



Balcony: A remembered architectural element amid the pandemic Evidence from digital media

*

Şeyda Emekci¹

ORCID: 0000-0002-5470-6485

Abstract

The pandemic has created a global crisis. Governments have taken a number of preventative measures like “stay-at-home” orders to curb the spread of COVID-19. These measures have provided people to rediscover their living spaces. The balcony is one of these places. The balcony has a crucial role in human life and works as a connector in-between space of indoor-outdoor, public-private. However, in the 21st century, it left its glorious old days behind, lost its vitality, and turned into a faded architectural element. Along with the pandemic, the balcony is again on the people’s agenda as space symbolizing the new form of freedom. The aim of this study is, on the one hand, to put forth the effects of the pandemic on the popularity of the balcony to employ quantitative analysis of internet search statistics; on the other hand, to reveal how pandemic affects people’s perception of the balcony to use sentence-level sentiment analysis.

Keywords: COVID-19, pandemic, balcony, sentiment analysis, internet search statistics.

¹ Assist. Prof., Ankara Yıldırım Beyazıt University, E-mail: semekci@ybu.edu.tr



Balkon: Pandemide hatırlanan mimari unsur Dijital medyadan kanıtlar

*

Şeyda Emekçi²

ORCID: 0000-0002-5470-6485

Öz

COVID- 19 Pandemisi beklenmedik küresel bir kriz yarattı. Hükümetler, COVID- 19'un yayılmasını engellemek için "evde-kal" emirleri gibi bir dizi önleyici tedbir almak zorunda kaldı. Bu önlemler insanları evde kalmaları için zorlarken, aynı zamanda onların yaşam alanlarını yeniden keşfetmelerine olanak sağladı. Keşfedilen bu mekanların başında ise balkonlar gelmektedir. Balkon insan yaşamında antik çağlardan bu yana çok önemli bir role sahip olup; iç- dış mekân, kamusal- özel alan arasında bağlayıcı bir görev görmektedir. Ancak 21. yüzyılda eski görkemli günlerini geride bırakmış, canlılığını yitirmiş ve önemini kaybetmiş bir mimari elemana dönüşmüştür. Kaybedilen bu görkem, COVID- 19 Pandemisi ile birlikte tersine dönmüş; balkonlar, özgürlüğün yeni biçimini sembolize eden mekanlar olarak yeniden insanların gündeminde yer almaya başlamışlardır. Bu çalışmanın amacı, bir yandan internet arama istatistiklerinin nicel analizini kullanarak salgının balkonun popüleritesi üzerindeki etkilerini ortaya koymak; Öte yandan ise cümle düzeyinde duygu analizini (sentence- level sentiment analysis) kullanarak COVID- 19 pandemisinin insanların balkon algısını nasıl etkilediğini ortaya çıkarmaktır.

Anahtar Kelimeler: COVID-19, pandemi, balkon, duygu analizi, internet arama istatistikleri.

² Dr. Öğr. Üyesi, Ankara Yıldırım Beyazıt Üniversitesi, E-mail: semekci@ybu.edu.tr

Introduction

As pandemic continues to grow exponentially, to date, the novel coronavirus has caused thousands of deaths and infected hundreds of thousands more. Governments have been taken many preventative measurements in order to curb this pandemic such as stay-at-home, social distancing, and quarantines. Ever since the lockdown began, people have had to invent new ways/ spaces of contacting the world. They started to rediscover their living spaces and balcony has become the main topic of the world's agenda. Especially in neighborhoods where balconies facing the street are common, balconies have become ideal platforms for social solidarity and social interaction. In many cities of the world, the residents of the buildings applauded the health workers for thanks, and the important days were celebrated on the balconies. The neighbors sang and danced together to support each other and boost morale; artists performed their performances on the balcony. The issue of the balcony has also been highlighted on digital media where has become our virtual connection to the world. In this way, people enjoyed socializing without getting away from the safe environment of their own home. Pandemic helps people understand how important balcony is in people's life. Before the date, although the balcony has had a crucial role in human life throughout history and it has also been the symbolic architectural element that has hosted many events throughout history; it lost its vitality and turned into a forgotten architectural element in the 21st century. In this context, this article aims to investigate the effects of the pandemic on using the balcony and to question how it affects people's perception of the balcony. As the methodology, google trend data is employed to analyze whether people's interest in the balcony has been growing and Sentence-Level Sentiment Analysis is used to measure the content of the news regarding balcony in terms of positivity, negativity, and neutrality. The analysis aims to find the answer to the question which is how pandemic affects people perception of the balcony.

