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## Transformation of Public and Private Spaces: Instrumentality of Restrictions on the Use of Public Space During COVID 19 Pandemic

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### Abstract

This study explores the changing nature of public and private spaces and their characteristics in our daily life during the COVID-19 pandemic. It focuses on the role of the COVID-19 pandemic on the transformation of our physical (i.e., spatial) and social environments. This transformation process of physical and social environments has been primarily driven by implementation the "coercive restrictions" on the use of public spaces. The implementation of coercive restrictions on the use of public spaces has been receiving "mixed reactions" from people in different countries all around the world. The research presented herein studies these observed "mixed reactions" by using the lens of "instrumentality". The use of concept of instrumentality reveals the subtle operation of the transformation taking place in public and private places all around the world. The findings of this research open up a new perspective to question, analyse, and evaluate the "instrumentality" of imposing coercive restrictions on the transformation of public and private spaces.

**Keywords:** Covid-19; Public Space; Working Space; Individual Space; Privacy, Instrumentalization, and Instrumentality.

### 1. Introduction

During the SARS-CoV-2 Coronavirus (COVID-19) Pandemic, public movement in many cities has been restricted and people have been locked down (Sandford, 2020). The common problem emerged from restriction of movement and lock down is the radical change in in the socialization behaviour of individuals and the usage of urban spaces. Tamborrino (2020) argues that "despite global alarm about the spread of the novel coronavirus, this desertification has been a gradual process, as people showed resistance to the interruption of the use of social spaces". Restrictions for social distance (i.e., quarantines, travel restrictions, curfews and stay-at-home orders, workplace controls, and facility closures) also has a significant influence on the space organization in daily life. Half of the world population has been recommended to stay at home or prohibited from being in public in order to reduce the spread of Covid-19. High- spread speed of Covid-19 has already caused the infection of over 3 million people and also the death of over 250,000 people in 185 countries worldwide.

The worldwide spread of Covid-19 and in turn restrictions imposed to control its spread have been significantly changing the life style of people. As a rational response to the changing life style of people, the spaces (e.g., public and private) used by people also are going under a subtle transformation/redesign process. A closer to the operation of this subtle process reveals that it is about the "density, proximity, clustering concentration and centrality" issues. Design scholars and practitioners, such as architects and urban designers and planners, have been involved in addressing and pointing out the negative impact of "density, proximity, clustering concentration and centrality" issues on the quality of life for quite long time. Yet the negative of impact "density, proximity, clustering concentration and centrality" issues on the quality life have been relatively ignored by social actors mainly due to socioeconomic reasons.

The worldwide spread of Covid-19 presents a new opportunity for design scholars and practitioners to make their voices about the negative impact of "density, proximity, clustering concentration and centrality" issues heard. The recent picture from the Covid-19 pandemic and in turn restrictions on the freedom of movement can be instrumental to redesign public and private space to solve spatial problems which plague the built environment for quite long time. The instrumentality of restrictions on freedom of movement can be easily justified on the claims of protecting the public health. Yet it can be also extended to question and revise our traditional design practices on private and public space. In this perspective, this paper aims to focus on the preliminary observations on transformation of public and private space and conjectures about (1) the "instrumentality" of restrictions on use of public space and (2) the subtle operation of co-functioning process and possible outcomes of this redesigning process. Some scholars, researchers, and journalists have

been already involved in studying and discussing the post-pandemic space relations (e.g., Abbany, 2020; Klaus, 2020b; Rasheed, 2020) and developing scenarios on how COVID 19 pandemic will transform our relationship with public space (Fulton, 2020; Honey-Roses et al., 2020; Huen, 2020; Klaus, 2020a; Shenker, 2020; Tamborrino, 2020).

There is a significant increase in the number of high rise buildings in many cities. The observed increasing trend results in over densification in many cities which cannot be solely justified with needs of the metropolitans. The inadequacy of so called “contemporary urban policies” becomes more evident as the tension between densification and disaggregation for social distance becomes more clear (Shenker, 2020). The COVID-19 pandemic shows us that new urban design policies should be introduced to impose wider neighbourhoods that enable people to socialize without being packed and compressed in their living units. The current residential space design practices have been predominantly targeting to integrate pre Covid-19 pandemic living and working conditions with the Covid-19 pandemic living and working conditions. Yet many spatial design solutions appear to be inadequate and fail to meet the need of private open spaces.

