



## Quarantine as a Simulation of the Future Development of Spatiality

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### Abstract

*In the age of information, the production of space includes two different but reciprocal layers, which are physical and digital. Although domination of one to the other always demonstrates change according to sociability, historicity, and spatiality, the general disposition is towards digital spaces. This study aims to demonstrate the transformation of spatiality in isolated days caused by COVID-19 pandemic disease that includes two steps which are transition from outside to inside and from real life to virtual life. For that purpose, after gathering broad information from the social media accounts of people, who are working from home during the quarantine, were traced. Then, archival surveys were held to find the trend hashtags and the correction of these hashtags was supported with the Google Trends graphs. The data obtained from observations and Google Trends results were evaluated within the framework of the production of space that changed with Manuel Castells' space of flows and space of places and, Paul Virilio's Speed in the media theories. The results show that the transition of society from outside to inside has several adaptation phases, and then the space of places is needed even at the highest level of involvement in the space of flows.*

**Keywords:** COVID-19, pandemic, production of space, electronic spaces, physical place.

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# Mekânsallığın Gelecek Gelişmelerinin Simülasyonu Olarak Karantina

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## Öz

*Bilgi çağında, mekânın üretimi fiziksel ve dijital olarak iç içe geçmiş iki katmandan oluşmaktadır. Bu iki katmandan birinin diğerini sosyabilite, tarihsellik ve mekânsallık olarak baskılaması değişkenlik gösterse de, genel yönelim dijital mekânlara doğru olmuştur. Bu çalışma COVID-19 pandemisi sürecinde mekânsallaşmanın dönüşümünü iki adım olarak ele almıştır. Bunlardan birincisi dış mekândan iç mekâna geçiş, diğeri ise gerçek hayattan sanal hayata geçiştir. Bu amaç doğrultusunda, karantina sürecinde evden çalışanların sosyal medya hesapları gözlemlenerek genel bir bilgi oluşturulmuştur. Ardından arşiv taraması yöntemiyle insanların en çok kullandıkları etiketler araştırılmış ve bu veriler Google Trends grafikleriyle desteklenmiştir. Google'da araştırılma oranı artış gösteren etiketlere ve gözlemlere bağlı olarak süreçler takip edilmiştir. Elde edilen veriler Manuel Castells'in akımların mekânı ve yerlerin mekânı ile Paul Virilio'nun medyadaki hız teorileriyle değişim gösteren mekânın üretimi çerçevesinde değerlendirilmiştir. Sonuçlar toplumun dış mekândan iç mekâna geçişinin birkaç adaptasyon evresine sahip olduğunu ve sonrasında da akımlar mekânına en dâhil olunan zamanda bile yerlerin mekânına ihtiyaç duyulduğunu göstermektedir.*

**Anahtar Kelimeler:** COVID 19, pandemi, mekânın üretimi, elektronik mekânlar, fiziksel yerler.

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## **Introduction**

It has been argued that the digital space produced through digital technologies as telecommunications and computers would become more important than the physical space itself (Batty, 1993). The predictions of Paul Virilio like the “evaporation of the material, physical dynamics of space” find a place in this kind of assumption (Virilio, 1993; in Graham, 1998). However, the present situation demonstrates the necessity of digital and physical space combination, which is defined as digital places by Thomas Horan (2001) and as inbetween layers of space of flows and space of places by Manuel Castells (2012).

While technological developments and their effects on spatial production were being discussed so fervently (see Mütterlein & Fuchs, 2019), humanity encounters a worldwide pandemic disease which affects deeply the concept of space understanding of society: COVID-19 (new coronavirus), which started in December 2019 in Wuhan, China (WHO, 2020a). In the following days, the first COVID-19 case in the USA, on January 21, 2020, and in Europe, France, on January 24, 2020, were announced (WHO, 2021). Due to the increase in the COVID-19 cases, the disease was declared as Public Health Emergency of International Concern on January 30, 2020, and pandemic disease by the World Health Organization on March 11, 2020 (WHO, 2020b). On April 4, 2020, WHO reported the number of cases was more than one million (WHO, 2020c).

Since coronavirus infects with close contact between people via small droplets, the administration of countries took some precautions as social distancing and self-isolation (WHO, 2020d). Entertainment venues as cafes and restaurants were closed. If possible, people began to work from home, and students began to take online education. People only went out for their basic needs and could not spend much time outside. Furthermore, between March 13, 2020, and June 30, 2020, several parts of the world were in lockdown (WHO, 2021).

As a significant aspect of the information age, the development of technology and its adaptation through the environment is already an important research area, however, during the isolation days caused by COVID-19, digitalization of daily life practices, education, and business life has started to accelerate much more than ever before. Therefore, this study aims to analyze the spatial transformation executed by isolated people during the quarantine caused by coronavirus in two folds: (i) the transition of people from outside (out of

isolation spaces) to inside (isolation areas)<sup>3</sup> and (ii) the transition of people from real life to virtual life in the fully isolated times of COVID-19.

## Methodology

This study follows a quantitative and qualitative research methodology within the four lines of research. The first research line, which is qualitative, expresses the theoretical framework of the research. It includes the theories of space from the 1970s to present day. Namely, this research begins with the theories of Lefebvre, Harvey, and Soja, whose perspectives are based on the strong connection between the production of space and social bonds. Furthermore, the research follows the integration of digital technology into the theories of space in the 1990s. Since the networks society and space of flows theories of Manuel Castells and junkspace definition of Rem Koolhaas emphasizes the social structure throughout the transformation of spatial understanding, these theories gain importance during the research. In this way, the flow, which could be interpreted as from the physical to digital is criticized for how spatiality is integrated into the digital mediums. Thus, this part of the research ends up with Virilio's future predictions about the speed in media.

In the second research line, social media posts on the Instagram community were observed, since it is the public platform for people to share their ideas and lives (Poell & Van Dijck, 2016), by considering the interactional situation between space and people between March 2020 and June 2020. In this way, the hashtags, which were mostly used and having the clues on the use of space were determined. These are *Instagram Challenge*, *Instagram Bingo*, *View from Window*, *Balcony Garden*, *Home Garden*, *Quarantine and Chill*, *Netflix and Quarantine*, *Online Birthday*, *Sport at Home*, *Working from Home*, and *Learning from Home*.