A Brief History of the Balcony

"Balcony" is an architectural element that has a lot of meanings in terms of aesthetics, character, and function. It can be defined as an interface between indoor and outdoor, sometimes working as a ventilator. According to the Etymology Dictionary, the origin of the name of balcony comes from Italian "balcone", from balco "scaffold", which is from a Germanic source in the early

17th century. It means “platform projecting from a wall of a building surrounded by a wall or railing” (Etymology Dictionary, 2021). Although balconies are now called an extension of the building, they were used to fascinate, unite, and inspire masses in old times. The architectural element served as meeting points for private and public areas in the city, as well as reference points and potential interactions not only in residential buildings like today; in public buildings and palaces. They were constructed to let people, sight, artifacts, light, and wind move freely between the two spaces. As common communication places in Western and Mediterranean living regions, the liminal architectural elements were utilized for interactions, community development, activism, and identity maintenance. In Ancient Egypt, the balcony of palaces was intended as a “theatre setting” for leaders to appear before their subjects; while in ancient Rome, it was an open-air platform where emperors and senators could compete with gladiators while still being visible to the public (Kemp, 2018). In the Middle Ages, elaborate latticed covered balconies were erected throughout much of the Arab world to allow inhabitants to breathe while complying with Islamic privacy requirements (Jehan, 2015). In the Renaissance, the outside world was contacted with balustrade balconies (Charitonidou, 2020). Aside from the cultural and geographical implications of balcony use, one of the most famous and romantic scenes of western literature from Shakespeare's *Romeo and Juliet* being played on the balcony; Nelson Mandela promising a new chapter in South African history from the balcony in Cape Town; Pope blessing millions of believers from a balcony in the Vatican show how important the balcony has been in our lives.

The glorious days of the balcony

As Marcus Vitruvius mentions in his book “*On Ten Books on Architecture*”, the first balcony idea in Rome came about by replacing some parts of the house to watch the battle of gladiators. The idea of a balcony quickly became a trend that spread rapidly throughout the empire to watch gladiators (Welch, 2007). The function, usage, and even name of the balcony have varied widely throughout history. According to Eugène Viollet-le-Duc, the primary aim of projecting the balconies—called “*hoards*” at the time—in the 11th century was to reach soldiers and/or defend them from attackers, implying that they were primarily used for military purposes.

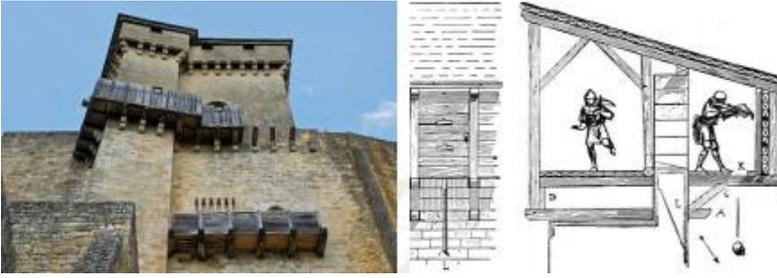


Figure 1: Hoards (Français, 2011)

Balconies were no longer utilized only for military purposes as of the fourteenth century. The element was a type of place where announcements were made and official papers, proclamations, and court judgments were read out (Stamp, 2014). Breteche, another type of balcony popular in the 14th and 15th centuries, was used not only in public buildings but also in palaces and private residences. In these centuries, the balcony was used to cover everything that was happening on the street (Kaufmann & Kaufmann, 2004). In the 17th century, in India, Jharokha was the surrounding enclosed balcony used for rituals of greeting and direct communication with the public (Avermaete et al., 2004). The indo-Islamic architecture was also utilized to enable women to see outside without being seen (Lewis, 1992).

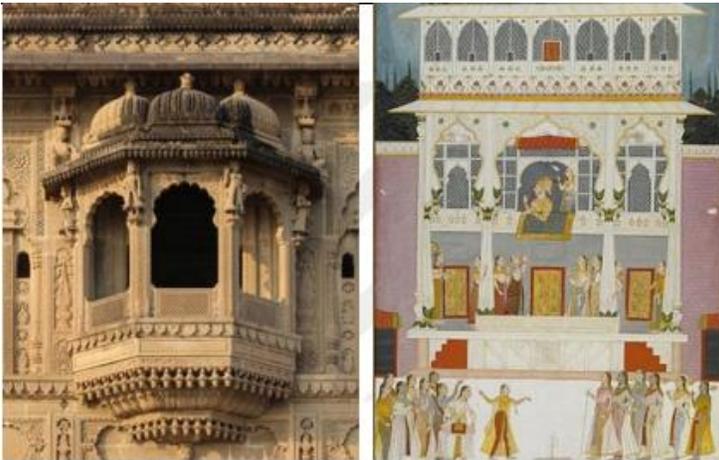


Figure 2: Jharokha (Gagnon, 2013)

Masrabia, which dates to the 12th century during the Abbasid period, was used in Islamic architecture until the 20th century (Abdullah & Abadi, 2001). It was primarily associated with Ottoman-Turkish architecture to allow the

occupant to get a good view of the street without being spotted (Kenzari & Elsheshtawy, 2003).



