Reimagining Public Spaces and Built Environments in the Post-Pandemic World

Edited by

Paul R. Messinger and Kishwar Habib

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Table of Contents

Acknowledgements

Of course, the book would not exist without the contributions of the many authors of the chapters of this book who dedicated their time and expertise

to studying and writing about reimagining public spaces and built environments. Their expertise and diverse perspectives support the rich set of topics and regions of the world covered in this book.

We very much appreciate the help of Sarah Palmer and Ben Williams, of Ethics International Press, for their encouragement and suggestions for improvement, and for their bringing this work to publication. Their commitment to disseminating knowledge and promoting dialogue in the field of public spaces and built environments is greatly appreciated.

Last but not least, we acknowledge those who engage with the ideas and concepts presented herein. Your interest and engagement is paramount, as it is you who ultimately determine the impact and relevance of this work. We now leave you to peruse the ideas that follow.

Paul R. Messinger and Kishwar Habib, Editors

Introduction

Chapter 1

Designing for a Post-Pandemic World: How Public Space and the Built Environment Will Respond to the New Norm

Kishwar Habib and Paul R. Messinger

The COVID-19 pandemic caused significant shifts in various aspects of our lives, from the way we work and play to the way we interact in public spaces. The World Health Organization (WHO) declared the COVID-19 outbreak a global pandemic on March 11, 2020 (Cucinotta and Vanelli 2020). Following WHO guidelines and measures, cities around the world managed this pandemic at various scales through social and physical distancing strategies (Gibson, 2020), as crucial means to mitigate virus transmission and the spread of the disease (AH, 2020; WHOb, 2020; PanCAP, 2020). These measures were further coupled with changed living and working patterns, as people increased their Internet and technology usage, leading to social and institutional forms of a "new normal."

Management of the use of public space constituted an important part of society's response to the pandemic. This affected the way people were able to engage and interact in public spaces. Diverse strategies were at play to contain or delay the spread of the virus: from early detection or treatment of infected cases to self-quarantine, from avoiding non-essential travel to working from home, from minimizing interaction between people to social (physical) distancing. Particular instructions included advice to stay two meters away from others, which eventually shaped "the spatial experience and impact of the COVID-19 pandemic on urban life, our understanding of public interaction, crowd practice, and everyday life at home under self-isolation and lockdown" according to Shields et al. (2020:216).

These strategies for mitigating virus transmission had a negative impact on economic activity, dramatically reducing industrial production, raising unemployment rates, and leading to closures or restrictions in the use

of congregated spaces. Recent evidence shows that the new normal also generated anxiety, loneliness, reduced productivity, sleeping disorders, and other mental and physical health issues for people around the world (Gammon and Ramshaw, 2020; Fox and McDermott, 2020). This disrupted human-to-human interactions, and eventually resulted in sharp declines in the use of public spaces, as people restricted their movements and avoided crowded areas due to health concerns (Hawkins, 2020; Moovit, 2020; Nuki, 2020).

As the world emerges from the grips of this global health crisis, the need to re-evaluate and reimagine our public spaces and built environments becomes imperative. It is in this context that the current book, *Reimagining Public Spaces and Built Environments in the Post Pandemic World*, documents changes in the use of public space during the pandemic, needed resilience for future public emergencies, and the legacy of changed behavior patterns for cities of the future. The book explores the complex relationship between the built environment and public spaces, highlighting the need for comprehensive and sustainable designs that accommodate the 'new norm' of a post-pandemic world. With contributions from the experts in architecture, urban planning, and design around the world, the book offers diverse perspectives on the challenges and opportunities that lie ahead in shaping our built environment.

This book is emphatically international, documenting a rich diversity of response in cities across the world, reflecting cultural differences between the West and the East, various levels of economic development, highly diverse municipal regulatory environments, and different perspectives about public space – who was historically entitled to access to these spaces, and a growing worldwide consensus that such spaces should afford universal access.

