

Corresponding author: [lenakomnin@gmail.com](mailto:lenakomnin@gmail.com)

As Greece was in lockdown, the Greek cities resembled ghosts, and their cityscapes reminded us of dystopian movies. Empty streets and motorways, people afraid to go outside, and an uneasy cloud hanging above, encapsulating the minds of people living in these unprecedented times.

Space is inherently connected with infectious diseases. In this context, the pandemic crisis posed new challenges to how we perceive and interact with space, both indoors and out. So, the aim of this article is twofold: to discuss whether the relationship with space has changed due to Covid-19 and the confining measures and to contribute to the knowledge base on the field by reflecting on the Greek reality.

Greece has been hit by the virus similarly to other European countries: counter-urbanization, quiet urban environment, lifeless streets, etc. Covid-19 brought a disturbance to the everyday lives of people as well as a shift in urban balances. As a result, urban trends have emerged in how we use space, which have altered the interrelation of citizens with urban space.

All in all, what is common is the uncertainty of the future, while the level of change regarding how we use and perceive space is unknown yet.

**Keywords:** Covid-19; impact; cities; space; planning

Copyright: author. Protected under CC BY 4.0. ISSN: 2468-0648.

**Please cite as:** Komninou, E. (2022). Is Covid-19 going to change our relationship with space? A paradigm from Greece. *plaNext – next generation planning*. 12: 101-117. DOI: [10.24306/plnxt/83](https://doi.org/10.24306/plnxt/83)

## Open Access Journal

### Introduction

Every once in a century, humanity comes to a turning point. While this article was being written, the world was facing the second wave of Covid-19. The concept of pandemics can be traced all the way back to ancient times. However, modern society was only familiar with these chronicles and was unprepared to act under such unprecedented circumstances.

February 2020 was the crucial date, after which the entire globe seemed to be stuck in a loop. The virus propagated worldwide in such a short period of time, ushering in a new reality. People were forced to adjust to a new way of life, which resulted in a shift in their routines and, as a result, their connection with space.

COVID-19 caused a disruption in daily living as well as a shift in urban equilibrium. The confining measures taken during the lockdowns<sup>1</sup> for the protection of public health and quarantine introduced new living norms: a total ban of traveling and social gatherings, empty halls, citizens afraid to go out, a decrease of downtown activity, in-person gave way to online, shared spaces were closed, contacts were minimized or abolished and the open spaces were empty.

As James (2020) points out, infectious diseases are inextricably linked to space. In this context, the pandemic crisis imposed new challenges to how we perceive and engage with space, both indoors and out. As a result, uber trends in how we use space are emerging. Even restrictive directives such as "remain at home" and "social distance" were unable in many circumstances to persuade citizens that the urban environment was safe (James, 2020). Furthermore, they have altered citizens' interrelation with urban space.

There is a debate over whether pandemics, in addition to imposing a burden on humanity, contribute to the development of new and improved methods of using and/or designing space. What is certain is that changes are occurring, and we should utilize them to our benefit. The question is how substantial these changes are and whether they will last long-term.

Greece has been affected by the virus on a national scale: counter-urbanization, quiet urban environment, and lifeless streets. The impact of Covid-19 is visible in all aspects of everyday life, with various dimensions (Honey-Rosés et al, 2020). All in all, what is common is the uncertainty for the future, as the extent to which our usage and perception of space will alter is unknown.

Greece, in particular, ranked first among 53 countries for having the strictest lockdown and the least movement of people (-47,7%) while scoring 84,25 out of 90 regarding the dictatorial state (Chang et al., 2020). The restraint measures themselves violate international human rights legislation. How much more so when the majority of the response to Covid-19 is authoritative? International Amnesty has received a large number of complaints by many countries, among them Greece, related to police incidents of violence in case individuals didn't comply with the 'protective measures' (amnesty.org., 2020).

The aim of this article is twofold: to discuss if and to what extent the relationship with space has changed due to Covid -19 and to contribute to the field's knowledge by representing the reality in Greece during the pandemic.

To achieve this, the article is divided into six (6) chapters, the first of which introduces the

---

<sup>1</sup> 1st lockdown 13 March – 18 May 2020, 2nd lockdown 7 November - 17 May 2020

## Open Access Journal

study's topic, followed by the theoretical framework, which includes a discussion of the relationship between pandemics and urban planning. Next is the methodology chapter. The 4th chapter is the analysis dedicated to the European and Greek experiences during the health crisis. Finally, in the discussion chapter main findings and conclusions of the paper are summarized.

The new reality requires us to adapt our lifestyles to the emerging challenges, re-valuing our relationship with space, a subject that entails high scientific interest and is considered appropriate for research due to its impact on everyday life. It is important to understand how people are experiencing and behaving in space under all these conditions.

### **Theoretical framework**

#### ***History of pandemics and urban planning***

Infectious diseases have a lifelong existence. It has to be clarified at this point that the purpose of this chapter is not to provide a chronological account of pandemics, but rather a statement of their impact on humans' relationship with space. The design of the cities reflects the major cultural and technological trends, as well as major crises. The next few paragraphs will focus on how pandemics manifest themselves in the built environment.

The mobility of people and interaction with different populations, living conditions, and animals have caused waves of widespread illnesses. Officially known as pandemics, they have plagued humanity many times. The word derives from the Greek *Pandemic /pandemik/*, which means a disease that affects an entire country or the entire world (LePan, 2020).

Old enough is also the concept of quarantine. First practiced in Italy during the 14th century, the port authorities of Venice forced ships coming from places where infectious diseases had been detected to moor for 40 days before landing, targeting the protection of the coastal cities against imported diseases (CDC, 2020). Thus, quarantine originates from the union of the two Italian words *quaranta giorni* meaning forty days (CDC, 2020).

Urban design and planning evolved under the threat of pandemics and other disasters. Starting in the 14th century, urban renaissance practices (i.e. decongestion of overcrowded areas by expanding the boundaries, creation of larger public spaces) were a response to the bubonic plague. Similarly, yellow fever in the 18th century was confined by widening boulevards and developing the early suburbs (Lubell, 2020).