Figure 3: Masrabiya (Ashashyou, 2018)

Overages, the Arabic influence expanded throughout the world, and semi-open spaces in the style of mashrabiya with latticework were transferred across continents.



Figure 4: Arabic influence in Tunisia (left) (Imen, 2015)

Peru (Middle) (Marina, 2014)

São Paulo in the 19th Century (right) ("São Paulo Antiga", 1998)

Aside from cultural and religious factors, another major aspect influencing the use of balconies was the weather. Balconies and humans have had a long history as human-environment connections. Climate has a significant impact on architecture. The vernacular architecture was prevalent before the arrival of modernism, and it was significantly connected to the building's location and the climate in which it was built. For example, whereas buildings in temperate climatic areas featured semi-open spaces in the form of galleries,

porches, and porticoes (Rijal et al., 2010), these spaces tended to shift inward as a more semi-open space in dry central regions (Chang et al., 2021). Courtyards were constructed to minimize humidity in hot and humid locations, whereas openness was kept to a minimum in cold climatic zones (Coch, 1998). This architectural feature has been climate-adapted so that humans could adjust to the environment throughout history.

In the 19th century, Europe experienced intense urbanization and balconies have influenced many branches of art as a symbol of urbanization. In 1869, French painter Eduard Manet painted three characters who were sitting on the balcony. Beginning of the 20th century, the famous Italian painter Umberto Boccioni made a painting entitled “*The street enters the house*”. He used the following words to describe his work:

The dominating sensation is that which one would experience on opening a window: all life and the noises of the street rush in at the same time as the movement and the reality of the objects outside (Pezzini, 1912).

The painting depicts a woman on a balcony at a busy street scene and the interior and exterior merge into a single entity. The painting makes evident what has long been the main function of the balcony.

In the 19th century, balconies, which inspired many writers, poets, and artists, became symbols of the metropolitan lifestyle in the 20th century. With the emergence of modernism in the early 20th century, building typology adapted in response to large-scale changes in both technology and society. The adaptation brought with it the introduction of new materials and equipment. This made it easier for balconies to appear on residential facades and to use as a functional connecting element between indoor and outdoor spaces (Kiani, 2004). But it still inspired artists such as Italian painter Umberto Boccioni who designated urban life in this work named *The Street Enters the House*.



Figure 5. Umberto Boccioni's painting (Whitacre, 2012)

The artist who interpreted the balcony as an interface, painted the noise and chaos on the street entering the private space through the balcony. French sociologist Henri Lefebvre also describes a balcony as a place where allows catching the *"fleeting rhythms of urban life"* (Lefebvre, 2004).

In addition to being a source of inspiration, balconies were places that began the greater political change in the twentieth century. The balcony has become widespread for the leader as a tool to influence the masses. Lamant (2020) describes this situation as *"the social awakening of the balcony"*. In 1936, Mussolini the fascist dictator made one of his important speeches that would set the course of history by proclaiming the Italian Empire from his balcony. After this date, Mussolini ordered to build a balcony wherever he went. He revived the use of balconies in Italy (Avermaete et al., 2004).



Figure 6. Mussolini delivered one of his famous speeches (left), Hitler and Mussolini at the balcony of Palazzo Venezia (right) (Chorny, 2019)

The speeches also affected architecture. In 1933, While Giuseppe Terragni designed a balcony on the façade of the building for IL Duce in Palazzo del Littorio; He did not add a single balcony for the Casa Del Fascio in Como, since the architect rejected the governmental idea of having balconies on building facades (Avermaete et al., 2004).



Figure 7. Palazzo del Littorio (left) (Behance, 2016) and Casa Del Fascio (right) ("Architectures Style", 2020)

The slogans were used by those who oppose the fascist regime such as “*balcony is enough*” paved the way for the balcony to become universal as a political platform. Before the Second World War, Adolf Hitler announced the annexation of Austria from the balcony of the Imperial Palace in Vienna (BBC-Witness History, 2021). Exactly seven years later, Winston Churchill joined the British royal family, who celebrated the outcome of the Second World War on the balcony of Buckingham Palace (BBC, 2021).