The concept of the book proceeds from the assumption that new social realities and related public health measures are likely to generate new socio-spatial conceptions for public space design in the post-pandemic period. In this book 'public space' is defined to include the space of public discourse, the physical space of institutional learning, retail space, theater spaces, and cultural congregated spaces. As a layered concept, central to socio-spatial analysis, public space is always specific, unique, and in the making (Massey, 2005:94). The book explores various ways in which public spaces and built

environments are changing, organized into eight sections and 17 chapters. The chapters investigate the layered meaning of public spaces—this includes unraveling the image and the publicness of the spaces through analysis of the spatial settings, logic, balance, and complexities in play during the pandemic. The various approaches in these chapters shed light on the new dynamics of post-pandemic reality, mapping the context and offering new insights.

Introducing Pandemic Challenges. The first section of this book looks at the immediate short-term and ultimate long-term effects of the pandemic on the economic and social functioning of two diametrically opposed spaces: (1) domestic spaces and (2) outdoor public spaces.

Chapter 2 ("Domesticating the *Oikoumene*") begins with a thoughtful focus on how the pandemic changed the functioning of the spatial unit of the family, called by the ancient Greeks: the *oikoumene*. This word refers to the inhabited dwelling of the household that is also an economic space. During the pandemic, we were all forced to live, work, go to school, interact, and even shop from home, which changed the boundaries between public and private space and rearranged people's public vs. personal lives with implications for people of different genders, ages, incomes, social status, and physical mobility. The author pushes us to recognize that these changes will last: "there is no simple going back," he states. We must reimagine domestic environments as economic spaces integrated via digital technology as the core of a new political economy of capitalism, with implications for our homes, our office buildings, our downtowns, our neighborhoods, and our public spaces.

Chapter 3 ("The Pavements of Hanoi") continues the development at the other end of the spectrum: economic and social life on the streets of Hanoi – the temporarily 'borrowed' spaces. In contrast with the previous chapter which refers to changes in the developed economies of the West, this chapter deals with urban life in Vietnam, an active developing economy in the East. The realm of this author's discourse could not be more different, yet the principles are perhaps just as enduring. Before the crisis, these pavement vendors played a crucial role in the urban fabric of Hanoi, providing necessary goods and services to the community. After the pandemic, top-down restrictions, no matter how well-motivated, could only go so far: the restrictions would be quietly circumvented by vendors, consumers,

and even policy enforcers, if the livelihoods and lives of these participants depended on the operating of these informal neighbourhood markets. This case study highlights the resilience and resourcefulness of the vendors and other society members as they navigated through the crisis: the need for restrictions and the need to get around aspects of these restrictions. In the long term, urban planning needs to recognize and even facilitate the functioning and resilience of such informal spaces, even in contingency planning for pandemics and other disasters.

City Spaces. Urban Spaces play a crucial role in shaping the quality of life and well-being of their inhabitants. The second section of this book considers two particular types of city spaces – neighbourhood spaces and privately-owned public spaces – and their use during and after the pandemic.

Chapter 4 ("Reimagining Neighbourhood Spaces") provides an engaging synthesis of eight recommended placemaking tactics to promote physical activity and social connectedness during epochs like pandemics: (1) naturalize (green) neighborhoods, (2) activate parks and streets, (3) culinize communities, (4) specticalize public spaces, (5) festivalize neighborhoods, (6) aestheticize streets, (7) convivialize public spaces, and (8) festivalize neighborhoods. These few pages provide a stimulating virtual tour of initiatives used in San Francisco, New York, Toronto, London (England), London (Ontario), Portland, and Indianapolis. This is thought-provoking material for city planners, urban designers, community leagues, and city-dwellers. These creative, whimsical, and low-cost instantiations of tactical urbanism were carried out during the COVID-19 pandemic, but the ideas are likely timeless.

Chapter 5 ("Potential of Privately-Owned Public Spaces") addresses the debate over privatization of public spaces by considering the advantages and disadvantages of Privately-Owned Public Spaces (POPSs), as evidenced by field observation of four POPSs in Melbourne during the pandemic. The arguments and evidence of this chapter are decidedly in favor of POPS. The authors outline how POPSs contribute to the City of Melbourne's Reactivation Plan, to the United Nations Sustainable Development Goals, and, generally, to more sustainable urban life in the post-pandemic world. Post-pandemic city reactivation entails improving accessibility, transforming deserted spaces into vibrant cultural hubs, and reinventing places that support physical activity and social interaction. Collaborative efforts

between private entities, public authorities, and community organizations can facilitate the creation of these revitalized spaces, fulfilling the shared objective of reactivating cities and promoting the well-being of their communities.