The city is the real focus of infectious disease in the 19th century (Wintle, 2020). To reminisce, the eradication of cholera was made possible by the development of cutting-edge methods for cleaning up overpopulated areas. London's modern sewer system allowed for the transformation of acres of marshland into the parks, boulevards, and other open spaces that have come to define the city's skyline (Wintle, 2020). Glaeser (2020) confirms that in order to contain infectious diseases, many municipalities had to invest heavily in their water infrastructure. These planned urban interventions were implemented to stop contamination. In the nineteenth century, new building codes centered on natural lighting and ventilation were established as a result of the industrial revolution. Overcrowded poor neighborhoods in Europe saw an increase in respiratory illnesses, prompting the creation of new building regulations to help prevent or at least lessen the severity of the problem (Berg, 2020). The construction of railroads and the widening of highways were two major legacies of the age of industrialization, which had a far-reaching effect on the nation's urban infrastructure. Suburban sprawl and

## Open Access Journal

massive urban agglomerations emerged as cities grew to accommodate them.

Modernism trends – well-ventilated and clear spaces, single-use zoning, along with waste management, re-organization of residences, and slum clearance were all established in the 20th century to control the spread of communicable diseases like tuberculosis, typhoid, Polio, and Spanish Flu (Glaeser, 2020).

Over time, cities have become safe places to live thanks to advances in technology, access to healthcare professionals, public health programs, and improved sanitation. "Urban planning and city design have always been influenced by health concerns", as Moritz Maria Karl so eloquently puts it. Whereas, Wintle (2020) acknowledges that today's cities are partially the outcome of the history of pandemics.

More people moved from the countryside to urban areas as a result of urbanization, further increasing urban density. Infectious diseases spread more quickly in polluted, overcrowded urban areas (Matthew & McDonald, 2006), so it stands to reason that most pandemics are fundamentally anti-urban and anti-social.

The vulnerability of large urban areas to infectious diseases and their high density are recognized as disadvantages by many analysts (Matthew & McDonald, 2006; Sharifi & Khavarian-Garmsir, 2020). These disadvantages are apparent now and will worsen if no steps are taken to prevent future disturbances of a similar nature. It is in this context that the idea of urban preparedness comes to the fore (Matthew & McDonald, 2006). This is because, as Glaeser (2020) puts it, "the Covid-19 pandemic strikes at the heart of our urban world," which is why it causes so much uncertainty.

### Methodology

The effects of pandemics on humanity are discussed at length. The full extent of the damage caused by the newly discovered Covid-19 virus has yet to be determined. Because of Covid-19's brief existence, its scholarly literature is limited. This paper is an attempt to add to the body of knowledge in the area.

To achieve this goal, a combination of qualitative and quantitative data from primary and secondary sources was used in the research process. This means that all primary data came from site observations, while secondary data came from a variety of desk studies.

This research focuses on a more theoretical analysis of how Covid-19 modifies our perception and utilization of physical space. Since combining the two would "produce more complete accounts of the social reality and enhance confidence in findings," this strategy was chosen over using either quantitative or qualitative research methods exclusively (Bryman, 1998, pp.126).

According to a number of sources, including Stepchenkova (2012, p. 452), it is appropriate to use pre-existing data given the nature of the topic and the field of social sciences to which it belongs. Since the 'how' and 'why' are often intertwined in real life, it follows that a combination of secondary quantitative and qualitative research methods is required to achieve the study goals.

## Open Access Journal

### ***Data collection and analysis***

Primary data was acquired using the space observation method, to be more accurate. The study was undertaken in the writer's home nation and city, Volos, Greece. Traveling and personal contact for the distribution of surveys or any interaction of human subjects were made difficult due to the lockdown and restriction orders. As a result, space observation was picked as the best approach for reflecting reality in Greece. The author was given a more specialized understanding of the conditions and insight into specific circumstances, resulting in a greater awareness of the problem under consideration (Unwin, 2006, pp.108).

Secondary data gathered from textual sources is also included in the study. Books, eBooks, journal papers, newspaper stories, reports from government and other organizations (International Amnesty, for example), relevant Internet pages, academic journals, and weekly news magazines were used to acquire information. In terms of categorization, secondary quantitative data was largely received from organizations and government accounts, whilst qualitative data was taken through reports and other relevant material. The information for this project was chosen from recent English and Greek bibliographies.

### ***Procedure***

The procedure for the preparation of the study is mirrored on the article's structure and writer's approach to scaling down the usage of space from the city level, to open spaces and personal space. The analysis chapter is organized accordingly, including information devoted to European and Greek experiences aiming to demonstrate the whole picture.

Reliability and validity are likewise important. Thomas (2003, pp.59) confirms that the way of data collection and analysis of documents are valid techniques of research. In terms of data reliability, Stepchenkova (2012, pp.450) points out that most information is authentic nowadays, and even easily available blogs are reliable sources.

### ***Ethical considerations – Limitations***

Even though the current research doesn't involve direct human contact it is still likely to face some ethical concerns about privacy. The limitation of the study is precisely this: the inability to conduct primary research. However, the novelty of the thematic and its significance for society, urban planning, and future steps make the study subject to further research once the restrictions are lifted.

### ***Analysis***

Le Corbusier said, "Hygiene and moral health depend on the structure of towns. Truer than ever before is the adage "without cleanliness and moral health, the social cell gets atrophied" (Wintle, 2020). With the Covid-19 pandemic, humankind's place in the cosmos has taken on new significance. Experts in the field — architects, designers, planners, and social geographers — are currently investigating the scope and shape of future changes in the way space is transformed and utilized.

The history of public space as we know it now begins in the nineteenth century, when people began to shop and socialize openly on the streets of major cities like Paris, London, and Barcelona. The first things to be impacted by the pandemic and social isolation measures are these pursuits. As a result, not only has pedestrian traffic decreased, but the impacts can be

## Open Access Journal

seen in the public sphere and in the commercial and economic sectors of the local community (window shopping, coffee shops, etc.). If this trend continues, the areas may lose their identity, which is a major concern.