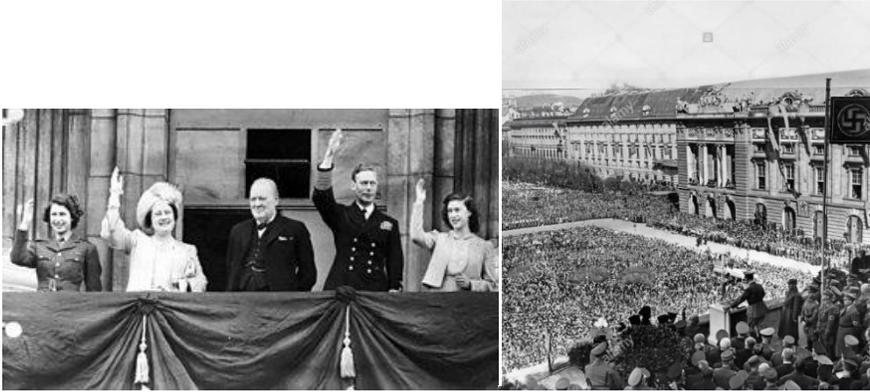


Figure 8. Winston Churchill joined the British royal family (left), and Adolf Hitler announced the annexation of Austria (right) (BBC, 2021)

After the war, the balcony began to be perceived as a source of shame (Avermaete et al., 2004). The assassination of Martin Luther King in 1968 supports this perception. Civil rights leader was assassinated while standing on a balcony of the Lorraine Motel in Memphis, Tennessee.



Figure 9. Martin Luther King Jr. and His aides on the balcony (The Associated Press, 2020)

In the 20th century, balconies were also recorded in history as places where the masses made their voices heard, beyond being a place belonging to leaders. During Algeria's war of independence with France, the balconies hosted independent mass protests after the government banned public gatherings (BBC, 2019).

Balconies, which allow people to interact with the outside, have been encountered under different names, in various civilizations and climatic conditions throughout history. Sometimes they were used for military purposes, sometimes as a means of greeting rituals and direct communication with the public, to mobilize the masses. Sometimes it appeared as a source of inspiration in artwork, and sometimes it could be employed to adapt to the climate in which humans live. As it is today, it was not only frequently used in residences but was also appeared in public buildings and palaces.

Balcony as a forgotten space

Throughout history, balconies have played very important roles in political, social, artistic events and as well as our daily lives. Until the widespread use of television, people used balconies to watch the events happening on the street (Aronis, 2020). Balconies have become a connection, a passage between the house and the street for people. But technologies such as telephones, TVs, and air conditioners have gradually pushed people indoors. Towards the end of the 20th century, balconies around the world began to lose a significant part of the importance they have acquired in human life. The balcony has undergone a transformation in parallel with the society in which individualization has spread. It was no longer seen as a connecting element between the house and the street but as a special part of the house that protects you from prying eyes and prevents the noise of the street. Although the balcony has been still using for political purposes (e.g., Donald Trump, Recep Tayyip Erdoğan), it began to lose its popularity long before.



Figure 10. Balcony covered with plastic and used as a scrapyard (Safarkhani, 2016)

Contrary to its past glory, it started to take place in our lives as a promotion in housing marketing. In many countries of the world, it is the main character of real estate advertisements in cities especially with Mediterranean, warm, and hot climates. Ironically, while real estate agents offered balconies - as open spaces - as an advantage in their marketing strategy, at the same time some real estate experts stated the idea that users can produce extra indoor space when they can be covered with plastic or glass. Although it shows that balconies preserve some of their purposes, they are gradually losing their features and being marginalized (Safarkhani, 2016).

In addition to that people thought of balconies as an area where unwanted items were placed. For example, it was perceived as a place converted into scrap yards, filled with waste material; where heating devices, air conditioners, and satellite dishes are placed. Even though the balcony has still used by some in a sense close to its actual use, the balcony is being misused by a large part of the public.

Rediscovering: Balcony during the pandemic

Since the outbreak emerged in China last December, as billions of people have been confined to their homes during the COVID-19 epidemic, balconies gained a new urban status all over the world. It has become a mandatory architecture element for people rather than a social luxury. People have discovered again that the “balconies” are a place of connection with the outside world in moments of forced isolation.



Figure 11. Usage of the balcony during the pandemic in Italy (left) and Netherlands (right) (Traverso, 2020)

People, who were isolated by quarantines and curfews, found a new way of socialization and liberation on the balconies. People all over the world applauded healthcare professionals from their balconies, sang songs. Artists performed their performances on the balcony. With the help of digital media,

people started to follow not only what was happening in their own neighborhoods, but what was happening in the world. Especially with the increased internet usage during the pandemic period, many people shared their experiences on the balcony via digital media. Today's technology no longer takes people away from balconies, on the contrary, it helps people to rediscover balconies as social spaces.



Figure 12. Usage of the balcony during the pandemic in Turkey (Traverso, 2020)

Methodology

The main methodology of this research depends on qualitative and quantitative analysis of digital media platforms. In this context, internet search statistics and news regarding balconies have been used to analyze the effects of the pandemic on using the balcony.

The article aims to reveal the increasing popularity of balconies. To provide that, Google Trends data is employed. Google Trends offers publicly accessible internet search patterns all over the world that occur in a certain time period by analyzing the queries on the Google Search website and other affiliated Google sites (Google, 2020). The platform allows to access the rate of searches for a user-specified term among all simple searches on Google Search. It is possible to determine a relative search volume (RSV) which refers to share for a particular keyword in a given time frame and location. While providing this share, it normalizes with the highest query share of that term over time series in order to be comparable. In this article, google trends data is used to provide a history of how popular the word “balcony” has been on the Internet between 2004 when the first data was provided from google, and 2021.