Green Spaces. The third section of this book emphasizes the critical role of green spaces as social infrastructure. The chapters highlight how green spaces contribute to societal well-being, by combating social isolation, promoting physical and mental health, and fostering social cohesion. By recognizing the significance of green spaces and ensuring equitable access, cities can enhance the quality of life for their residents and create more resilient communities for the post-pandemic future.

Chapter 6 ("Greenspace as Critical Social Infrastructure") draws on six national and city-specific empirical research projects in the U.S. The authors synthesize results and discuss knowledge gaps concerning how public green spaces constitute critical infrastructure for social resilience. A key theme is that greenspace is good for mental health. The authors further argue that providing equal access to quality green spaces is essential to fostering social cohesion and reducing health disparities. They put forward the notion that green spaces should be viewed as essential elements of urban planning and regarded as public health infrastructure.

Chapter 7 ("Jakarta's Public Space Adaptability") examines the sensitivity and adaptability of public space during the COVID-19 pandemic for the particular case of Jakarta's public park, Taman Lapangan Banteng. This chapter highlights the various adaptive measures implemented in Jakarta's public spaces during the pandemic, such as increased pedestrian areas, pedestrianization of streets, and the utilization of underutilized public spaces. These adaptations not only allowed for social distancing but also created opportunities for economic activities, supporting local businesses and individuals affected by the pandemic. The chapter reminds us that public spaces were not always for everyone in the colonial world. The paper provides a critical historical perspective on the intended use of public spaces by various strata of society before, during, and after colonization, including the influence of various governments since independence. By examining collected data about park visitations, related literature, and new stories, the current chapter considers the importance of public space

resilience for the post-pandemic future. In some places, the lack of public space for the masses is a holdover from the class-based society of a colonial past. In other places, the lack of parks is the byproduct of "development gone wild," unfettered by urban planning or a dedication to shared access.

Neighborhood Spaces. The fourth section of this book delves into the fascinating realm of neighborhood spaces, shedding light on the diverse uses and experiences of walkable infrastructure and the potential to maximize work-life opportunities for people with disabilities within a 5-kilometer radius.

Chapter 8 ("Walkable Neighborhoods of Singapore") explores the different perspectives, needs, and uses of walkable infrastructure by various social groups. The authors argue that active mobility infrastructure, such as sidewalks, bike lanes, and pedestrian zones, is not a one-size-fits-all solution. Rather, it should be designed with sensitivity to the diverse needs of different user groups, ranging from pedestrians to cyclists and skateboarders. By considering the needs of these various users, urban planners can create inclusive and equitable neighborhood spaces that cater to the needs of all individuals.

Chapter 9 ("The 5-Kilometer Neighbourhood") shifts focus to the specific challenges faced by individuals with disabilities in their daily lives. The authors argue that neighbourhoods must be designed to maximize work-life opportunities for disabled individuals within a 5-kilometer radius. By providing accessible and inclusive infrastructure, such as ramps, elevators, and curb cuts, disabled individuals can navigate their neighborhoods safely and independently.

Cultural Spaces. Cultural spaces play a pivotal role in shaping the identity of a place, reflecting the unique collective heritage, traditions, and values of a community. The fifth section of this book delves into the significance of cultural spaces in urban areas, focusing on two chapters that explore their influence and potential transformation.

Chapter 10 ("Crowd Dynamics in the Chalai Market") considers how crowd dynamics have contributed to the functioning of the historic urban core in Thiruvananthapuram, Kerala. The Chalai Market is known for its vibrant atmosphere, bustling streets, and diverse range of goods and services. This chapter examines the interplay between the local community, the physical

environment, cultural practices, and how these factors have shaped the market's unique character over time. The authors underscore the importance of understanding the crowd dynamics of Chalai Market in order to fully appreciate its historical and cultural significance.