The prevalence of and damage caused by Covid-19 will vary by location, health care system, and other factors. In an effort to contain the spread of Covid-19, governments around the world have instituted restrictive policies, including travel bans, restrictions on public gatherings, telecommuting, and quarantine. Which varied in intensity and duration from place to country but shared a common root: alienation from one's social circle. Since most infectious diseases tend to avoid metropolitan areas, it's important to know how people in these areas have been making use of the space they have.

### **Counter-urbanization**

To start with, a significant matter that may not be so obvious at first glance is how safe citizens feel in their cities. It is not coincidental that people started to leave urban centers, where the transmission rates got higher due to the population's density, once the first outbreaks were announced. Londoners and Parisians preferred to relocate from the city to more natural and less crowded areas (Bender, 2020). The London exodus started in 2020 with almost 700.000 people leaving the capital, while a recent study revealed that 55% of young Londoners were considering leaving their home city post-pandemics (Urban Jungle, 2021). The same survey evidenced a 73% increase in those moving to more rural areas. Furthermore, correspondence between the distance from the city of London and outbreaks has been proven, with Sheffield, Birmingham, Leeds, and Manchester documenting fewer cases of COVID-19 (Ghosh et al., 2020).

In Italy, returnees are estimated to number between 80.000 and 100.000. De-populated villages across the Italian countryside are gaining life again. Incentives are given by the authorities (grants, programs of regeneration, national strategies, and investments in rural planning) aiming at making these areas viable on an annual basis and making efforts to keep the returnees as permanent residents (D'Ignoti, 2021). At the same time, the real estate market recorded a 20% increase in the demand for properties in these areas. The result was the regeneration of depopulated areas (D'Ignoti, 2021).

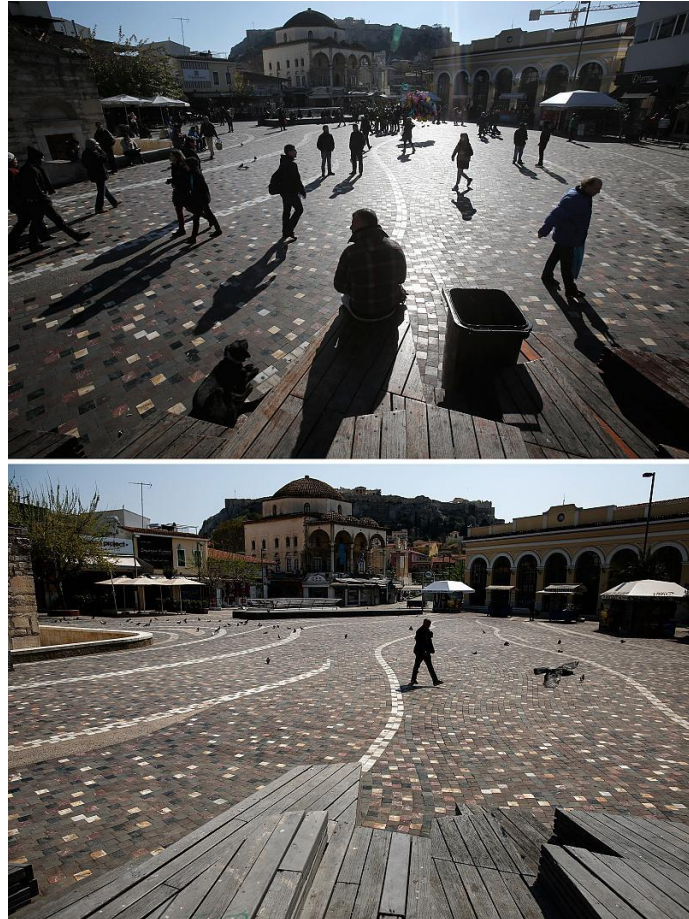
On the contrary, "emptying the city" isn't trending in Berlin despite the high outbreaks (Shepard, 2020). The lower percentage of Berliners leaving the city during the March–July 2020 period in correlation to 2019 is remarkable (Scholz, 2020).

Massive escapism indicates that citizens felt threatened in their own homes, seeking protection from risk to the safety of big cities' surroundings. As an illustration, Greek cities resembled ghosts while the cityscapes during the lockdown reminded one of dystopian movies. With empty streets and motorways, people were afraid to go outside while scenes of irritation weren't missing, having in mind the frustration of people experiencing such harsh conditions for the first time.

The busiest and most congested streets and highways in Athens and Thessaloniki were like deserts; cities remained silent (Figures 1(a) and 1(b)). Many Greeks left the urban centers, returning to their hometowns. In detail, a total of 154,621 vehicles exited Athens before the second lockdown, reaching a peak in November 2020 (Ministry of Citizen Protection, 2020). This figure has more than tripled since the first lockdown (50,597 vehicles) (Ministry of Citizen Protection, 2020). The fear and exhaustion felt by the Greek population during the second

## Open Access Journal

lockdown accounts for these numbers. It is widely acknowledged that negative emotions like tension, fatigue, and despair can be triggered by a city's frenetic pace (Tulumello, 2017). Under this spectrum, the choice of city dwellers to escape from the new 'normal' is justified.



**Figure 2(a).** Monastiraki square before the lockdown  
**Figure 1(b).** Monastiraki during the lockdown Source: Σάιρας, 2020

James (2020) denotes how one's sense of security might be affected by the behavior of others in the same area. However, instead of the safety and assurance that a city offers via the provision of services, products, and supplies, the threat of a killer disease spreading in the urban tissue prevailed. Even the confining orders failed to make citizens feel safe in their environment. Because of the congestion and crowding in major cities, individuals started looking for new areas to call home.

### **Open spaces**

Moving forward, the use of open spaces displays different patterns depending on the context and city. What is concerning during a global pandemic is the way people interact within a specific geographical space, as pointedly James (2020) cites. Individuals' responses to the emerging environment are unique experiences, altered by their view of COVID-19 varying in time and space.

The lack of human presence in public space and the resulting decrease in social interaction is a profound effect of COVID-19 (Garrido et al., 2020). The decision to use public, semi-public,

## Open Access Journal

or private spaces is no longer a personal one, but is dictated by power structures (governments) (James, 2020). The Greek Government decided to reduce the amount of available green and open space (m<sup>2</sup> per citizen) by restricting or blocking access to major spacious areas. Isolating the usage of well-ventilated public places in urban areas as an argument in favor of the general health and wellbeing of the population has no basis in science (Leontidou, 2020). Consequently, the presence of open spaces in the form of clusters may have been minimized while individual visits have increased.