The article aims to show that pandemic affects not only the popularity of balcony but also people's perception of it. To provide that, sentence-level sentiment analysis on news is used to understand the effects of the pandemic on the balcony. The sentiment analysis is a method used to predict the emotional view

in the text by evaluating how positive, neutral or negative the content is. News associated with the word “balcony” was gathered with the help of the scraping tool from google news. The tool is used to extract large amounts of data from websites. The scope of this study is the news published in English in the world in April 2019 (before pandemic) and April 2020 (during a pandemic). In order to make a comparison, the same months of consecutive years have been chosen, since the searches for balconies on the internet are affected by seasonal conditions. After gathering news related to the balcony, it was also implemented sentiment analysis to show the context in which the word has been addressed.

Case Study

The scope of the study is limited to the first 10 countries with the highest number of cases due to the Covid-19 pandemic according to data provided by Johns Hopkins University (JHU) (JHU, 2021). The selected countries that have different cultural and climatic conditions make it easier to understand the effects of the pandemic beyond culture and seasonality.

These countries are listed below.

Table 1. Countries and COVID-19 cases (JHU, 2021)

Country name	Total Cases
USA	24,306,043
India	10,558,710
Brazil	8,456,705
Russia	3,568,209
UK	3,357,361
France	2,894,347
Turkey	2,380,665
Italy	2,368,733
Spain	2,252,164
Germany	2,038,645

Results and Discussion

One of the purposes of the study is to show the increasing of people’s interest in the balcony during the pandemic. To provide that it uses internet search patterns made all over the world. These search statistics include searches in each country's native language and English. This study covers the data on the search for the word “balcony” on google between 2004 and 2021. According to google trends data, search patterns of the word “balcony” are as follows.

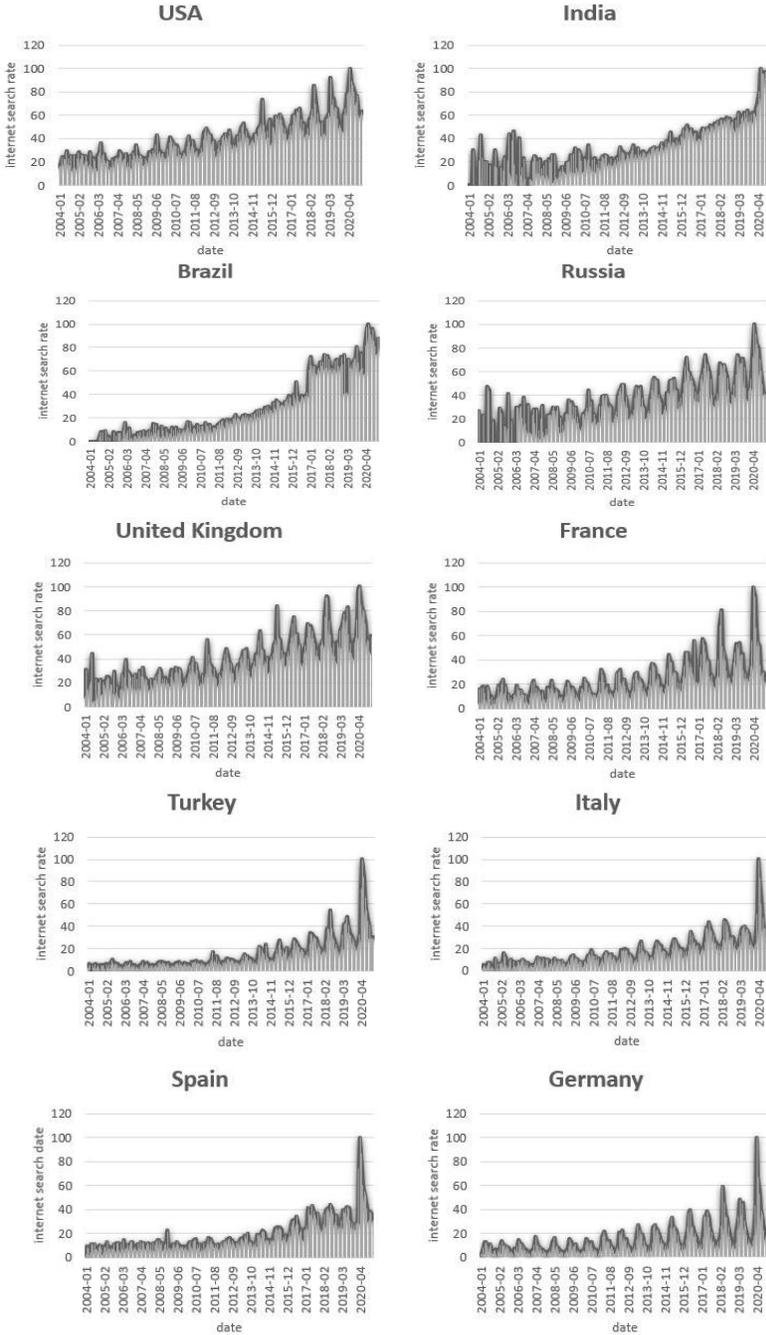


Figure 13. Countries' internet searches data regarding the word "balcony"