During the COVID 19 Pandemic, living units present opportunities to their users to transform the semi-private space characteristics into to public space characteristics. These new opportunities for the transformation of space are not limited to the living units but also extend to roofs, windows, corridors, lobbies, terraces and balconies. The need for public space is now met at above the ground not at the ground level. Furthermore, balconies and windows are now become a buffer zone between intimate spaces of isolation and the public realm (Tamborrino, 2020). The redesign process based on co-functioning increased the instrumentality of space.

On the other hand, movement restrictions have led emergence the redesigning process of roofs. The redesign process introduces an additional new function to roofs – a public space where different kind of personal space patterns can be hosted. Thus, gaining a sense of public characteristics led to increasing social participation. But the lack of physical social integration increases the instrumentalization of space for roofs because of losing space identity. Yet this redesign process of spaces is not planned but spontaneous and haphazard. The physical (i.e., spatial and social requirements for hosting activities are to a great extent completely ignored. Consequently, people have been transforming the crucial parameters of the built environment according to their social and spatial needs.

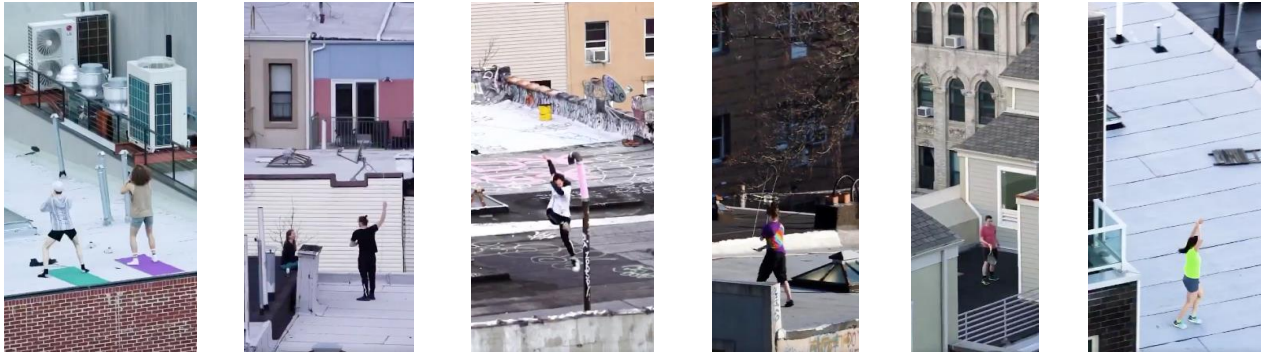
However, the impact of Covid-19 pandemic is not solely confined to redesign of private and public spaces but also extends to the deconstruction of space boundaries. It becomes evident that “boundaryless” cyberspace constructed by unprecedented digitalization is the only viable option to continue our formal and informal relationships. Information and communication technologies present the use of cyberspace as a public sphere to be a “digitalized” self to the public, and a new version of the self that is purely for public needs for working, education, paying taxes visiting digital museums, etc. Each house, private space, in this digitalization process is now the operating centre for creating, maintaining and sustaining our formal and informal relationships with other social entities. During the COVID-19 pandemic, the role of the house can be criticized by Baudrillard’s assumption about the condition of continuous and complete exposure of the inhabitant to information and communication. Baudrillard (1983, p. 55) states that: “today, it is the very space of habitation that is conceived as both receiver and distributor, as the space of both reception and operations, the control screen and terminal which as such may be endowed with telematic power - that is, with the capability of regulating everything from distance, including work in the home and, of course, consumption, play, social relations, and leisure. Here we are far from the living room and close to science fiction”.

## **2. Re-functionalization of roofs as public urban areas**

Globally, billions of people have been under isolation with curfews and stay-at-home orders as of early April 2020. Inhabitants have been staying indoors for days, even weeks. It can be easily stated that COVID-19 will have a significant impact on not only our daily basis such as how we work, learn, communicate, and so on but also our living practices. Even if we know “future is non-linear”(Abbany, 2020), data and trends can be studied and scenarios of how the future will be can be developed. It is widely acknowledged that cities can be conceptualized as living organisms – born, grow, and evolve. Fulton (2020) also points out the features of cities by arguing that “cities are adaptable and flexible and they have been reinventing themselves”. Using these features of cities under the conditions of Covid-19 pandemic opens up new ways of conceptualizing cities and questioning our conventional approaches to cities and their design. The potentials of such a new way of conceptualizing cities as Alver (2009) argues that “in times when social problems increase and people search for a solution, utopia stands out as a new path, search, and solution”.