Activities in public spaces include, among others, gatherings in public transport stops, meeting points such as street corners and seating areas, crosswalks, etc. As more people stayed at home or worked remotely, there was less time for small talk, going out to restaurants or bars after work, or even getting some exercise (James, 2020). According to Galloway (2020), fewer office workers imply less street traffic.

During Covid-19, most of us experienced a reduction in the perceived density and crowding (Glaeser, 2020). Waiting in long queues or sharing common urban infrastructure like parks, cultural places, etc. was drastically reduced or eliminated (Glaeser, 2020). Other than these activities, cities in the time of Covid-19 have nothing more to offer besides dark landscapes and overcrowded health service infrastructure. Free public and shared spaces constitute an antidote to the pandemics in the cities; restricting the access to them drove the population to congest within the apartment buildings causing a suffocating urbanscape.

The aforementioned observations indicate people's fear of the disease. They don't want to put themselves in unsafe situations (where high population density is sighted) due to the risk of infection. Most importantly, they are worried about the impact of their actions on others (spread of infection) (James, 2020). As a result, people are starting to shift their habits and visit public spaces outside of typical rush hours, which are considered unsafe.

Another phenomenon is the increased popularity of cycling. Increasingly, municipalities are investing in bicycle and pedestrian infrastructure by building new paths and extending existing ones. A few of the first to be mentioned are Bogotá, Berlin, and Mexico City (Null & Smith, 2020). Transformative urban solutions were also implemented in Milan, Paris, and Barcelona to reclaim the streets from cars and decrease reliance on public transportation. These solutions included increasing walking and cycling space, providing a bike-friendly design, creating superblocks, and improving the use of public space (Knight, 2020). Milan is expanding permanent sidewalks and replacing vehicle lanes with 35km of bike lanes (Honey-Rosés et al., 2020). The most important thing is the permanent character of these urban interventions.

During the lockdowns, Danish cities were the exception to the rule of "closing the open spaces." The approach of keeping public spaces open and allowing outdoor activities was grounded on their vital role in a healthy civic life. Instantly, Copenhagen's public spaces drew more visitors during the March and April 2020 lockdown compared to the fall 2020 pro Covid-19 (Gehl, 2020). In essence, the presence of people indicates how healthy and functional a public space can be.

Results from Gehl's survey (2020) on public life before and during the spring 2020 lockdown are presented below. They emphasize the importance of accessibility of public spaces.

- Increased use of recreation, play, and exercise in comparison to a decrease in downtown activities (shopping, etc.).
- Popularity of local establishments increased, resulting in increased pedestrian traffic



## Open Access Journal

- in more remote areas outside the city center.
- An increase in the use of public spaces by children and the elderly.

Conversely, in Greece, more anti-democratic ways were chosen to combat COVID-19. Everyone was proud of how the pandemic was handled during the first wave because the figures (mortality rates) were better than in other countries. Indeed, Greece ranked among the least affected countries in the EU during the first wave (Crego & Kotanidis, 2020). However, the picture was fictitious, with the situation quickly spiraling out of control, proving the measures ineffective (Λινοῦ, 2020). In the second lockdown, curfews, demonstration bans, and increased fines were added to the list of restrictions, making Greece one of the worst places to live during pandemics.

In light of this, a widespread fear prevented Greeks from moving freely in the first place, in case they encountered police and were fined. However, social human nature triumphed over repressive tactics. As citizens reconnected with nature and its healing power, there has been an increase in mobility in open spaces – urban and peri-urban parks, forests, watersheds, and so on. Individuals were seen alone or in pairs, and in most cases, they did not congregate, exhibiting social distancing.

The key point is the re-discovery of open spaces in Greece. Because of the Mediterranean climate and proximity, Greeks took green spaces for granted, believing that they could go outside whenever they wanted. This was suddenly no longer the case. Being denied access to public spaces taught Greeks to value their existence. The desire to be outside was strong, and people traveled to even the most remote parks to escape confinement.

Many Greek cities led the way in providing better urban environments in the context of the new reality. During the first lockdown, Farkadona, Karditsa, and Rethimno were the first to reclaim public spaces for their citizens. Specifically, the latter were ranked first and second among 3,136 European cities in the categories of small and big cities, respectively, during the European Mobility Week. Furthermore, ten more Greek cities were awarded the Sustainable Urban Mobility award on July 9, 2020: Igoumenitsa, Larisa, East Samos, Agios Dimitrios, Nea Propontida, Heraklion, Alimos, Trikala, Grevena, and Neapoli-Sikewn (Nafteporiki.gr, 2020).

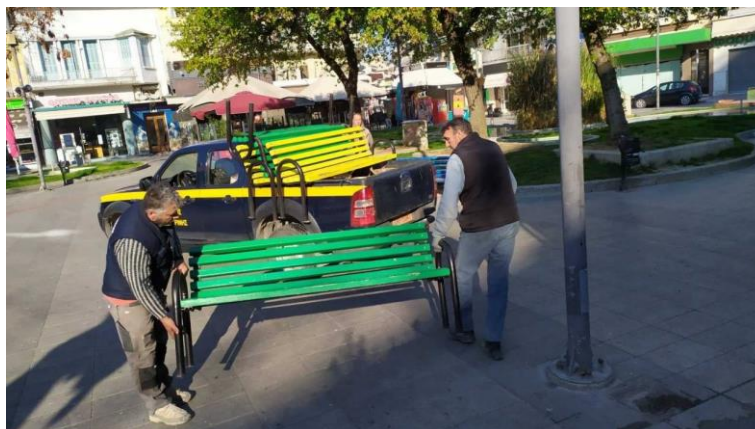
Outdoor gyms, for example, were constructed in Farkadona to promote physical activity and safety during lockdowns (Herk & Aivalioti, 2020). While Karditsa is one of the most bike-friendly Greek cities, with 20,000 bikes, the city plans to expand the cycling and pedestrian network by adding 20km of sidewalk lanes that meet the most recent standards, including disabled specifications (Pouliopoulos, 2021). The goal is to be friendly and accessible to all cities.