The third research line is the continuation of the second line that the hashtags determined through observations were traced at Google Trends. Since the Instagram API has limitations in terms of reaching the users' posts in a specified period, the hashtags faced in Instagram were traced throughout Google Trends, which is the web service of Google, which demonstrates the search scale of any keywords in a specific period. Since Google is the most used

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<sup>3</sup> Within the context of this study, inside refers to the areas where people were isolated themselves during the pandemic, mainly the spaces of domesticity like their homes. Outside corresponds to the any places out of inside, which is generally suitable for crowd as public spaces, schools, working areas.

search engine, it provided the most broad information about what they were inclined to do in their lives during quarantine can be found here. Moreover, since it is documented that there is a positive correlation between Google Trends and Twitter Trends (Shahzad et al., 2017), supporting the Social media accounts with Google Trends results gives a chance to test the accuracy of the observations. Thus, this method allowed understanding the increase in the reflection of the physical ties associated with the space to the digital space during social isolation. At the further stage of this quantitative data collection, gathered information was examined under two parts as a *transition from outside to inside* and a *transition from real to virtual*. While the first part focuses on the early stages of quarantine by elaborating on the *shock of people, connections with the outdoor, indoor activities, and pulling out of the quarantine activities*. The second part coincides with the adaptation of the new normal, which is the new everyday life of people.

Finally, gathered information will be criticized in the frame of Paul Virilio's speed in media and Manuel Castell's spaces of flow and spaces of place. Relatedly, the results of this research lead us to the inference that society creates a new virtual existence since the social ties with the physical space did not satisfy them during the social isolation period. Because of that, the social isolation period refers to the adaptation period. Since the results of Google Trends graphics demonstrates a decrease after social isolation, it approves that quarantine makes people more familiar with the virtual environment than before. Moreover, since the results did not scale back to the degree of the before-quarantine stage, this period could be argued as the simulation of future developments.

### **Theoretical Framework**

The theories of space went through two substantial transitions in the 1970s (Ghulyan, 2017) and 1990s (Castells, 1999). In the 1970s, the traditional ontology of spatiality, in which space was defined with pure material and geographical aspects, was broken (Castells, 1978; Harvey, 1992; Lefebvre, 1991; Soja, 1996). Until the 1970s, the term space had been elaborated with its length, width, and depth as a context of Euclidian geometry in Cartesian understanding (Elden, 2009). However, after the second half of the 20th century, the concept of space has been initially argued based on the Kantian conceptualization of space which is subjective and ideal<sup>4</sup> (Kant, 2003). Thus this thought constructed the

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<sup>4</sup>“ Space is not something objective and real, nor is it a substance, nor an accident, nor a relation; it is, rather, subjective and ideal; it issues from the nature of the mind in accordance with

base of space conceptualization in the social sciences and humanities (Veikou, 2016). During this transition, Henri Lefebvre (1991, p. 26) produced his main argument that “social space is a social product.” According to Edward Soja (1996), the production of space in the argument of Lefebvre is based on three ontologies: spatiality, historicity, and sociality. In each time, this trialectic produced the space and because of that, each space leads to different understandings for each individual. Individuals produce space differently in their cognition.

After the 1990s, the second transition in the production of space has executed (Castells, 2004). Although the main arguments of Lefebvre (1991) and Soja (1996), those ontologies of space and *social space is a social product* protect its validity, the contextual platform has changed from the physical environment to digital. According to the theorists of the first transition, as de Certeau (1984) and Lefebvre (1991), the most important keyword that enriches the production of space is *spontaneity*. According to Lefebvre (1991), if every social formation produces suitable spaces for itself, the space of capitalism is the *abstract space*, which refers to the already designed environment by the hegemony. In abstract space, society sustains their everyday life practices in already coded spaces that are not decided by society itself. Therefore, Lefebvre’s *abstract space* does not allow any spontaneous encountering, it is designated by the hegemony with codes and prevents social production. If this theory is to be applied directly in today’s situation, it is obvious that everywhere is perceived as an abstract space. The biggest fallacy in this understanding is to ignore the changing ingredients of the ontological triad. As Mitchell (2002) argues that the digital environment has begun to take the role of the physical part in the production of space. Moreover, the change of society in this direction was named by Castells as the network society (Castells, 2004). The ontology of network society is mostly producing the invisible layer of the space, which is the virtual environment. This new society is a new ontological ingredient that interacts through feedbacks in social and business life. Since feedbacks are the links, a kind of web, between people, it becomes an effective tool in society (Castells, 2004), relatedly in the spatiality.

In the issue of the production of space, spontaneous encountering in physical places gives its place to digital feedbacks and comments, which could be defined as digital encountering. In the traditional understanding of space (Lefebvrian), every individual produces their own space in accordance with

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a stable law as a scheme, so to speak, for co-ordinating everything which is sensed externally” (Kant, 2003, p. 397).

their historicity, sociality, and spatiality following their own needs. Lefebvre (1991) uses the spider metaphor, in which each spider produces its web accordingly, to explain the role of the individual in the production of space. However, in the 2000s, Rem Koolhaas, a starchitect, brings a new definition to the production of space that there are spider webs but no spiders and he determines this type as the junkspace (Koolhaas, 2002). Without identification of the invisible part, which includes digital encountering, space, or junkspace, fallouts of what remains after digitalization, as there are spider webs without users. Indeed, today, the situation is that there are spiders and webs, in which every spider could be able to interfere with others' productions through the digital encountering. For example, in social life, these spider webs are hidden in our social media accounts.

The relationships between digitalization and society, and society and space, call forth the need for questioning the production of space in the digital era. Because, without integration of the invisible part mentioned above, space becomes meaningless as is Koolhaas's definition of junkspace, which is unmemorable, unimaginable, without form, and warped (Koolhaas, 2002). However, when the strong relationship between society and space is re-theorized, the meaning and the motives of the space regain their power. In this respect, Manuel Castells (2012) has done one of the most powerful spatial analyses, which are produced by the network society. First, like the theorists of the previous period, he emphasizes the importance of society as a key element, a fundamental dimension, in the spatial transformation. According to him, the key elements of socio-spatial change are *function*, *meaning*, and *form*. The *function*, in terms of taking a part in the economic and technological network, is global, on the other hand, societies' private life including culture is still local. Societies have to experience both global and local together. *Meaning* is the duality between individual and communal life in the cities and *form* is the complexity between the space of flows and space of places. In spatial formation, Castells argues that *the space of flows* connects the separate locations with the technological infrastructure as transportation lines and information systems, and telecommunications, which is indeed the base of the network society. It is "The material arrangements that allow for the simultaneity of social practices without territorial contiguity. It is not purely electronic space." (Castells, 1999, p. 295). *The space of places* refers to "the historically rooted physical expression of society" (Albrechts & Coppens, 2003, p. 216). What Castells believes is that the spaces of flows are folded into the space of places in the informational city, in which information and communication technologies play important roles in

urban development (Castells, 2012). This formation is the re-conceptualization of the city, which is a hybrid and a kind of interaction between virtual and physical. Similar to Castells, Thomas Horan (2001) argues the connection of electronic space with the physical place. According to him, “the need for the physical place and human activity is not going to vanish, but will evolve within the context of digital activities and technologies”, and “digital technologies will impact our social and communal relations, but how well they integrate with these relations will depend on how well we build our city of bits” (Horan, 2001, p. 18).