According to graphs, it is clear that the internet searches related to the balcony have increased significantly during the pandemic when comparing to the previous years. Although there has been an increase in the searches for the word “balcony” every year periodically in the spring and summer season, for this year, due to the pandemic, this increase has reached the highest levels. After this rapid increase, a decrease is observed. The main reason for the decrease in searches is that the winter season has entered. The most important indicator of this is India and Brazil, which are relatively closer to the equator and whose average temperatures are above 20 degrees in winter (AccuWeather, 2020), this decline is very small compared to other countries.

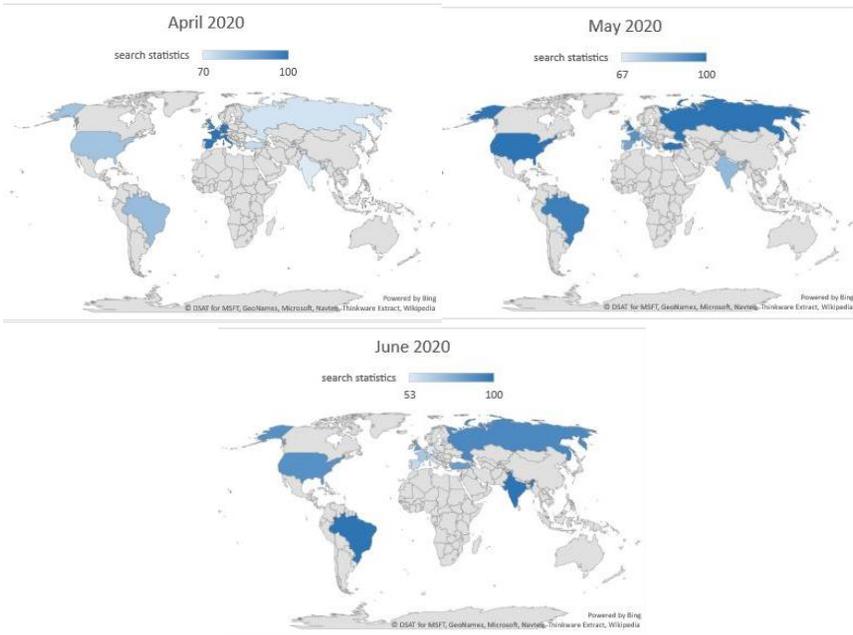


Figure 14. World map of the internet searches for the word “balcony”

Figure 14 depicts to reveal the relationship between the number of covid-19 cases and balcony searches. Searching for the word “Balcony” reaches the highest level when the pandemic peaks. Considering that each country has experienced its own peaks at different times, the balcony search data reaches its highest level at different times in different countries depending on their peak times. For example, according to John Hopkins University data, the European pandemic experienced its first peak in April (JHU, 2021). On this date,

balcony search from Europe reached the highest levels. In May, the USA became the new epicenter of the COVID-19 pandemic (JHU, 2021). When analyzing the map, in May balcony internet searches were at the highest level in the USA. There is a positive correlation between the number of covid-19 cases and balcony internet search. The major reason for this is that quarantines and curfews enforced as part of the steps intended to limit the spread of the virus, have increased the amount of time people spend at home; accordingly, this has risen the interaction of people, who is a social being, with the balcony which gives the chance to re-socialize. It grew in popularity among the general public. These areas have begun to be perceived as the interface of spending safe time outside during the COVID-19 outbreak.

The study claim that pandemic affects not only the popularity of balcony but also people's perception of it. In order to understand how the pandemic affects people's perception of the balcony, the study employed sentence-level sentiment analysis. All the news that contains the word "balcony" published in English in April 2020 was obtained from Google News with the help of the web scraping tool. The collected news was compared with the news containing the word "balcony" and published in the same month of the previous year (April 2019). The month of April 2019, before the pandemic emerged, was compared with the month of April 2020, when covid-19 spreads rapidly all over the world. News with identical contents has been eliminated. The results are as follows.

Table 2. Sentence-Level Sentiment analysis of the news

date	# of news	# of positive news	# of negative news	# of neutral news
April 2019 (before pandemic)	150	18	115	7
April 2020 (during pandemic)	209	167	36	2

While, before the pandemic, 115 negatives, 7 neutral, and 18 positive news have been published, after the pandemic, 36 negatives, 2 neutral, and 167 positive news have been detected with a reliable average polarity confidence. A significant increase has been observed in the number of positive news. Percentages that belong to the news are as follows.