In contrast, some municipalities restricted access to the public seating areas (Figure 2), while the municipality in Katerini decided to remove urban furniture from the piazzas (Figure 3). This repressive action claimed to prevent social gatherings and over-crowding, but actually it was violating citizens' institutional right to use public space. On the same note, access to the seafront in Volos was prohibited by the General Secretariat for Civil Protection.

Open Access Journal



**Figure 2.** Blocking access to public urban furniture, Greece  
Source: author, 2021



**Figure 3.** Benches' removal in Katerini, Greece  
Source: cnn.gr, 2020

Since parks and open spaces allow effective social distance due to their scale, it is unclear whether these hygiene rules prompted the sealing of forests, Athens' major parks (Pedion Areos, National Garden), organized beaches, seaside fronts of Thessaloniki, Volos, Patras, and the removal of urban furniture in Katerini.

The Greek government and the Hellenic Ministry of Environment and Energy took advantage of the crisis to vote for a series of new policies and regulations that otherwise would have been difficult or impossible to implement. The new planning law – 4759/2020 New Special Planning Bill will have a direct impact on space and the environment. Some of the regulations concern, among other things, specific timelines for the drafting of local urban plans, initiatives promoting organized business activities, and energy and environmental upgrades to buildings.

What is more, an enhanced urban and regional planning framework was introduced to address long-standing inherited issues in spatial planning. Nonetheless, the proposed fragmented spatial interventions are raising many concerns among professionals regarding the new planning law's validity, due to their short-term and long-term environmental effects. Most of

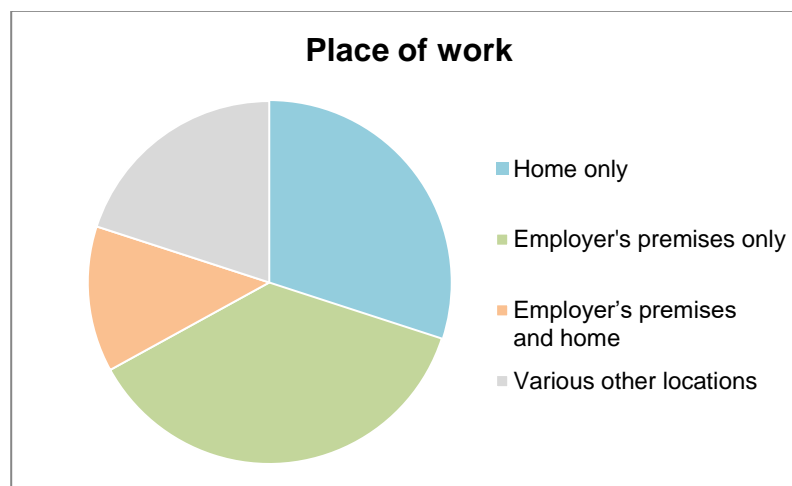
## Open Access Journal

the concerns center around the ministry's decision to loosen restrictions on construction outside of the urban planning zone. This was a shortcut to the formal process of establishing city plans for expansion and allowing residents to legally build (Constitution Article 24).

### **Working – personal space**

Covid-19 and the preventive measures impact both indoor and outdoor activities. Telecommuting and working from home ushered in an entirely new professional landscape. The best office spaces in the urban centers, which are currently vacant, were previously sought after by the large corporations.

The employees in closed workspaces must now overcome new challenges. They must deal with newly designed workspaces in addition to the masks they must wear at all times for everyone's safety. Companies had to adjust interiors to safeguard physical distance based on the directives to 'stay sufficiently far apart' and 'minimize person to person contact'.



**Figure 4.** Teleworking in Greece during pandemics  
Source: Eurofound (2020), self-edit

Numbers speak for themselves when it comes to remote work, showing an increase once the pandemic broke out. Official statistics show that during pandemics, 40% of the working population in the EU engaged in some form of telework (Eurofound, 2020). Evidence from the same survey, Eurofound (2020), also indicated that remote work was more urban-based, indicating that employees living in large cities rather than rural areas had a greater potential for homework. Figure 4 illustrates how Greece adheres to the broad pattern mentioned earlier.

Many Greeks benefited initially from homework but later felt exhausted and insecure as a result of it. Recent studies have shown that 65 percent of those who were surveyed experienced a negative impact on their mental health due to their remote work status (star.gr, 2021). Psychologists explain that employees working at home lose track of the working schedule and don't have the full sense of their working and personal space as their boundaries are the same. Working from home entails going through different phases throughout the day within a specific space.

Hence, opinions regarding home working vary (Eurofound, 2020). Many people enjoy it, while others do not. In many cases, people would rather work remotely than in an office because it allows them to avoid the hassles of commuting and allows them the flexibility to do their jobs

## Open Access Journal

from the comfort of their own homes. On the other hand, many people look for ways to revamp their personal environments because they grow tired of staying in the same place for the majority of the day. Most people who have tried teleworking have found that it is a positive experience, suggesting that it may become the norm after the crisis in locations where it is feasible.

### Discussion

The primary focus of many governments during the pandemic was combating the virus. In the case of Greece, the goal was to minimize the spread of COVID-19. Access restrictions to parks and other green areas were implemented as a government response to the COVID-19 pandemic, but this proved to be counterproductive. Open, spacious areas within the urban tissue, as described in the theoretical section, help to overcome pandemics, in addition to health measures. Historically, urban planning has been used to slow the spread of disease, and open, green areas were prioritized.

Now, the Greek government has taken a completely opposite stance, oblivious to history's lessons. Instead of being able to be outside in the fresh air, the citizens were trapped on narrow pavements and polykatoikies. Closing parks added to people's confinement, and teleworking caused them to congregate in high-density downtown areas and overcrowded apartments (Kalandides, 2020). During the confinement period, which was marked by exclusions, restrictions, and monitoring, public urban space was transformed into a getaway space. The negative feelings deriving from the experience of urban space have created escapism trends in the suburbs.