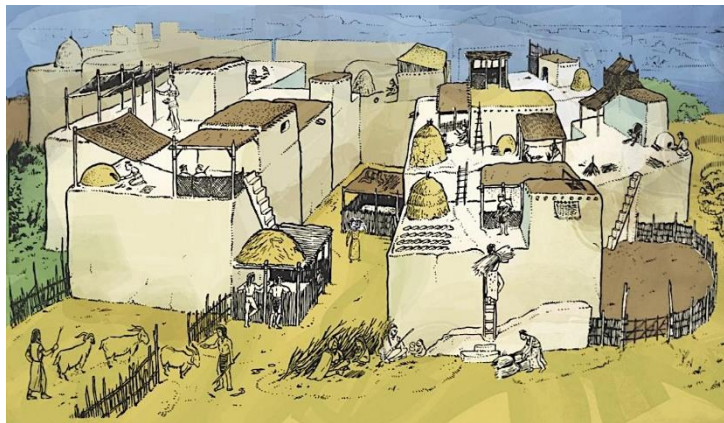
The restrictions imposed during the pandemic show that the most challenging situation is the fact that our habitual life experience or daily routines could not be achieved and performed. The social fabric has been simulated by society with the transformation processes of roofs. Flat roofs have become the main space for people's social interaction during pandemic days. It was like a dystopian version of Le Corbusier's utopia which has proposed to give the roofs new function and considering them as part of a life scenario. The main idea was refusing to interpret the roofs just as a structural element. In the twentieth century, Le Corbusier integrated roofs as a form of contact between people and nature (Dummett, 2008). His idea of green roofs offer spaces that enhance human activities while improving the feeling of community (Kowalczyk, 2011). Green roofs have been also utilized and proposed by the proponents of sustainable design

and development approach. They gained popularity and architects become interested in green architecture concepts (Kowalczyk, 2011). Furthermore, the concept of garden cities which has been predominantly proposed by green architecture movement also intends to re-prioritize re-establish our contact and relationship with nature and in turn meet the hygiene and health needs of habitants.



**Figure 1.** Re-functionalization of roofs in New York as outdoor sports activity spaces - Source: URL-1 (2020)

Social isolation orders have triggered city inhabitants to engage in solo outdoor activities such as walking and running, and exercising at roofs individually. It has resulted in the recovery of outdoor needs also through a change in their original intended use of roof spaces. The apparent restrictions on outdoor activity spaces have challenged conceptions of social interaction. Inhabitants of settlements come together at re-functionalized public spaces like roofs. The organization of outdoor activity areas has been a difficult issue in particular high density city settlements, but these open areas have been rapidly transformed into spaces to host sports activities, sunbathing, playground and informal meetings in the early stages of quarantine (Figure 1). This organization of roofs to host such social activities has strong similarity to public spaces in Çatalhöyük settlement where streets or courtyards have been absent in the Neolithic age (Düring, 2001). The early history of roofs which have been used as a public space dates back to the Approximately 6700 BC (Figure 2). The tendency of residents to re-incorporate the roofs into daily activities and to use them actively during the pandemic can be considered as an instinctive orientation left by our ancestors who lived in Çatalhöyük.



**Figure 2.** Roof Spaces in Çatalhöyük, Illustration by John Swogger (Source: Çatalhöyük Araştırma Projesi (2018).

17th-century plague pandemic and 19th-century cholera pandemic have triggered new urban planning approaches and architecture initiatives (Akcan, 2020). The prevention process has been grounded on hygiene fact in industrial times. "Reestablishment of human contact with nature" was the main idea behind many of the modern city planning initiatives introduced at the beginning of the 20th century. Architects, like Le Corbusier, following early 20th-century modernist design ideas advocated freestanding high rise building blocks in open space to provide ample sun, air, and green to all habitants (Marmot, 1981). Yet ironically the freestanding building blocks as a settlement model employed in modified forms all around the world. Le Corbusier's idea has been easily abused (Marmot, 1981) and has been served as an expanded design solution during the socioeconomic, racial-ethnic, and global inequalities in the 21st century. But this evolved high rise housing model has not responded to sufficient open spaces and green areas. In that sense, how the modern planning and architectural design that invented sanitary cities also produced ruthless inequalities has been exposed and become crystal clear by the COVID-19 pandemic (Akcan, 2020).