On the other hand, Mitchell (2002) argues in his article, *E-Buildings and E-Cities*, that time dominates the space, such as call centers could work for Hong Kong from Sydney. For e-cities, the critical issue is being at the correct time, and there is no correct place. In his context, space is a refugee. In Castell’s description, infrastructural qualities should meet with the socio-spatial structure, which means the hybrid production of space of places and space of flows. However, for Mitchell, the important thing is just the infrastructural network with the globe, namely, space of flows dominates the space of places. Day by day, we have lost the connectivity of the places and prefer to have electronic connectivity. This preference could solve our all working and social needs. If he is compared with Castells’ (2012) spatial analysis, the critical direction for the future is *the space of flows*. For example, online banking decreases the importance of bank buildings, which are constructed on the main streets that decrease the connectivity to the physical geography day by day (Mitchell, 2002).

While Castells and Horan discuss the necessity of creating a balance between digital spaces and physical places by emphasizing their equality in today’s situation, Paul Virilio mostly focuses on the dark scenarios of digitalization, especially at the digital media and their effects on society. With the media, nature will be deciphered and annihilated (Virilio & Lotringer, 1983). People will prove their existence with the programming and physical being with the advanced technology and electronic communications machines (Armitage, 2001). Virilio discusses the perceptual technologies and their embeddedness in everyday life such as streets and homes (Cubitt, 1999; Virilio, 1994) in which recorded things that could be banal or habitual, may not get attention or perception (Walker & Virilio, 2001). Through the years, the existence of humans will give its place to the media. To resist disappearance, everything survives and remains with communication tools (Virilio, 1986). In the cities, habitable circulations, nature, and technology are superimposed (Virilio and Lotringer,



1983). The city has turned into a dwelling place organized by channels of communication and transportation (Virilio, 1986).

In terms of flows, Virilio argues that for the contemporary media infrastructure, access to information has increased and this situation brings the transformation of everyday life, which is hidden by flow (Virilio, 2001). The level of speed in the flow explains the acceleration in urbanization, information, and socialization. (Virilio, 1986). Furthermore, aspiration to control time and space is accelerated and caused speed in communication and transportation technologies (Aykutalp, 2017). With allseeingness, the human can transcend the limitations of time and space, and lose the sense of place. Computers and record machines could be programmed for watching in later times, which gives an electronic space to the object rather than a physical being (Virilio, 2001; McGuire, 2019). This electronic space includes global flows. Timothy W. Luke and Gearóid Ó Tuathail (1998, p. 73) argue Virilio's *speed* to explain flowmation as "structured events flowing in-formation under high-speed acceleration". Global space is re-mastered by global flowmations, which are used to reach the whole world and transcend the physical borders (Luke and Ó Tuathail, 1998).

As mentioned by Virilio, execution of whole life in the developing technological communication and transportation technologies has put the question of the changing society and where it lives (Cubitt, 1999; Virilio, 1986, 2001). Relatedly, will the communication networks be new living spaces for the network society, which is identified by Castells (2012)? If so, is locality compelled to be erased? Although Castells (2012) and Horan (2001) point out that the production of space will continue with a balance between electronic and physical, Virilio and Mitchell think that spaces of flow will prevail in this regard. In this new society, will this situation result in the loss of the place and features of the people in the world as Virilio mentioned? On the other hand, as Mitchell (2002) said, is this a change and development, in which everything is proceeding as it should be? With COVID-19, a context has been created to test all these theories and their future implications during the four months of isolated life in which people mostly had technology-dependent life.

### **Production of Space in Quarantine**

During quarantine, most of the people experienced digital platforms more than usual. Thus, the integration of digital technologies in daily life practices caused some changes in the production of space. First of all, since the 1990s, getting familiar with digital technologies and their effects on the theories of space

demonstrates that spatiality has already been in a serious process of change (Castells, 2004; Horan, 2001; Koolhaas, 2002; Virilio, 1993). Society needed it and was moving in this direction. The quarantine process could be assumed as an accelerating task in the physically breaking world, for researching, developing, and adapting the ways of digital interaction. It allowed the experience of living increasingly in the flows of the network in social, private, and business life by keeping the locality fixed. In the discussions between digital spaces and physical places, by keeping the locality constant, it was made visible what could be the result of digitalization only.

In the isolation days, as a first step, quarantine forced people to stay at home that causes to change in people's lives that they suddenly transitioned from outside to inside. Then, after people became used to living in isolation, they experience another transition that occurs from the real environment to virtual to socialize and work at home.

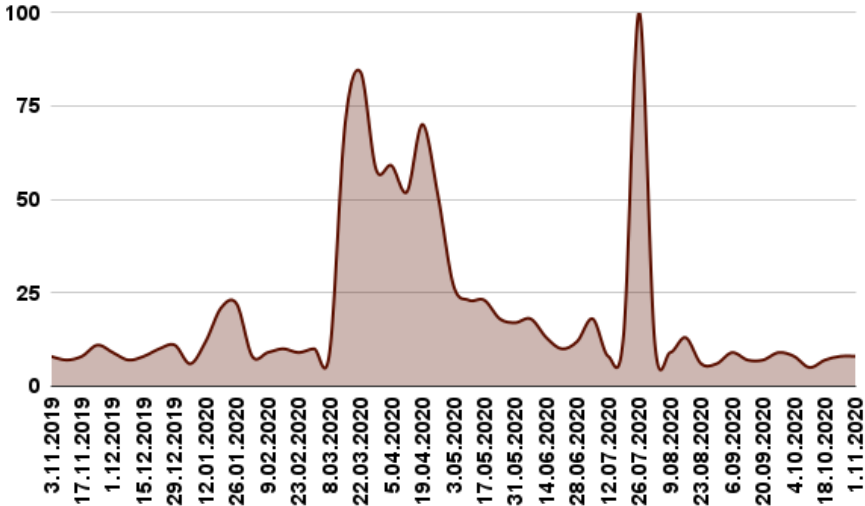
### *The transition from Outside to Inside*

During the quarantine, people's preference to communicate with others and follow related news about the coronavirus was realized in digital channels, which includes social media posts and Google searches as they used to. Indeed, regarding the observations through Instagram and Google Trends results, the transition from outside to inside could be evaluated within three parts, which are the shock of people, connections with the outdoor, indoor activities and pulling out of the quarantine activities.