Chapter 11 ("The Grand Bazaar of Tibriz") focuses on the transformation of a historic retail space in response to the global COVID-19 pandemic. This chapter examines the importance of climate-responsive design elements in maintaining customer trust and confidence in physical retail spaces during a pandemic. With lockdowns and social distancing measures, both vendors and customers faced substantial challenges during the pandemic. However, this crisis also provided an opportunity to reimagine the design and layout of retail spaces to ensure the safety, comfort, and wellbeing of customers. The authors emphasize the need for incorporating climate-responsive design elements such as adequate ventilation and natural lighting to give comfort to consumers in retail spaces. It argues that such design elements enhance customers' trust and create a welcoming and enjoyable shopping experience.

Features of the Built Environment. The sixth section of this book explores significant aspects related to the built environment, by focusing on urban brownfield redevelopment and the environmental effects of telework during and after the COVID-19 pandemic to promote sustainability and resiliency.

Chapter 12 ('Urban Brownfield Redevelopment in Dhaka") describes the Hazaribagh brownfield area redevelopment of Dhaka. Brownfields here refer to abandoned leather industrial sites that are highly contaminated. The chapter highlights the significance of sustainable urban design in transforming brownfields into vibrant, livable spaces in a highly dense metropolitan context. By redeveloping the Hazaribagh area, the chapter argues that the city can address not only the environmental challenges, but also the social and economic disparities exacerbated by the COVID-19 crisis.

Chapter 13 ("COVID-19-Induced Telework and Beyond") explores the positive environmental impacts of widespread adoption of telework. The chapter acknowledges the necessity of quantifying these environmental

benefits to understand the potential of telework as a long-term solution for reducing carbon footprints and achieving sustainability goals. Furthermore, it discusses the potential challenges and implications as telework continues to be scaled up after the pandemic, highlighting the need for careful planning and infrastructure development to accommodate this shift in work patterns.

Resilient Spaces. The seventh section of this book sheds light on resilient spaces in urban environments, emphasizing the need for adaptability and flexibility to withstand future challenges and crises while maintaining a high quality of life.

Chapter 14 ("Needs Assessment for Buruburu Estate, Nairobi") presents a comprehensive assessment of the current state of public open spaces in Buruburu Estate, one of Nairobi's densely populated areas. The authors document a series of interventions to transform public open spaces into resilient and adaptable environments suitable for the pandemic. This includes redesigned layouts to facilitate social distancing, improving sanitation facilities, enhancing green infrastructure, and incorporating technology to track and manage visitor numbers. The authors also examine the challenges posed by the pandemic and recommend strategies for creating resilient spaces that meet the evolving needs of the community. These measures aim to create spaces that not only address immediate post-pandemic needs but also provide long-term resilience against future crises.

Chapter 15 ("Adaptive Public Space in Yogyakarta, Indonesia") shifts focus to exploring the future of public space design in the context of Yogyakarta City, Indonesia. This chapter highlights the need for adaptive spaces that can respond to a variety of urban challenges and evolving societal demands. Yogyakarta City serves as an example, facing rapid urbanization, climate change, and social complexities. Additionally, community participation and inclusivity are key elements in the creation of resilient public spaces. The chapter explores the importance of engaging with local communities to understand their unique needs, aspirations, and cultural practices. By involving various stakeholders, including residents, civic organizations, and government bodies, the planning and design of public spaces can better cater to the needs of the people.

Adaptive Public Spaces. The eighth section of this book considers the concept of adaptive public spaces, presenting an intriguing discussion about the evolving relationship between cities and their residents in a post-pandemic world.

Chapter 16 ("Paradigm Shifts") explores paradigm shifts in the fields of urban design and architecture arising from the COVID-19 pandemic. The authors document changing research in these fields in Turkey over more than four decades. The paper provides support, in a very different way, for many of the conclusions developed in Chapter 2 and elsewhere in this book. Because people spent more time in the home, the meaning of a dwelling changed for individuals, with a blurring of boundaries between inside/ outside, closed/open, and public/private. In particular, the paper argues that the COVID pandemic changed the direction of research in urban design/planning and architecture. In particular, the paper documents the changing perspectives in this body of research about the concepts of time, public space, urban justice, mobility, flexibility, sustainability, accessibility, urban resilience, and housing.