However, each era creates its own unique effects on housing strategies. At the beginning of the 20th century, the term

Existenzminimum (minimal existence) dwelling proposed a new way of living (Ioannidou, 2007). During the interwar period architects defended and applied that idea to address the housing shortage with social-equality values which were better for societies to produce many small but qualified dwellings for all rather than a few large ones for the wealthy (Akcan, 2020; Ioannidou, 2007).

### 3. Transformation of personal and intimate spaces as a public space

During the Covid-19 pandemic, the partial re-functioning of living units has become evident, as people transformed some specified spots in their living units into home-offices (Akcan, 2020) and activity areas. New spots have been discovered in interior spaces by bringing in multifunctionality to small spaces such as walls, ceilings, windows, and balconies. The impact of spatial and temporal crisis has become more pronounced on the basic needs such as physical and psychological care, child-rearing and socializing and relaxation. Tamborrino (2020) clearly states that “society has moved from places at street level to balconies and windows, which act as a filter between the intimate spaces of isolation and the public realm” (Figure 3).



A man sits on his window  
London, Britain, April 5,  
2020. Source: (URL-2, 2020)



A man reads a newspaper on  
a balcony in Brussels,  
Belgium April 5, 2020.  
Source: (URL-3, 2020)



Neighbors drink  
together while in  
quarantine, toasting  
from their balconies  
Bella, Italy April 2020  
Source: (URL-4, 2020)



Performance on balcony  
Paris, France, April 3, 2020.  
Source: (URL-5, 2020)

**Figure 3.** Transformation of balconies and windows

Interior spaces have rapidly have been reorganized to generate new patterns and configurations on using space to perform daily routines and activities. After the imposition of restrictions on the usage of outdoor spaces as public, balconies have been symbolized new kinds of freedom while supporting social isolation without feeling trapped, and to get fresh air without worrying about the contamination of the virus. Poon (2020) mentions that “such yearning reflects the value and limited amount of private outdoor space — be it a patio, small yard, or even a fire escape — built into multi-family housing in dense cities, where any kind of personal space is a precious commodity”. While everyday life takes place in a mixture of public and private spaces the confinement has led to blurring them in one interior space. In this confinement way of habitation, the relationship between the house and outside has lost a sense of differentiation. This kind of change in the experience of space is new.

Pre Covid-19 pandemic, people were spending most of the day outside their home, establishing various relationships with the public spaces due to social and mandatory activities. After the occurrence of the Covid-19 pandemic, they had to spend most of their daily life in interior spaces. This restriction in turn demands users to put more effort into accommodating and reconciling optional and compulsory activities at living units. Activities such as walking, shopping, eating and drinking, having fun, and performing social relationships; combined with activities such as commuting, going work and school in limited spaces. This situation has forced to limit the active 21st-century life practices into living units. Restricting daily activities into living units have led the impermeable and/or semi-permeable (i.e., controllable) boundaries of the private spaces such as windows, doors and balconies to evolve into permeable public space. In another words, this process is characterized as a different kind of “abstract demolishing or penetrating process of borders and transforming them into public spaces.

During Covid-19 pandemic, most of the people have been working from home, connecting digitally, and using digital public space while isolating themselves from physical contact- to ensure social distance. Most of the people have shifted from traditional working approach to “do it yourself at your living unit” approach where homes are now turned into production spaces where workshops are organized to perform working tasks and duties. “Do-it-yourself at your living unit” approach ensures simultaneously meeting working tasks and duties as well as physical distance for hygiene. Additionally, jobs, meetings, concerts, conferences, lectures, forms of socialization, traditional education systems have gone under a serious transformation process by moving from face to face interaction to online digital platforms. People have revealed most of their intimate spaces globally, by demonstrating their home experience, production facilities, and



workshops through digital platforms. On the other hand, it means to transform 'domestic space' into a 'production space' which has already separated in the industrial revolution.