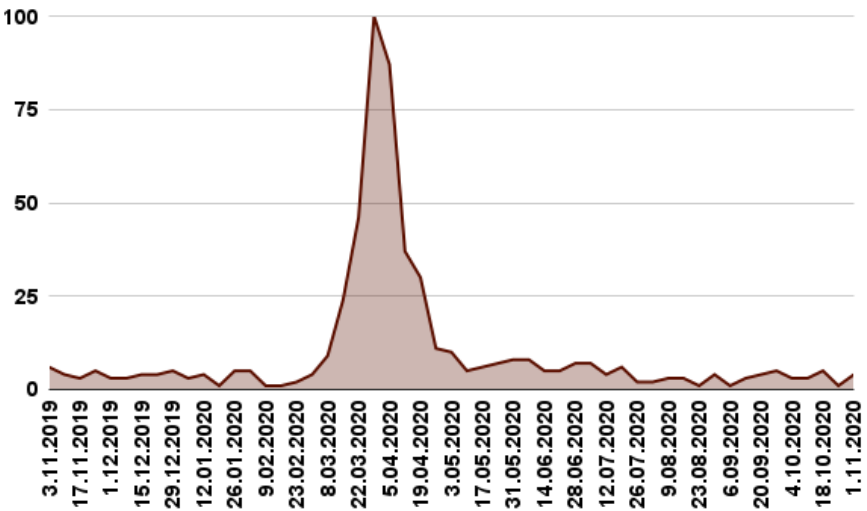
At the early stage of the isolated life, people tended to be reminiscent about their past. They preferred to post #tbt (throwback to), creating some challenges that include childhood photos and bingos of cities and universities. During this stage, this sharing activity continued as a chain and reached most of the people. Rather than focusing on current situation, they tried to take comfort in the past. People were in a strange circumstance and the most familiar thing was the past and their memories. The first stage was a kind of shock for people and they produced some entertainment methods for socializing. Without thinking inside or outside, they refrained from meeting with people impulsively. In this unpredictable situation, people attend to the challenges in social media unconsciously. It was kind of a collective method to survive the first shock of these bad days.

For this stage, searching for the *Instagram challenge* (Graph 1)-four times higher than usual, and *Instagram bingo* (Graph 2)-nearly a new item in search

demonstrates a great increase in the access numbers through Google search engine in quarantine months that are March, April, and May.



Graph 1. Graph of Search for Instagram Challenge (Google Trends, 2020)



Graph 2. Graph of Search for Instagram Bingo (Google Trends, 2020)

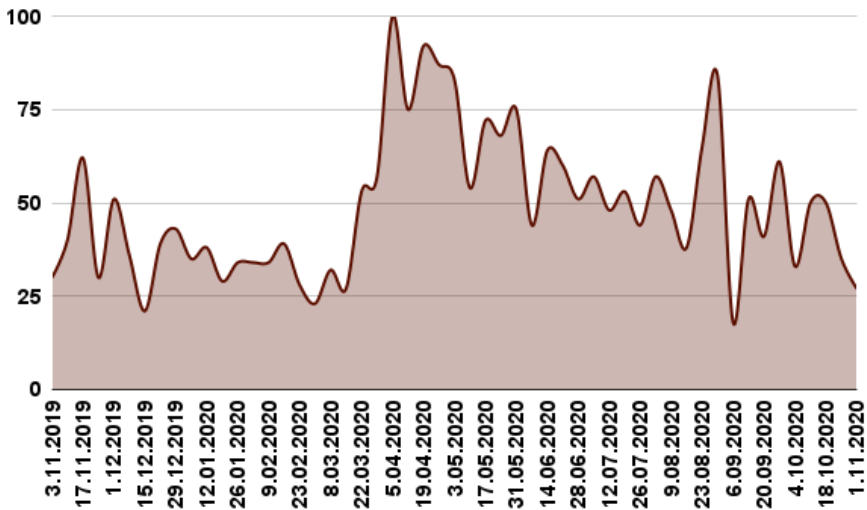
Although people were in lockdown, they still had a personal connection to the outdoor and tend to share their yearning throughout the perspectives from balconies, windows, and gardens where the closest places to the outside are. In

those threshold spaces, people can create a visual connection with the outside. In March, April, May 2020, #ViewFromMyWindow was among the trend hashtags used on Instagram (Larkin, 2020). Moreover, the searching of *view from the window* (Graph 3), *picture window* (Graph 4), *balcony garden* (Graph 5), *interior garden* (Graph 6), and *home garden* (Graph 7) raised during the isolated life. Differently, after the shock stage of the quarantine, individualism became more dominant and people feel the moment they existed. It was the first step, which is taken for *quarantine memory*.

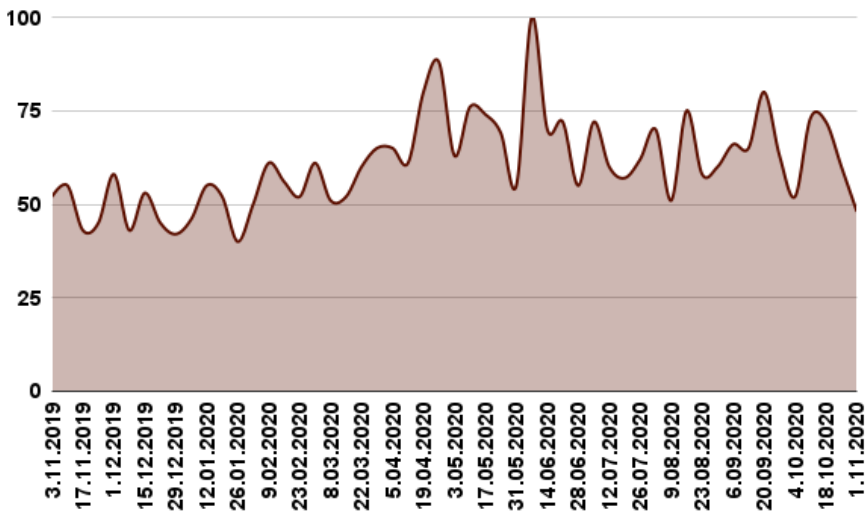
Moreover, since people do not spend time on transportation in order to reach their work places and can spend the break times in their homes, they have more free time, which can be spent on other activities. Relatedly, homes as a domestic living environment bear other meanings during the quarantine, such as the space of working, doing sport, social activity, and living as well. The way they used to familiarize themselves with the events and activities of outside, which are products for sharing in the virtual environment. When they are isolated from the outdoor, they need to create a bridge<sup>5</sup> between inside and outside. In this respect, producing in-between spaces by remembering outside and nature resulted in indoor gardening in different sizes between flowering a houseplant to the transformation of a balcony to a vegetable garden. One of the interesting interpretations through these spaces is that it demonstrates the semi-public space characteristic. It is not an accessible place by other people; however, they can see it from the outside.