Chapter 17 ("Starbuckisation of China") comes full circle to the domestic sphere (also considered in Chapter 2 – but in a very different context). The authors illustrate how coffeehouse chains like Starbucks have become synonymous with a modern lifestyle and offer an alternative to the traditional domestic sphere in urban China. The introduction of Western-style coffeehouses as places of work, socialization, and relaxation provides fluid and adaptable environments. The authors re-envision how urban dwellers engage with their environment, blurring the boundaries between public and private spheres and influencing the overall fabric of urban living.

Conclusion. The chapters in this book emphasize the significance of public spaces and the built environment in a global context and highlight the need for thoughtful and adaptable post-pandemic design. There is a need for collaborative, interdisciplinary work by urban planners, architects, policymakers, and other stakeholders. By addressing evolving needs, safety, resilience, inclusivity, sustainability, and community involvement, we can create spaces that respond to the challenges of the post-pandemic era and promote a better future.

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Section 1:
Introducing Pandemic Challenges

Chapter 2

Domesticating the *Oikoumene* during the Pandemic

Rob Shields

Abstract: The division between domestic space, public spaces, and work spaces has been an iconic division of the social spatialisation of modernity and contemporary capitalism globally. This chapter builds on recent policy discussions, work on gender, race, space, and political economy by social commentators such as Angela Mitropoulos. It discusses the political-economic implications of work-from-home for urbanism and households. The changing use and management of urban public space has been a prominent aspect of spatial arrangements to manage COVID-19. However, the iconic division of public and private sits astride numerous smaller changes which, in sum, have transformed the everyday life of households and the domestic life of these oikoumenes. This has been a time-space revolution in its scope, scale, and suddenness.

Keywords: COVID-19, domestic, household, spatialisation; gender, race

The division between domestic space, public spaces and work spaces has been an iconic division of the social spatialisation that fuses together modernity and contemporary capitalism as a global arrangement or assemblage. Lockdowns during the 2020-22 global COVID-19 pandemic challenged these divisions and showed that other arrangements were possible. A reigning social spatialisation which involved understandings and codes, practices and lived framings of what was possible and could be imagined, placed and allocated interaction and activities in everyday geopolitics of "this place for this activity, and that place for that activity." Taboos on combining activities in the same place such as eating and defecating are not merely functional but cultural and part of a lived and imagined habitus (Shields, 1991). At the scale of cities, where downtowns were once imagined as CBDs, 'central business districts,' the spatialisation

of economic management and exchange during the pandemic, were seen without most of their tenants. Work from home suddenly challenged office work. This left the buildings and even entire business districts as mostly deserted monuments to a past spatialisation of global capitalism and its markets that once depended on dense, highrise, central business districts.

This contribution builds on recent policy and business discussions in English-language print media in North America and OECD countries, and on work on gender, space, and political economy by theorists such as Angela Mitropoulos, Hannah Arendt and Gabriel Tarde. We survey the changing relations between public and private domestic spaces highlighted in recent newspaper articles and corporate statements. This reading is the core method by which the theoretical and historical scenarios developed in the above research are evaluated for fit against emerging changes in white-collar work and related real estate provision of office environments. These are considered for insight into the post-pandemic political economy and the implications of an emergent domestic-public 'oikopolitics' for social spatialisations and for urbanism more specifically.

Despite developers' rather self-serving proclamations of confidence in highrise business districts, it is still an open question as to whether or not the global COVID-19 pandemic will reconfigure cities by changing the balance between domestic spaces and offices as the locations for managerial work. One can see this as a tension and also as self-delusion in statements from corporate real-estate management firm Avison Young's President of Professional Services for the Americas:

> "It will pass. Downtowns will continue to be vibrant because they have such a powerful role in the economy. But how we use our offices will transform toward collaborative work environments. People will still want to go to the office to engage with their colleagues, but they don't have to be there, 9 to 5, every day glued to a desk." (Sheila Botting cited in (Immen, 2021))

This quotation does not mention that workers are glued to desks at home for even longer hours. This illustrates how even part-time work from home has changed the spatial and temporal distribution of work. White-collar work is no longer confined to the office, but has moved to a location in workers'

homes requiring a reconfiguration of domestic life for the entire family.

However, as a long-standing problem, housing and the domestic realm are not generally considered in terms of COVID-19 and post-pandemic changes. Domestic spaces have been highly impacted and are the flip side of urban public spaces and work places. Moreover, hybrid domestic-work spaces supplanted the work worlds of many "white collar" professions, leading to a division between workers who could fulfill their tasks remotely and those whose presence and physical, kinetic engagement was essential and thus continued.