Access to space was strongly restricted during the severe lockdowns. The first wave of the virus was successfully controlled by Greece, but it had an effect on citizens' freedoms—day-to-day life and social interactions were affected. Greek cityscapes under military rule and curfew, as well as the suspension of constitutional human rights law and cultural needs, were the immediate results (Constitution Article 5). Citizens alone were expected to bear the burden of civic responsibility. There comes a time when the general public is viewed as the enemy (Tufecsi, 2020).

This is why regrettable outcomes are always a possibility: many scientists, medical professionals, and political figures later acknowledged that the decision to impose such a prolonged lockdown was flawed, demonstrating that its effects were worse than those of the virus itself, including mental health problems, domestic violence, suicides, home auctions, etc. (Λινοῦ, 2020).

It is clear from the data presented above and the author's own first-hand experience with the urban spaces in the post-Covid 19 city that there is a need for revitalizing the urban landscape to make it appealing and secure for its residents. Berg (2020) recognizes a lack of investment in areas like sufficient and affordable housing, widened public spaces, and pedestrian-cyclist-friendly mobility systems; Covid-19 could be seen as a wake-up call to address these and other areas of concern. Although some Greek municipalities made attempts to respond to the new reality by creating a more hospitable urban environment for their residents, the pandemic ultimately revealed a lack of public spaces, walking and cycling facilities.

Land use, transportation planning, movement and access, open spaces, production and consumption of basic goods, and human-centered strategies for evacuation and quarantine are all crucial areas in which planners and planning have a role to play and should collaborate

## Open Access Journal

with the private and public sectors to ensure appropriate urban defense (Matthew & McDonald, 2006).

Thereupon, the urban landscape and densities will have to adjust to respond to the challenges. Cities can only function at a certain population density; any reduction in that number has an immediate effect on the efficiency with which essential services can be delivered (Kimmelman, 2020). an alternative solution needs to be invented to deliver a more sustainable urban reality. Concurrently, if we don't want home work to be established, we should redesign buildings to implement physical distancing regulations.

By all means, old design techniques must be replaced by integrated planning and new management approaches. The ultimate goal is to fortify our cities in all aspects of daily life (transportation, housing, public spaces, etc.) against similar crises.

Cities should take advantage of the crisis to re-build and re-imagine their spaces in a more environmentally friendly post-COVID manner.

### Conclusions

Overall, the objectives of this article were to investigate our relationship with space and demonstrate the reality in Greece during the COVID-19 crisis. From the author's perspective, the significance of these issues lies in the trends that they disclose and which impact not only on individuals but also on society and the urban planning and policy-making process in general. Further research could reveal how long the effects last and/or how permanent they are.

This study attempted to highlight the changes in the use of space during COVID-19 by presenting the impact of pandemics on shaping the urban landscape over time and by providing international examples as well as the Greek experience.

Therefore, it was found that our use of both indoor and outdoor space changed during the pandemic. The role, purpose, and security of public spaces were what changed the most in Greece, aside from how people used their private spaces (such as their homes, offices, and personal spaces) (Vatavali et al., 2020). Covid-19 has had the most significant effect on those aspects of social interaction that are inherently spatial. As a result, the restrictions have changed how people interact with their surroundings.

Changes in urban equilibriums were also noticed during COVID-19. Fear of the unknown, insecurity about the future, unequal access to safety, and a widening gap between nations are all hallmarks of the new normal. The recent economic recession has exacerbated all of these symptoms in Greece. As a result of the health crisis, economic recovery was stymied. As a result, the effects of COVID-19 can be seen in every facet of modern life. To avoid future post-apocalyptic scenes, it is crucial that cities prioritize sustainable, human, and decentralized growth.

With all these feelings emerging, one couldn't help but wonder if we are being transformed into a transitional society in the midst of the pandemic's unknown future. Although the concept of pandemics is not new, the components of the virus we are currently dealing with are still being studied. As a result, no one can be sure of tomorrow.

What is known is that the new routine has a direct impact on the use of space. Nonetheless,

## Open Access Journal

the following remains unknown:

- The extent to which changes in public spaces will be visible and transformational (Honey-Rosés et al., 2020).
- The level of change regarding how we use and perceive public space.
- The future social interaction process and
- How will social interaction take place in public places?

Berg (2020) emphasizes the pandemic's consequences and their impact on the social and physical organization of cities. A design renaissance is required for the revival of the cities. Urban areas should be reshaped to accommodate the new dynamics, with a focus on public health as well as economic viability.

Citizens' and local communities' roles in using public space during the confinement period have become more important than ever. Cities and citizens must be armored in order to be effectively protected against all potential threats. As the current reality reintroduces the issue of protecting human life within the urban environment, we all have the responsibility and power to secure and shape the future of the cities in which we live.

In the hope that present-appropriate urban space management will define the future, urban planning should prioritize the prevention of such crises, which are inherently linked to infectious diseases. It is time to use urban planning to directly link well-being, quality of life, and health to the use of public space.

The perception that pre-crisis social and lively public spaces have been lost as a result of preventive measures is shared globally, despite differences in country and city conditions and response mechanisms to the health crisis. It is important to remember that, in addition to physical appearance, humans have emotional attachments to places. In any case, closing and reopening the parks is not regarded as a viable strategy for combating the pandemic.

Despite a clear shift in approach to the use of space on a neighborhood and city scale, the trends emerging in the urban landscape are concerning, at least in Greece. Staying at home has prevented a full manifestation of those until now. Individuals do their best to protect themselves, particularly in national circumstances. Still, one can see that Greeks aren't as mobile as they were in the pre-Covid era. One could also argue that they are afraid of being/going outside. Of course, the government's management is directly responsible for this behavior.

While people's perceptions of public space vary and are influenced by a variety of factors such as age, gender, region, city, country, disease impact, and others, one thing remains consistent: appreciation during lockdowns.

To summarize, if the emerging trends are to become the new normal, a complete shift in our perception and relationship with space is possible. The pandemic should be viewed as an opportunity to put in place an integrated planning framework that prioritizes humans and their safety. Of course, pandemic patrol isn't one of them. While there are still unknowns about the use of space for the public good, urban space should not have a negative impact on public health. What we do know is that we should have faith in our cities. Eugene Ionesco's saying, "You can only predict things after they have happened." sums up the situation perfectly.