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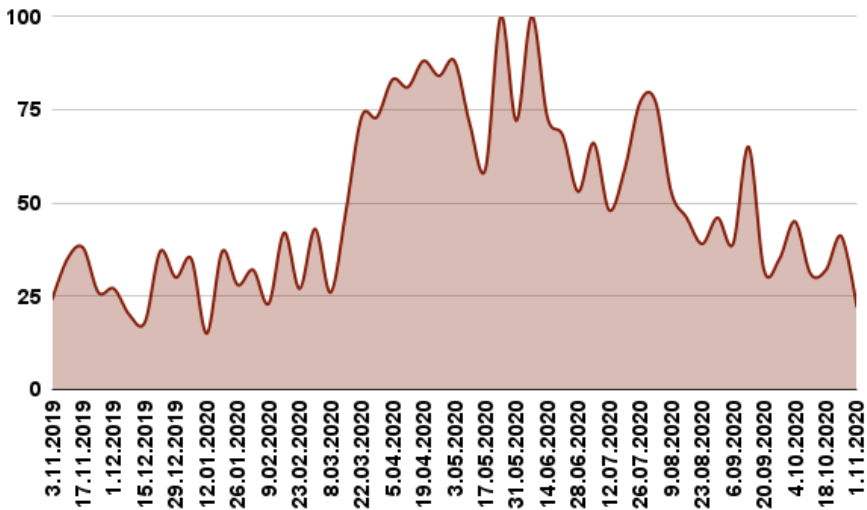
<sup>5</sup> Martin Heidegger (1971) uses the bridge metaphor to explain giving meaning to space. That bridge is what makes space a place by attributing meaning to its two sides.



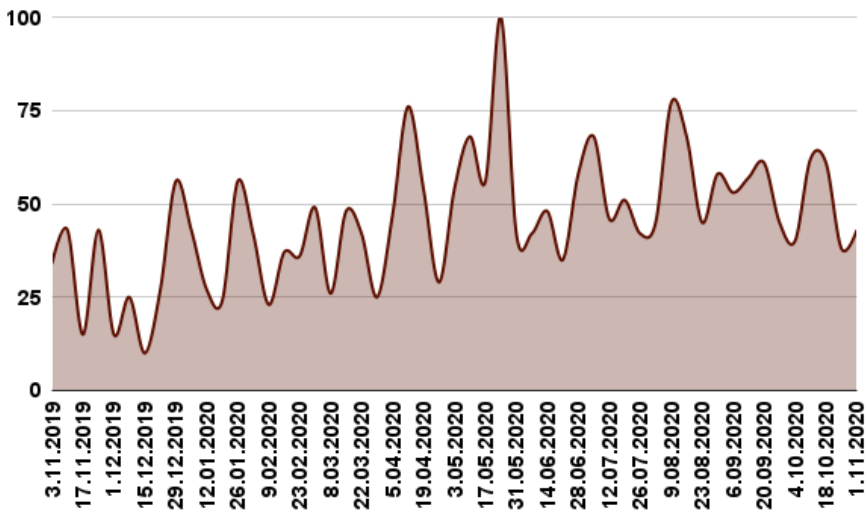
Graph 3. Graph of Search for View from Window (Google Trends, 2020)



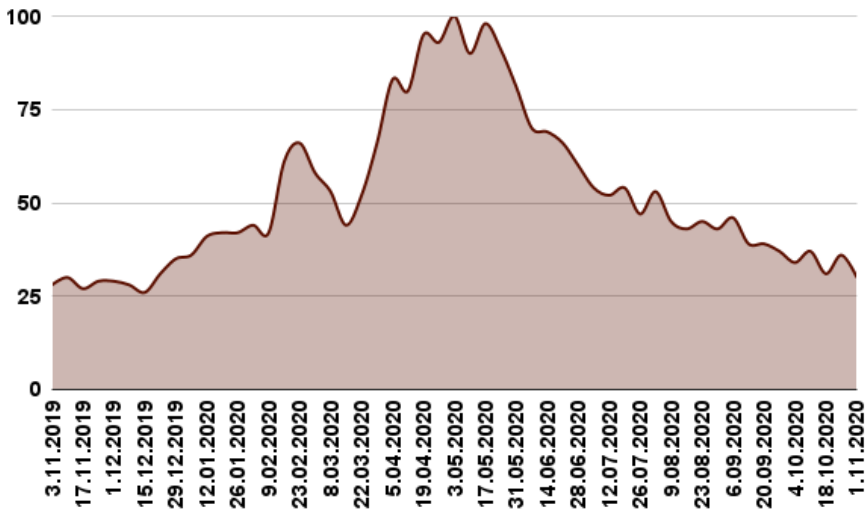
Graph 4. Graph of Search for Picture Window (Google Trends, 2020)



Graph 5. Graph of Search for Balcony Garden (Google Trends, 2020)