Gender

The literature on work-from-home is often silent on the gender composition of workforces. The heterosexual division of labour takes concrete form when male-dominated spaces are physically separated from the domestic sphere. Who is able to work from home? Who actually did and does work from home or in a hybrid combination of workdays in a designated office and from other locations? Work that could be accomplished via telephone and digital computing in regions where sufficient internet capacity was available to householders was shown to be portable. Mediated through platforms such as Zoom and Microsoft Teams, many office workers reconfigured their work life and re-equipped their domestic spaces to work from home. Even some call-centre workers, who are required to work in specific offices equipped with high-speed telephony and data services, were able to shift to home-based work. It is well known that it has been economically necessary for both men and women to do paid work to support their households, for the last three decades and longer for working-class families, migrants and families of colour in North America (Lynch, 2020). During this period and continuing during the pandemic, domestic labour and child-rearing duties have continued to not be shared equally among heterosexual couples (Burns et al., 2021; Lyttelton et al., 2020). In effect, remote working from home, expanded untenable demands to a larger group of women who had to undertake domestic on top of employment labour. School closures in favour of learning at home affected families with school-age children. Mistakenly referred to as the 'Great Resignation,' this was often not a choice. Many women were forced to stay home as an adult was essential to supervise children (Bambra et al., 2021). This has happened on such a scale that

female participation in management positions substantially declined.

Many resigned, but others attempted to maintain the illusion of working day norms despite having children around and underfoot (see e.g., Molla, 2021). Media interviews and images of women working from home during the pandemic capture the intermingling of domestic and work objects, bodies and activities in shared spaces. Work becomes embroiled with home. It is not surprising that these portraits centre on women themselves in a domestic setting. What is striking is that it is often difficult to separate and discern which are the paid work activities and which are personal and/ or domestic activities. Which elements are "work" and which elements are "domestic"? To what extent does this hybridity affect the spaces and relations between work and the domestic?

Stigma and Empty Office Districts

In business districts and across cities around the world, reductions in commuting and delivery to businesses during quarantine periods significantly altered the activity zones and acoustic environments of the city. The absence of vehicles was evident in a 4 to 6 dBA reduction in sound levels detected by monitoring network data (Asensio et al., 2020). Pandemic restrictions have resulted in uneasy feelings about public encounters and an uneasiness about contact and crowding. For example, in Canada, Winnipeg and other cities including Calgary and Edmonton have been called 'doughnut cities' with a core of offices emptied by rising and racially or ethnically labeled criminality. COVID-19 work-from-home measures exacerbated this by emptying downtowns and populating the correspondingly vibrant suburbs (Maginn & Hubbard, 2021). In 2021, even panhandlers have been observed to have moved from the central business district out to affluent but still dense areas of the city which have more vehicular and foot traffic than the white-collar and managerial downtowns of cities, such as Ottawa, the capital of Canada. Families moving to more suburban locations to have access to green space and gardens have dominated the real estate industry (higher frequency of garden usage is correlated with better self-rated physical and mental health and sleep quality; Corley et al., 2021).

Peri-urban expansion into agricultural land is also fueled by government and municipal policy based on the popularity of the family ideal of a house

and garden that contributes to the identity of a household (Immen, 2021).

Despite costing taxpayers much more to create and service, city plans implement this political preference through limiting the increase in density and thus the economic vitality of existing built-up areas, supporting peri-urban development, forbidding more dense building forms such as attached dwellings and restricting mixed use development in business centres. This contributes to a decline in such areas where the narrow use for which they are zoned by the city is not in demand.

Despite costing taxpayers much more to create and service, city plans implement this political preference through limiting the increase in density and thus the economic vitality of existing built-up areas, supporting peri-urban development, forbidding more dense building forms such as attached dwellings and restricting mixed use development in business cores. This contributes to the decline of such areas when the narrow use for which they are zoned is not in demand.

Together, expensive peri-urban expansion of infrastructure and services alongside decline in the property and sales tax returns from central districts, pose a frightening cost on cities which has led to tax increases on residents for cities such as Calgary ("The Future of Cities Is Density," 2021).