## Open Access Journal

### Disclosure Statement

Author has no financial interest or benefit arising from the direct applications of this work.

### References

- Amnesty.org (2020). Αστυνομεύοντας την πανδημία: παραβιάσεις ανθρωπίνων δικαιωμάτων κατά την επιβολή των μέτρων για τον κορονοιο στην Ευρώπη. Retrieved January 17, 2021 from <https://www.amnesty.gr/news/articles/article/23594/astynomeyontas-tinpandimia-paraviaseis-anthropinon-dikaiomaton-kata-tin>
- Λινού (2020) Κλείνοντας τους ανθρώπους μέσα αυξήσαμε τη διασπορά – Είχαμε λάθος στοιχεία [online]. Retrieved September 2, 2021 from <https://www.in.gr/2021/04/02/greece/linou-kleinontas-tous-anthropous-mesa-ayksisame-ti-diaspora-eixame-lathos-stoixeia/>
- Bender, R. (2020). Escape to the Country: Why City Living Is Losing Its Appeal During the Pandemic. *The Wall Street Journal*, 21 June 2020. Retrieved December 20, 2020 from <https://www.wsj.com/articles/escape-to-the-country-why-city-living-is-losing-its-appeal-during-the-pandemic-11592751601>
- Berg, R. (2020). How Will COVID-19 Affect Urban Planning? Retrieved January 20, 2021 from <https://thecityfix.com/blog/will-covid-19-affect-urban-planning-rogier-van-den-berg/>
- Bryman, A. (1998). Quantitative and Qualitative Research Strategies in Knowing the Social World, In T. May and M. Williams (Eds.) *Knowing the Social World*. (pp.138-57). Buckingham: Open University Press.
- CDC (2020). History of Quarantine. Retrieved December 28, 2020 from <https://www.cdc.gov/quarantine/historyquarantine.html>
- Chang, R., Hong, J., & Varley, K. (2020). The Best and Worst Places to Be in Covid: U.S. Sinks in Ranking. Bloomberg, 21 December 2020. Retrieved January 17, 2021 from <https://www.bloomberg.com/graphics/covid-resilience-ranking/>
- Cnn.gr (2020). Κορωνοϊός - Κατερίνη: Ο δήμος ξήλωσε τα παγκάκια για να μην βγαίνει έξω ο κόσμος. Retrieved January 17, 2021 from <https://www.cnn.gr/ellada/story/212120/koronoios-katerini-o-dimos-xilose-ta-pagkakia-gia-na-min-vgainei-exo-o-kosmos>
- Crego, M.D., & Kotanidis., S. (2020) States of emergency in response to the coronavirus crisis. Normative response and parliamentary oversight in EU Member States during the first wave of the pandemic, Members' Research Service PE 659.385 –December 2020
- D'Ignoti, St. (2021). Rural Italy Had a Pandemic Renaissance. Can It Last?. Retrieved May 28, 2021 from <https://www.bloomberg.com/news/articles/2021-05-21/how-covid-repopulated-rural-italian-villages>
- Eurofound (2020). Living, working and COVID-19 (COVID-19 series). Luxembourg: Publications Office of the European Union
- Galloway, S. (2020). Post-Covid and the New Normal. *City Journal*, 30 November 2020. Retrieved December 15, 2020 from: *Post-Covid and the New Normal: City Talk | City Journal* (city-journal.org)
- Garrido, C., Giorgi, E., Gonzàlez, A., & Tuduri, M. (2020). Covid-19 and the future of cities: How are public space and social life going to change? Retrieved December 14, 2020 from <https://www.citiestobe.com/covid-19-how-are-public-space-and-social-life-going-to-change/>
- Gehl (2020). Public Space & Public Life during COVID 19. Retrieved December 19, 2020 from <https://covid19.gehlpeople.com/lockdown>