#### 4. Transformation of public spaces in cyberspace

The COVID-19 pandemic has moved many of social and public activities into cyberspace. However, most of the daily activities have already been translated into digital forms before COVID -19 pandemic. In the recent years, there has been an extremely growing interest for the digitalization of museums (Fevgas, Fraggogiannis, Tsompanopoulou, & Bozanis, 2014; Mannoni, 1996; Note, 2014) banks (Giannakoudi, 1999), working environments (Timonen & Vuori, 2018) and educational practices (Bates & Bates, 2005) through the utilization of digital technologies. But the COVID-19 crisis has rapidly reshaped our perception to accept cyberspace as the only public sphere to access. The coercive restrictions have enabled to perceive "normalcy" of cyberspaces allowing people to accomplish public responsibilities by using digital technologies. The perception of cyberspace as a public sphere is the most acceptable point when it has aligned with the prevailing possible effects of the COVID-19 crisis on the social and political environment. Moreover, it has caused the transfer of existing daily social routines such as holding online courses, meetings, friend and family celebrations, cooking and painting classes, and community gatherings. It becomes evident from this unprecedented digitalization of everyday life has significantly increased our dependency on a set of services, telecommunication, information, and networks more than ever. In a such relationship, the reliability of digitalization elements is the key for the sustainability of day to day activities.

The utopian rhetoric that the dawn of digitized man has very close to turned into reality in COVID-19 pandemic with restrictions on accessing public space. Societies have tended to be isolated and have cut loose from the sociality of urban life with governmental decisions in contaminated countries. Social life has atomized in a cyber environment. The private living space has suddenly opened to the world and has transposed itself into cyberspace by blurring dimensions of inside and out, here and there. The role of the house can be criticized by the concept of 'on-line privacy', a function that enables it to be closed/open - on /off - to the 'elsewhere'. In this relationship turning private personal spaces to virtual public spaces means losing the privacy of intimate spaces.

#### 5. Conclusions

The Covid-19 virus has already redefined our relationship with private/personal and public space and accelerated our move to cyberworld - the online world. However the social reality of post-industrial society has shown us, only the privileged can afford to sustain themselves to stay home (Akcan, 2020). Lower-income households cannot afford to obey social isolation orders, they have to continue their public attendance because of their employment obligations (Honey-Roses et al., 2020; Valentino-DeVries, Lu, & Dance, 2020). It appears that the post-industrial society is not ready to cope with challenges presented by the COVID era. As Akcan (2020) has pointed out that "it is true that dense and large cities are challenged during infectious disease outbreaks, because of the increased probability of close physical contact and transmission of virus...[but] living in sprawling environments and isolated houses in gardens, and de-investment in public transportation, do not take other disasters into consideration, such as climate change (which is augmented by the inefficient use of space and increased commute), obesity, and social and racial segregation." In that sense, the COVID-19 pandemic is a wake-up call for post-industrial society to consider their spatial organization and evaluate how their urban development can help them to face extreme events.

#### References

- Abbany, Zulfikar. (2020). What do futurists imagine for the post-coronavirus-pandemic world? *Deutsche Welle (DW)*
- Akcan, Esra. (2020) *How to Build a Better World-a part of a cross-disciplinary series examining the real and possible effects of the COVID-19 crisis./Interviewer: Ryan Mulcahy*. The Magazine of the Radcliffe Institute for Advanced Study at Harvard University.
- Alver, Köksal. (2009). Ütopya: Mekan ve Kentin İdeal Formu. *Sosyoloji Dergisi/Journal of Sociology*(18), 139-153.
- Bates, Anthony W, & Bates, Tony. (2005). *Technology, e-learning and distance education*: Psychology Press.
- Baudrillard, Jean. (1983). *The ecstasy of communication*. New York.
- Çatalhöyük, Araştırma Projesi. (2018). *Çatalhöyük Kazı Alanı Rehber Kitabı*. İstanbul: Yapı Kredi Yayınları.
- Dummett, Emma. (2008). *Green space and cosmic order: Le Corbusier's understanding of nature*. (Ph.D Thesis), University of Edinburgh.
- Düring, Bleda S. (2001). Social dimensions in the architecture of Neolithic Çatalhöyük. *Anatolian studies*, 51, 1-18.
- Fevgas, Athanasios, Fraggogiannis, Nikolaos, Tsompanopoulou, Panagiota, & Bozanis, Panayiotis. (2014). *The iMuse Virtual Museum: towards a cultural education platform*. Paper presented at the IISA 2014, The 5th International Conference on Information, Intelligence, Systems and Applications.
- Fulton, William. (2020). How the COVID-19 pandemic will change our cities. *The Kinder Institute for Urban Research: COVID-19 and Cities*.
- Giannakoudi, Sofia. (1999). Internet banking: the digital voyage of banking and money in cyberspace. *Information and Communications Technology Law*, 8(3), 205-243.