The 'doughnut' thesis lacks nuance and is questionable given the significance of spatial centrality to any urban form. Downtowns and areas most served by transport networks retain many geographical advantages. It may be more accurate to hypothesize that beyond rendering downtown office towers irrelevant during pandemic work-from-home measures, the result has been to stigmatize such business districts and the highrise building typology. Even if these constructions are necessary evils, this stigma remains as anxiety concerning elevators, the search for staggered commuting times and concern about ventilation business travel that may lead to contagious contacts. The reallocation of work to home redistributes bodies in space and also changes the perception and affections toward a whole range of sites. Home, garden, playground, office have identities in relation to an overall spatialisation of everyday life in which activity and social interaction are distributed geographically. Complementary community and collective facilities may lose some of the functions that now are

located in households. Parks for walking outdoors, limited occupancy retail and restaurant spaces, and well-ventilated public interiors similar to 19ᵗʰ century 'glass palaces' may become ways of avoiding future lockdowns. By appointment exercise and leisure facilities may be created that will find value in the centrality in the stigmatized cores of cities.

Even with new variants of COVID-19 predicted to continue to emerge, and with significant declines in values, real estate interests continue to argue, 'A big factor is the continued lack of foot traffic in retail districts as many people continue to work from home and shop online says...national real estate leader for PwC Canada... "First and foremost, the financial institutions have to go back to work, and that one change will see at least a 50-per-cent improvement in the viability of downtown retail in major cities across Canada"' (Stan Krawitz quoted in Immen, 2021, p. B6). But tourism is a missing element of foot traffic because travel remains restricted. While retail sales have increased in 2020, even with government support such as CERB (Canada Emergency Relief Benefit) , 40% of Canadian restaurants could not pay their November rent on time and in full, up from 38% in October and 32% in August. 33% of retailers and 47% of beauty salons have fallen behind on rent (Immen, 2021). Meanwhile, programming of retail streets and districts with cultural and entertainment attractions was increased in an effort to attract shoppers and foot traffic. This in itself shifts the understanding and practical reality of sidewalks in retail areas from only a transportation infrastructure to a social site and common threshold linking retail spaces to the space of the street -- social streets that are not merely for traveling down but hanging out on and participating in. However, these spaces and programs are increasingly more under the control of business improvement districts and groups of entrepreneurs, not the collective political institutions of the citizenry. That injects economic calculation as the main determinant of official activities in addition to and over political or cultural expression.

Work Impacts of COVID-19

During the COVID-19 pandemic, similar to Canada, the OECD found that in Australia, France, and the United Kingdom, 47% of employees teleworked during lockdowns in 2020. In Japan, which did not institute a nationwide lockdown, the teleworking rate increased from 10% to 28%

between December 2019 and May 2020. In April 2020, more than 3.9B people in over 90 countries were subject to confinement as a quarantine measure of social distancing. In professional, technical information and communication services 7 in 10 employees – particularly women – exceeded estimates and continued their jobs remotely (Statistics Canada, 2021). 59% of workers with postsecondary education were able to work from home by contrast with 10% of those with no high school diploma (Messacar et al., 2020). In the US, workers with higher levels of qualifications and those employed by large firms were fifteen times more likely to shift to telework than those without postsecondary qualifications (OECD, 2021). Statistics Canada found that approximately 40% of Canadian jobs could be done from home. Productivity was at least as good, especially as assessed by new teleworkers (Mehdi & Morrisette, 2021), which might be an indicator of the intensity of work even in the changed context from workplace to home. However, 35% of workers (51% of managers) reported working longer hours to achieve this and only 3% of new teleworkers worked shorter hours (Statistics Canada, 2021).

By August 2020, in Canada, and similar to other Western countries, 59% of businesses offered at least some of their employees the opportunity to telework during the pandemic (Statistics Canada, 2020). For a significant proportion of the population of OECD economies, this has seen couples and also children working from home. This has relocated the geography of workplace and career-related stress into the home, adding it to domestic tensions. An online survey, mostly of white married US women 55-75 in January 2021, suggested that working from home improved the lives of up to a third of respondents while increasing problems for a similar proportion (Sweet, 2021). Many service sector workers such as those who staffed retail and food outlets in business districts were supported through central government compensation programs such as CERB but empirical evidence connects both household economic struggles and perceptions of economic performance to rates of relationship breakdown at home (Fischer & Liefbroer, 2006; Fostik, 2021).