## Open Access Journal

- Ghosh, A., Nundy, S., Ghosh, S., & Mallick, T.K. (2020). Study of COVID-19 pandemic in London (UK) from urban context. *Cities*, 2020;106(102928). DOI: <https://doi.org/10.1016/j.cities.2020.102928>
- Glaeser, E. (2020). Cities and Pandemics Have a Long History. *City Journal*, 325/Spring 2020. Retrieved December 20, 2020 from Spring 2020 | *City Journal* (city-journal.org)
- Herk, S., & Aivalioti, S. (2020). Healthy Cities during COVID-19; Accelerating from planning to action. Retrieved January 14, 2021 from <https://urbact.eu/healthy-cities-during-covid-19-accelerating-planning-action>
- Honey-Rosés, J., Anguelovski, I., Bohigas, J., Chireh, V., Daher, C., & Nieuwenhuijsen, M. (2020). The Impact of COVID-19 on Public Space: A Review of the Emerging Questions. Retrieved January 12, 2021 from [https://www.researchgate.net/publication/340819529\\_The\\_Impact\\_of\\_COVID-19\\_on\\_Public\\_Space\\_A\\_Review\\_of\\_the\\_Emerging\\_Questions/citation/download](https://www.researchgate.net/publication/340819529_The_Impact_of_COVID-19_on_Public_Space_A_Review_of_the_Emerging_Questions/citation/download)
- James, A.C. (2020). Don't stand so close to me: Public spaces, behavioral geography, and COVID-19. *Dialogues in Human Geography*, 2020;10(2):187-190 DOI: <https://doi.org/10.1177/2043820620935672>
- Kalandides, A. (2020). The importance of urban green in times of epidemics [online]. Available at: [http://blog.placemanagement.org/2020/04/11/the-importance-of-urbangreen-intimesofepidemics/?fbclid=IwAR0kgGCmZdJMt5o6UMKfFhqPupt9ZBqeS\\_HKk65uzMpikgAmy84Hhk3xuM#more-2509](http://blog.placemanagement.org/2020/04/11/the-importance-of-urbangreen-intimesofepidemics/?fbclid=IwAR0kgGCmZdJMt5o6UMKfFhqPupt9ZBqeS_HKk65uzMpikgAmy84Hhk3xuM#more-2509) (Accessed 24 April 2021)
- Kimmelman, M. (2020). Can City Life Survive Coronavirus?' *The New York Times*, 22 March 2020. Retrieved January 12, 2021 from <https://www.nytimes.com/2020/03/17/world/europe/coronavirus-city-life.html>
- Knight, C. (2020). Space for life. Retrieved December 21, 2020 from <https://www.eib.org/en/stories/covid-19-urban-planning>
- Leontidou, L. (2020). Πολεοδομία και πανδημία στη συμπαγή πόλη της Μεσογείου: Ανθρωπογεωγραφικές παράπλευρες απώλειες του Covid-19. *Επιθεώρηση Κοινωνικών Ερευνών*, 154, 11-27. [online]. Available at: [doi:https://doi.org/10.12681/grsr.23234](https://doi.org/10.12681/grsr.23234) (Accessed 15 May 2021)
- LePan, N. (2020). Visualizing the History of Pandemics. Retrieved December 28, 2020 from <https://www.visualcapitalist.com/history-of-pandemics-deadliest/#:~:text=>
- Lubell, S. (2020). Commentary: Past pandemics changed the design of cities. Six ways COVID-19 could do the same. Retrieved December 28, 2020 from Will coronavirus change city architecture and design? - *Los Angeles Times* (latimes.com)
- Matthew, R.A. & McDonald, B. (2006). Cities under Siege: Urban Planning and the Threat of Infectious Disease. *Journal of the American Planning Association*, 72(1):109-117 DOI: <https://doi.org/10.1080/01944360608976728>
- Ministry of Citizen Protection (2020). Ελληνική Αστυνομία - Στατιστικά Στοιχεία Τροχαίας. Retrieved December 28, 2020 from [http://www.astynomia.gr/index.php?option=ozo\\_content&perform=view&id=81&Itemid=73&lang=](http://www.astynomia.gr/index.php?option=ozo_content&perform=view&id=81&Itemid=73&lang=)
- Naftemporiki.gr (2020). Πρωταθλήτριες Ευρώπης στη βιώσιμη κινητικότητα Ρέθυμνο και Καρδίτσα. Retrieved January 14, 2021 from <https://www.naftemporiki.gr/story/1617724/protathlitries-europis-sti-biosimi-kinitikotita-rethumno-kai-karditsa>
- Null, S. & Smith, H. (2020). COVID-19 Could Affect Cities for Years. Here Are 4 Ways They're Coping Now. Retrieved January 12, 2021 from <https://thecityfix.com/blog/covid-19-affect-cities-years-4-ways-theyre-coping-now-schuyler-null-hillary-smith/>
- Pouliopoulos, G. (2021). Karditsa: Cars replaced by 20,000 bicycles | *travel.gr* [online].



## Open Access Journal

- Retrieved September 20, 2021 from <https://www.travel.gr/en/explore-en/karditsa-cars-replaced-by-20000-bicycles/>.
- Scholz, K.A. (2020). Are Berlin residents packing up and leaving the city to flee the coronavirus? Retrieved December 22, 2020 from <https://www.dw.com/en/berlin-coronavirus/a-54471392>
- Sharifi, A., & Khavarian-Garmsir, A.R. (2020) The COVID-19 pandemic: Impacts on cities and major lessons for urban planning, design, and management, *Science of The Total Environment*, 2020, 749: (142391) [online]. Available at: <https://doi.org/10.1016/j.scitotenv.2020.142391> (Accessed 18 May 2021)
- Shepard, S. (2020). COVID-19 Mobility Landscape: Europe vs. United States. Retrieved December 22, 2020 from <https://urbanmobilitycompany.com/content/daily/covid-19-mobility-landscape-europe-vs-united-states>
- Star.gr (2021). Πανδημία: Μείωση εισοδήματος για 6 στους 10 εργαζόμενους. Retrieved January 22, 2021 from <https://www.star.gr/eidiseis/oikonomia/529419/pandhmi-exasan-eisodhmata-to-56-twn-ergazomenwn>
- Stepchenkova, S. (2012). Content Analysis. In L. Dwyer, A. Gill, and N. Seetaram (Eds.), *Handbook of Research Methods in Tourism: Quantitative and Qualitative Approaches* (443-458). UK: *Edward Elgar Publishing*
- Thomas, R. (2003). *Blending Qualitative and Quantitative Research Methods in Theses and Dissertations*. Thousand Oaks, CA: Corwin Press.
- Tufecsi, Z. (2020) Keep the Parks Open, the Atlantis April 7, 2020 [online]. Retrieved 1 June 2021 from: <https://www.theatlantic.com/health/archive/2020/04/closing-parks-ineffective-pandemic-theater/609580/>
- Tulumello, S. (2017). *Fear, Space and Urban Planning. A Critical Perspective from Southern Europe*. Springer. [10.1007/978-3-319-43937-2](https://doi.org/10.1007/978-3-319-43937-2).
- Unwin, T. (2006). Doing Development Research 'at Home'. In V. Desai and R. B Potter (Eds). *Doing Development Research*. (104-112). London, England: Sage Publications
- Urban Jungle (2021). *Where should you live after lockdown?* England, London: *Urban Jungle Publications*
- Vatavali, F., Gareiou, Z., Kehagia, F., & Zervas, E. (2020) Impact of COVID-19 on Urban Everyday Life in Greece. Perceptions, Experiences and Practices of the Active Population, *Sustainability*, 2020, 12:(9410) [online]. Available at: <https://www.mdpi.com/2071-1050/12/22/9410> (Accessed 15 May 2021)
- Wintle, T. (2020). COVID-19 and the city: How past pandemics have shaped urban landscapes. Retrieved December 28, 2020 from COVID-19 and the city: How past pandemics have shaped urban landscapes - CGTN
- Σαΐτας, Π. (2020). Αθήνα - Covid-19: Φωτορεπορτάζ πριν και κατά την διάρκεια της καραντίνας. Retrieved January 15, 2021 from <https://gr.euronews.com/2020/04/15/ellada-athina-covid-19-koronoios-fotoreportaz-prin-kai-kata-tin-diarkeia-karantinas>