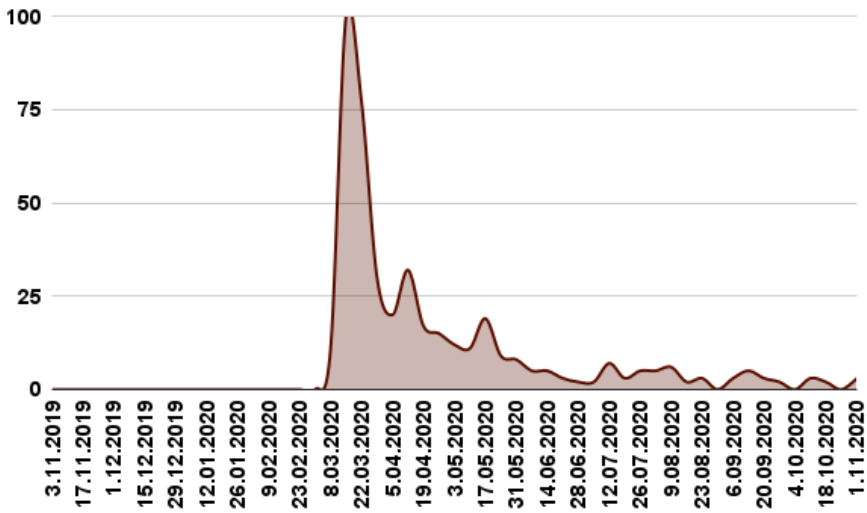


Graph 6. Graph of Search for Interior Garden (Google Trends, 2020)

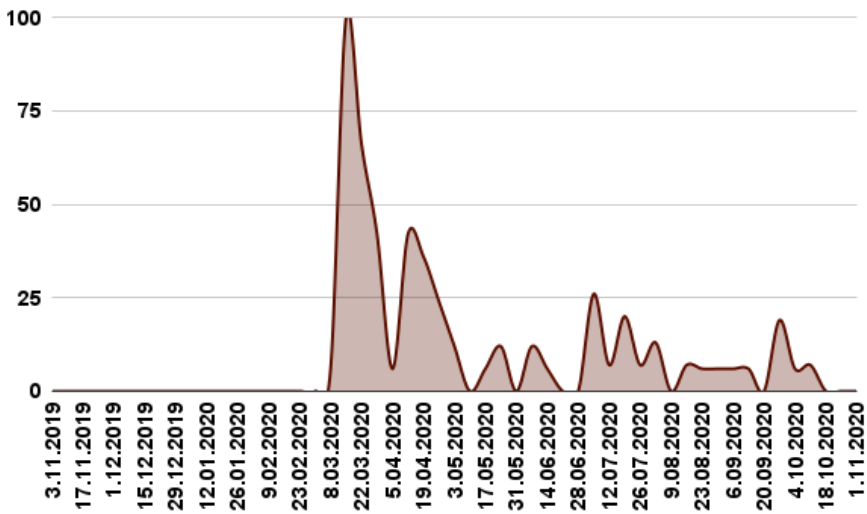


Graph 7. Graph of Search for Home Garden (Google Trends, 2020)

After people got accustomed to individual life a bit more, the number of activities held in interior such as working, exercising and cooking was increased (Valizadeh & Iranmanesh, 2021). In time, isolated life becomes the usual daily life. People begin to use online video calls for gathering social activities. #QuarantineAndChill and #NetflixAndChill, which were placed near the top on Instagram (Larkin, 2020). This situation demonstrates people's habitude turned to the interior. Most of the community began to design their interior places for working and exercising. A great number of posts and design ideas were shared during the process, and via short articles, architectural ideas about the workspace design were shared that focused on giving meaning to space (Cemali, 2020). Nearly for about three weeks, the social media accounts were swarmed with photos of the instagrammable space of the home. In April 2020, news published seven trending hashtags on social media. Although #Coronavirus, #Covid19, and #StaySafeStayHome were at the top of the list, #WFH / #WorkingFromHome was placed at the sixth line as the new norm for those days (Media Update, 2020). Relatedly, searching the number of *quarantine and chill* (Graph 8), *Netflix and chill* (Graph 9), *sport at home* (Graph 10), *online birthday* (Graph 11), *working from home* (Graph 12), and *learning from home* (Graph 13) demonstrates a great increase in Google search engine.

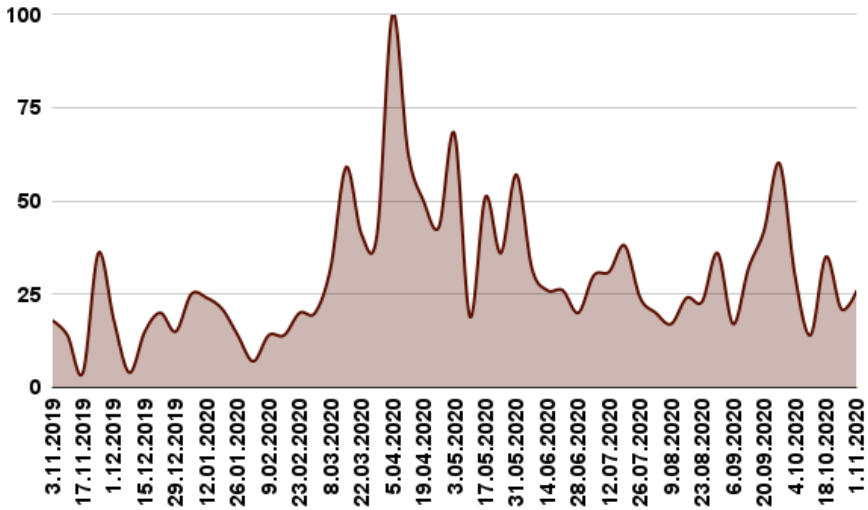


Graph 8. Graph of Search for Quarantine and Chill (Google Trends, 2020)

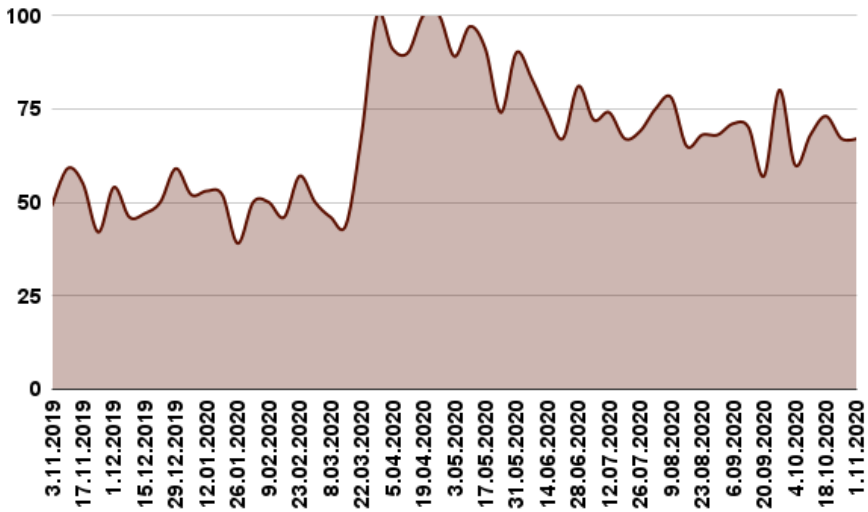


Graph 9. Graph of Search for Netflix and Quarantine (Google Trends, 2020)