- Honey-Roses, Jordi, Anguelovski, Isabelle, Bohigas, Josep, Chireh, Vincent, Daher, Carolyn, Konijnendijk, Cecil, . . . Orellana, Arturo. (2020). The Impact of COVID-19 on Public Space: A Review of the Emerging Questions.
- Huen, Bobby. (2020). COVID-19: Here's how one pandemic will change our lives, forever. *ZDNet*.
- Ioannidou, Ersi. (2007). *The (Existenz-) minimum dwelling*: University of London, University College London (United Kingdom).
- Klaus, Ian. (2020a). Pandemics Are Also an Urban Planning Problem. *CityLab*.
- Klaus, Ian. (2020b). The Post-Pandemic Urban Future Is Already Here. *CityLab*.
- Kowalczyk, Angelika. (2011). Green roofs as an opportunity for sustainable development in urban areas. *Sustainable Development Applications*, 2, 63-77.
- Mannoni, Bruno. (1996). Bringing museums online. *Communications of the ACM*, 39(6), 100-105.
- Marmot, Alexi Ferster. (1981). The legacy of Le Corbusier and high-rise housing. *Built Environment (1978-)*, 82-95.
- Note, Margot. (2014). Museum Communication and Social Media: The Connected Museum. *Collections: A Journal for Museum and Archives Professionals*, 10(2), 239-241.
- Poon, Linda. (2020). A Lesson from Social Distancing: Build Better Balconies. *CityLab*.
- Rasheed, Zaheena. (2020). Our lives after the coronavirus pandemic. *Aljazeera*.
- Sandford, A. (2020). Coronavirus: Half of humanity now on lockdown as 90 countries call for confinement. *Euronews*.
- Shenker, Jack. (2020). Cities after coronavirus: how Covid-19 could radically alter urban life *The Guardian*.
- Tamborrino, Rosa. (2020). Here's how locking down Italy's urban spaces has changed daily life. *weforum.org*.
- Timonen, Hanna, & Vuori, Johanna. (2018). *Visibility of work: how digitalization changes the workplace*. Paper presented at the Proceedings of the 51st Hawaii International Conference on System Sciences.
- URL-1. (2020). Roof Culture during Quarantine in NYC by Jeremy Cohen Retrieved April 28, 2020 [https://twitter.com/jerm\\_cohen/status/1251564472575107079](https://twitter.com/jerm_cohen/status/1251564472575107079)
- URL-2. (2020). A man sits on his window sill in Islington, as the spread of the coronavirus disease (COVID-19) continues, London, Britain, REUTERS/Dylan Martinez. Retrieved May 1, 2020 <https://www.reuters.com/news/picture/quarantine-culture-from-rooftops-balconi-idUSRTS373GI>
- URL-3. (2020). A man reads a newspaper on a balcony in Brussels, Belgium. REUTERS/Johanna Geron. Retrieved May 1, 2020 <https://www.reuters.com/news/picture/quarantine-culture-from-rooftops-balconi-idUSRTS373GI>
- URL-4. (2020). Neighbors drink together while in quarantine, toasting from their balconies, by News Desk: ABC News Retrieved May 1, 2020 <https://theglobalherald.com/neighbors-drink-together-while-in-quarantine-toasting-from-their-balconies-abc-news/385705/>
- URL-5. (2020). Concertist and conductor Stephanie-Marie Degand and her daughters, Madeleine and Gabrielle, perform on their balcony the prelude from Marc-Antoine Charpentier's Te Deum, formerly the Eurovision theme, as part of the Eurobalcon weekly challenge in Paris, France. REUTERS/Charles Platiau. Retrieved April 28, 2020. <https://www.reuters.com/news/picture/quarantine-culture-from-rooftops-balconi-idUSRTS373GI>
- Valentino-DeVries, Jennifer, Lu, Denise, & Dance, Gabriel JX. (2020). Location data says it all: staying at home during coronavirus is a luxury. *The New York Times*.