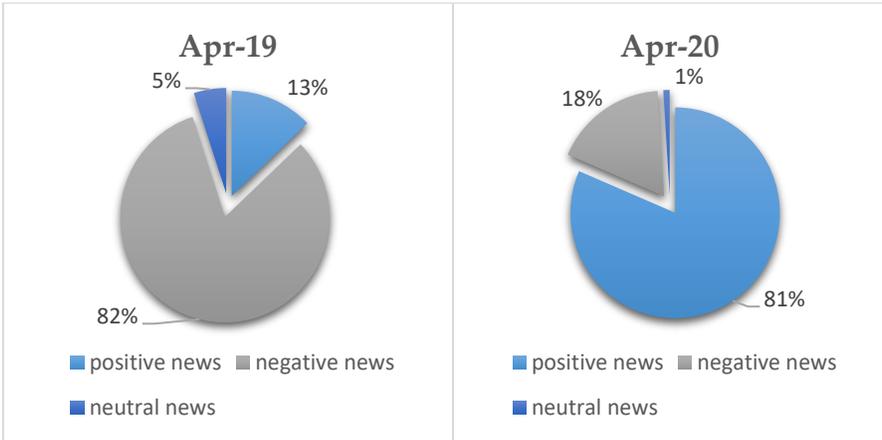


Figure 15. Percentages of the news

While the rate of positive news was only 13% of all news published before the pandemic, this rate increased to 81% after the pandemic. There has been a significant decrease in the percentage of negative news. The number of neutral news that cannot be classified as positive or negative also decreased compared to the pre-pandemic. Although the news was unfavorable before the pandemic, the number of positive stories subsequent to the pandemic increased considerably. The pandemic changed the views of people towards balconies.

With the rise in time spent in this space, which has been rediscovered as a consequence of the growth in people's interest in the balcony, the number of news articles about it has also grown. The growing interest was reflected not just in the amount of news, but also in their content. When the content of the news is evaluated in terms of word frequency, word clouds belonging to the news texts are shown in Figure 16.



Figure 16: Word cloud of news released in pre-pandemic(left) and post-pandemic (right)

According to word cloud created using news when released in April 2019, many negative words are encountered in the news content such as suffered,

death, while the content of the news published in April 2020 consists of more positive words such as to entertain, concert. According to the comparison made in the same months of the consecutive years, April 2019, while the word “balcony” was mostly associated with negative words and word groups, while it has been replaced by positive words in April 2020. Before the pandemic, the aforementioned place was only stressed as a building aspect, such as an enclosed area at a specific height, while focused on the substance of the news. This architectural feature was also a back seat in the news. For example, as in the news of “a child falling from a balcony”, the main event is the child's fall, and the balcony is the reason for this. However, following the pandemic, it is reflected in news content as a space that is the focus of societal concerns and is remembered more with emotions.

Conclusion and implications

Covid-19, which started to spread from the Wuhan city of China to the whole world, almost redesigned human life. The virus has also affected the usage of human living spaces. The balcony has been one of them. Balconies have seen a sharp increase in use because of the “stay at home” orders. Contrary to their glorious days, balcony lost their importance and have been transformed into faded components the toward end of the 20th century. As the purpose of building a balcony was to create a space in front of the building to relax or watch the surroundings while preserving privacy and comfort, toward the end of the 20th it has turned into a space where unwanted materials are stored, sometimes covered with plastic or glass to create a closed space until pandemic. With the curfews put into practice as a result of the pandemic, social life has started to take a new shape with the increase of time spent in houses since March. Many people's habits would change with the “new normal”. People have begun to rediscover the balconies, which had previously been indistinguishable from the house's closed areas. Balconies, which are the sole way to communicate with the outside world during a pandemic, have regained popularity. Balconies have evolved into social meeting spots for neighbors to socialize, sing, and congratulate healthcare staff.

In this context, the purpose of this essay is to delve into the impact of the pandemic on balcony use and how it changes people's perceptions of balconies. As a methodology, Google Trends data was utilized to determine whether people's interest in the balcony has increased, and Sentence-Level Sentiment Analysis was used to assess the substance of the news about the balcony in terms of positivity, negativity, and neutrality. The study reveals

the changing spatial context of the balcony analyzing news and internet search statistics about the balcony. As a result of the qualitative and quantitative analysis of digital media, important conclusions and implications have been reached. Conclusions and implications are as follows.