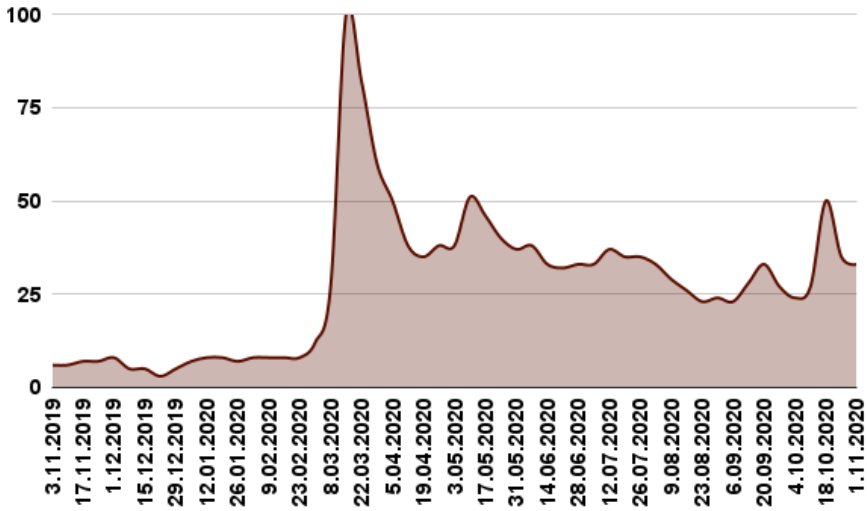




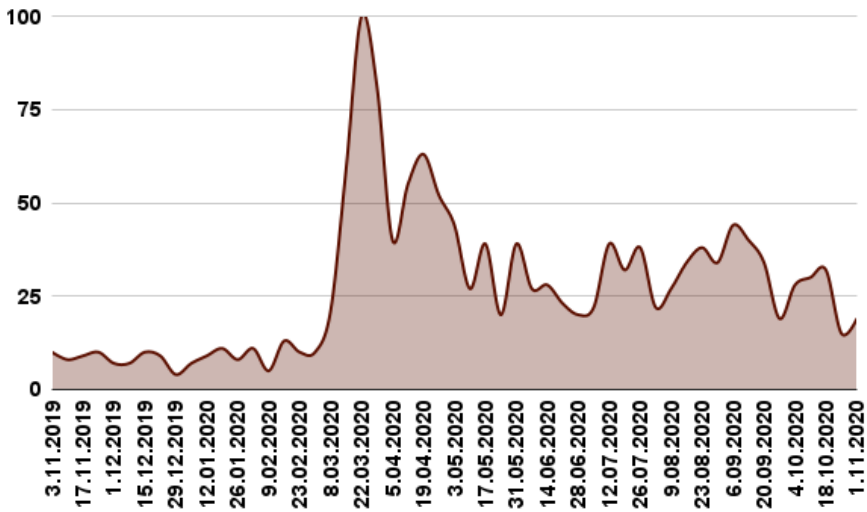
Graph 10. Graph of Search for Sport at Home (Google Trends, 2020)



Graph 11. Graph of Search for Online Birthday (Google Trends, 2020)



Graph 12. Graph of Search for Working from Home (Google Trends, 2020)



Graph 13. Graph of Search for Learning from Home (Google Trends, 2020)

Through the end of quarantine, people have nearly stopped sharing their activities. Even Instagram influencers have decreased their sharing day after day. Synchronously, people’s enthusiasm for life has decreased. The public spaces where people encounter simultaneously were locked. Thus, people can-

not meet new people in their daily life practices. Even if they meet with somebody, they cannot continue to same communication without seeing them in real life (Low & Smart, 2020).

### ***The Transition from Real to Virtual***

With the announcement of coronavirus as a pandemic, all countries begin to experience quarantine life by closing doors to the outside. Immediately afterwards, isolated life, to an extent, has forced people to dabble with technology to reach the news, continue work and education, and even for socializing. In this process, societies have taken a fast move towards where they want to reach in communication technologies and digitalization. When Bedyński (2020) compares the 14th century Black Death, the medieval pandemic, and the COVID-19, explores that the 14th-century pandemic caused to increase in mobility, yet the COVID-19 pandemic has frozen the movement. It could be explained with the need for the current period. In the 14th century, society needed improvement in urban planning with water infrastructure (Lilley, 2015). However, in the 21st century, Desafio can be framed by the need for digitalization as a part of the information age. As argued by Mitchell (2002), Castells (2012), and Virilio (1994), the world moves through the connection lines and it has changed the ontology of where we live. Relatedly, in the fixed localities, where could be any physical place in the world, individuals can connect to digital flows with the digitalization of museums, exhibitions, concerts, and improvement in virtual communication systems (Euronews, 2020). During the pandemic, nearly all work branches have slowed down or even stopped. When everything stopped, work power in communication technologies focuses on the improvement of connecting the whole world and they succeeded. The need or will of the era is realized in condensed one month rather than spread it to the whole year. The atmosphere of the environment, containing an extensive amount of needs and problems, which is faced by people in their daily lives provided an adequate base for them to have enough experience in order to test the digitalization. Herewith, the change in society can be observed in this rapidly changing and adaptation process as a simulation of the future. Speed in connection and media technologies that already integrated into our lives, now, totally get the control and it is generating new economic, political, social, and other forms (Virilio, 1986).

After people adapted to indoor life, they were exposed to another transition from real to virtual. Learning and working from home caused to adopt a new culture in the information age. First of all, people experienced *adaptive technological design* which is one of the key themes for digital places as expressed by

Horan (2001, p. 12) that "...designs that have been modestly altered to incorporate some level of technology, but which retain their original organization and atmosphere." On one hand, homeworkers adapted to the new work culture of which digitalization of their workflow in a virtual environment (Chung, Xu & Zhang, 2020). On the other hand, working from home is connected to a physical place and people find new ways to design their homes according to the workflow. Internet connection was the first step in the design process. Although in the urban spaces, the internet infrastructure is already up and running, in the peripheries of urban and in the rural space, there are still some stability and data rate problems. Function becomes the dominant factor for this sudden change. People have become part of the technological network from their homes (Castells, 2012; Horan, 2001). Before the fast digitalization caused by pandemic, companies were already part of the network, however, individual participation in the network was not that much common. With the pandemic, people who work from home feel their place at this network. Moreover, they combine the work with their private life, which was still local. It proves the inseparability of virtual and the real and the strong need to be connected to the network (Castells, 2012; Mitchell, 2002).