Many have referenced the mentally and socially 'unsustainable' situation of pandemic lockdowns. Working from home isolates individuals from embodied participation in communities of practice. This not only has mental impacts (e.g., anxiety) but also impedes the creation of professional

networks and links that were once used for career progression and adapting organizations. Trends observed at shelters, hotlines and emergency rooms indicate COVID-19 and/or economic crises are a catalyst for gender-based violence in the home and xenophobic violence outside the home (Centre for Research and Education on Violence Against Women and Children, 2020). This situation expanded from more precariously employed contract labourers to become a widespread phenomenon during the pandemic.

Homework, Home and Work in the Oikoumene

This paper turns to consider the less visible but no less significant role of work from home and its impacts on the role and understanding of the domestic sphere and the household as an '*oikos*,' the ancient Greek term for a household or inhabited dwelling that is also an economic space. In the ancient Greek usage, the oikos is the spatial unit of the family, an *oikoumene* (or *ecumene*). Admission to the more private spaces flexibly extended and indicated the membership status to adoptees, slaves, and relatives (Steadman, 2016). In the modern context, racial stereotypes of the household predominate. Based on the majority of households, an assumption of the racial homogeneity of the oikos is made. Moreover, the oikos is a unit that organized and epitomized patriarchal inheritance and the line from father to son. This entails control over women's reproductive life through spatial separation from other males. By this spatial logic, the tendency was to create two, unequal, spatial classes: males who moved between their household and civic spaces, and females who were much more cautioned and controlled in their movements outside of the household. The household is essential for analysis of contemporary society. More than any other entity, it fuses ethno-racial-sexual-class distinction into a unit. It integrates different individuals into economically stratified and racially distinct neighbourhoods and cities (Guevara & Shields, 2019). Particularly in 'Western' secular cultures of the OECD countries, the oikoumene is the foundational building block in a modular system of territories that divides the world according to a naturalized form of racialized and stratified differentiation and discrimination (Mitropoulos, 2012, p. 9). Capitalism extracts value by arbitraging labour and goods between these differently valued blocks – a so-called spatial fix for economic contradictions (Harvey, 1982).

White-collar occupations that could be digitally relocated from offices to

telework from home, have meant the reconfiguration of domestic space. Laptop computers with trackpads allow computer work to be repositioned and relocated. Bedrooms double as workspaces, while dining room tables have become coveted workspace. Others work from couches or invest in adjustable office chairs and additional screens to extend the functionality of laptops. Telework demands more privacy and control over the sound content and activity in the home (Torresin et al., 2021). This becomes a challenge when partners are also making noise working from home and children are being homeschooled.

COVID-19 required changes to domestic interiors, in particular when more than one person was working from home. This might have been couples struggling to allocate space in homes which presumed a gendered division of work around the house. The allocation of office space (marketed as a 'den', 'study', 'office', 'spare bedroom' or more grandly 'library') in residences was never on the basis of each adult requiring a workspace. But students and children also had to be accommodated, working from kitchens, dining rooms and bedrooms that were never intended for 24/7 occupancy. Residential internet often had to be upgraded to support multiple videoconferences going on at the same time in different parts of the house or apartment.

Remote working also eliminated the temporal boundaries of paid work. This changed the time structure of white-collar work, its routines, tempo and rhythms. In the shushed household, the working day no longer includes office banter and coffee breaks. Workers are assumed to be available all the time during working hours and videoconference meetings encroach on lunch hours and the formal end of the workday. Some manage to start computers and log on to work online to appear to have started work while still getting out of bed. This has changed the rhythms and temporal and spatial markers that differentiated different times, modes and distinct activities in the home; it complicates work managed internationally across virtual teams (O Connor et al., 2021). As capitalism is a regime of time as well as a spatialization that separates social reproduction from material production (Suckert, 2021), economic temporal imperatives are part of the saturation of home life by work. There are new tactics for mitigating of the tensions in 'work-family' relations and practices. In Finnish research, reducing the demands of the capitalist time regime is found to be female