Indeed, the popularization of co-working spaces was an increasingly common situation. Workspace designs, as flexible and open, are articulated with eye-catching Instagrammable place equipment (Ayu & Sulisty, 2020). During the pandemic, people have produced their Instagrammable places at home and posted them on their social media accounts. Instagrammable is defined as "Visually appealing in a way that is suitable for being photographed for posting on the social media application Instagram." (Lexico, 2020). How space seems good in the photograph becomes crucial for the individuals. It is the new transmedia paradigm in which people place themselves between the real and virtual which is defined as the transmediated self (Elwell, 2014). These photographs are attached to the flows at social media accounts as a public space that creates emotional connection between people (Poell & Van Dijck, 2016). Namely, the development of virtual public spaces continues to reflect its traditional base (Light, 1996).

However, from another perspective, while people were used to share already commodified spaces, now, they would learn to commodify new spaces themselves. The condensed digitalization and speed in media and social activities brought a new extension to individuals. Within that, the duality between

individual and collective in meaning-making become more blurred. The locality has changed its meaning which is not private anymore. Physical beings began to exist to survive in the virtual environment (Armitage, 2001).

In terms of socializing, no matter how, people keep connected through virtual birthday celebrities, parties, or group organizations but it could not be long-running. As a community that lost ground the conversation in these gatherings revolved around absence and lost their meaning (Gessen, 2020). Through the end of quarantine, people began to miss what they were familiar with on normal days. #INoLongerRemember became the new in social media to emphasize this nostalgia (Media Update, 2020). People cannot separate themselves from the locality and miss the old days. It proves that the root of the virtual places is hidden at the locality. At the same time, the links between the real and the virtual became stronger than ever. It does not turn back to its previous state (The Economist, 2020). Working from home, digital communications, and online education will take much more place in our daily life practices.

Indeed, as it is understood from the transition from real to virtual in the quarantine days, if there is a struggle of domination between virtual and real physical spatiality, it cannot be solved by emphasizing only one of them. Opposite to Mitchell's belief (2002), the most important thing is not just the infrastructural network with the globe. People still, want to experience and to give meaning to those spaces. Castells's (2012) mentioned that the locality is still at the forefront. The virtual environment cannot dominate the real space where people live physically. For example, although most of the writings emphasized the advantages of online education during the isolation days, in terms of social aspects of the schools, it should be thought that school as a place creates a locality for students who learn to work together. Students need to learn how to sustain relationships in the locality, not in the adaptive learning technology (Lempinen, 2020).

With the intense digitalization, the physical places and digital spaces for the people have become a new spatial reality. The transition from physical to digital has increasingly taken place in daily life practices since the 1990s. For example, as seen in Graph 12 and Graph 13, working from home or learning from home were concepts that has had existed before the quarantine. These Google Trends graphs (Graph 12 and Graph 13) state that these concepts were also searched on Google before the quarantine period (before March). But the epidemic entirely caused a significant increase primarily focused on this area. Moreover, as seen in Graph 5, Graph 6, and Graph 7, searching for an indoor garden had an undenia-

ble rate before the quarantine. People have indeed begun to establish a link between outdoor and indoor. Also, according to the graph in Graph 10, the concept of sports at home was in demand before isolation. That is, digitalization was gradually beginning to create fixed but multipurpose localities.

The research shows that the keywords captured from Instagram and the frequency of their search ratios in Google mesh together. At the same time, we have already tended to use spatial adaptations, as hybrid spaces, in today's conditions. And all the graphics, which are in this direction, like the compressed version of the future, showed an intense increase in the quarantine process. Although our digital pace has increased gradually, the need for people to organize their daily spaces and to connect with nature showed that digital spaces can never replace physical places. The fact that all of these can be followed from social media accounts proved a mutual relationship between digital spaces and physical places.

## Conclusion

Changing arguments through the production of space in terms of the real and virtual environment becomes one of the important questions in the age of information. The question of how virtual space replaces physical space could be followed by using the arguments of pioneers, who breaks the traditional ontology of space like Lefebvre, Soja, Harvey, and Castells in two different ways. Firstly, the production of space still sustains its social character that, social space is a social product, which the role of the society mirrors in the digital space. Secondly, besides developing spatial arguments based on the existing ones, the production of hybrid space demonstrates the validity of the discussions produced during the 1970s. Because the comprehensive argument of physical space still protects its importance as it is. In the first part of the quarantine, transition from outside to inside, behaviours of the people prove the strong link between society and physical space by using threshold spaces as windows and balconies and moving the outside activities to the inside.

In the second part of the isolated life, people have a chance to experience what Castells and Virilio argue for today and future developments. The superimposition of electronic space and the physical place is in our life more than ever. Moreover, their accelerated experience of them clarified the complex discussions between two spatialities. By Andrew Benjamin's term, both are the telos of the being in today's situation (Benjamin, 1989). The definition of Virilio (1986) that city as habitable circulation gives its place to the city of flows that need to habitable space. Today this habitable space is placed in the virtual environment. However,

to sustain the habitation it needs physical places. Even if people tend to live in digital space during the quarantine, it should not be disregarded that people lost their connection with the locality. People filled their life with social media and digital activities, however, they lost social, spatial, and emotional embeddedness through the locality which they used to call home (Chung et al., 2020).

Until quarantine times, the disposition of society and the importance of spatial tendency is through the virtual networks and virtual life. However, during the process, it is obvious that without the locality, the virtual environment will not be alive for a long time. Because its production is executed in the spaces of places. However, not being in existence in our virtual life is decreasing our energy of life. As argued by Castells, both are folded into each other. As experienced today, in social meeting activities, people can come together in the virtual environment with other people. Or, in the physical meetings, they find a visual beauty in the places for sharing on social media and increase the interaction with other people that they do not exist in the same physical environment. Likewise, in business and education facilities, being in sharing physical spaces is important for people; however, being in contact with people from different parts of the world provides a variety of opportunities. Although the balance between physical and digital space changes in everyday life practices, there occurs a mutually reciprocal relationship between these spatialities.

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