- The rate of online searches regarding the balcony increased significantly during the pandemic. This increase is positively correlated with COVID-19 cases. In other words, as the number of cases and the level of precaution increase, so do online searches regarding the balcony. The pandemic has boosted people's interest in the balcony. It became more popular among the public. During the COVID-19 pandemic, these places have come to be viewed as the interface for spending safe time outside. With the pandemic, quarantines and curfews have made the balcony a critical point.
- There was an upsurge in the quantity of news regarding the balcony during the pandemic. There have been significant changes not just in the number of news articles, but also in the content of those narratives. While the news was more negative before the outbreak, there was a considerable rise in the number of positive articles following the pandemic. The pandemic has altered people's perceptions of balconies.
- The word "balcony" used before the pandemic was primarily linked with negative words and word groupings, whereas positive words were substituted in the following the outbreak. When focusing on the news content prior to the pandemic, the balcony was only underlined as a building component and it was insignificant in the news. However, following the pandemic, it was mirrored in news content as a space that is the focus of societal issues and is remembered with greater passion.

The research highlights possible topics for further research. Whether the discursive production of the balcony can be represented in zoning policies and real implementation and its future effect may be the continuation of this study.

References

- Abdullah, R. A. J., & Abadi, E. (2001). *Merchants, mamluks, and murder: the political economy of trade in eighteenth-century*. Basra: SUNY Press.
- AccuWeather. (2020). Statistics | AccuWeather. Retrieved January 17, 2021, from <https://www.accuweather.com/en/press/69327221>
- Architectures Style. (2020, November 4). Casa del fascio: a great example of rationalism in Italy. Retrieved September 12, 2021, from <https://architecturesstyle.com/casa-del-fascio/>
- Aronis, C. (2020). Architectural liminality: the communicative ethics of balconies and other urban passages. *Cultural Studies*, 1–27. <https://doi.org/10.1080/09502386.2020.1844254>
- Ashashyou. (2018). *Near the market*. Retrieved from https://commons.wikimedia.org/wiki/File:Mashrabiya_in_Abbasyia.jpg
- Avermaete, T., Koolhaas, R., & Boom, I. (2004). *Balcony*. Venezia: Marsilio.
- BBC. (2019). Algeria profile - Timeline. *BBC News*. Retrieved from <https://www.bbc.com/news/world-africa-14118856>
- BBC. (2021). History of the BBC: End of the war. Retrieved January 6, 2021, from [bbc.com/historyofthebbc/research/bbc-at-war/end-of-the-war](https://www.bbc.com/historyofthebbc/research/bbc-at-war/end-of-the-war)
- BBC-Witness History. (2021). BBC world service - Witness history, the anschluss. Retrieved January 6, 2021, from <https://www.bbc.co.uk/programmes/p00rg2jv>
- Behance. (2016). Terragni in Rome. Retrieved September 12, 2021, from <https://www.behance.net/gallery/42260811/Terragni-in-Rome>
- Chang, S., He, W., Yan, H., Yang, L., & Song, C. (2021). Influences of vernacular building spaces on human thermal comfort in China's arid climate areas. *Energy and Buildings*, 244, 110978. <https://doi.org/10.1016/j.enbuild.2021.110978>
- Charitonidou, M. (2020). The balcony as an urban element: threshold, common world and rythmanalysis [Application/pdf,13 p. accepted version]. *ETH Zurich's Research Collection*. <https://doi.org/10.3929/ETHZ-B-000499062>
- Chorny, M. (2019, December 15). Hitler visits Rome: 1938. Retrieved September 12, 2021, from <https://war-documentary.info/hitler-visits-rome-1938/>
- Coch, H. (1998). Chapter 4—Bioclimatism in vernacular architecture. *Renewable and Sustainable Energy Reviews*, 2(1), 67–87. [https://doi.org/10.1016/S1364-0321\(98\)00012-4](https://doi.org/10.1016/S1364-0321(98)00012-4)
- Français. (2011, July 29). Hourds en bois (reconstitution), château de castelnaud, dordogne.english: reconstructed wooden hoardings in château de castelnaud, Dordogne, France. [Wikimedia Commons]. Retrieved September 12, 2021, from https://commons.wikimedia.org/wiki/File:Hourds_Castelnaud.jpg

- Gagnon, B. (2013). Jharokha. In *Wikipedia*. Retrieved from <https://en.wikipedia.org/w/index.php?title=Jharokha&oldid=1043827133>
- Google. (2020). Google trends. Retrieved from <https://trends.google.com/trends/?geo=US>
- Imen, I. (2015). Imen's [Blog]. Retrieved September 12, 2021, from <http://imenbrahim.blogspot.com/>
- Jehan, M. (2015). *The traditional arts and crafts of turnery or mashrabiya* (Ph.D Thesis). The State University of New Jersey, USA.
- JHU. (2021). Coronavirus update (live): 95,007,112 cases and 2,032,106 deaths from covid-19 virus pandemic - Worldometer. Retrieved January 17, 2021, from <https://www.worldometers.info/coronavirus/>
- Kaufmann, J. E., & Kaufmann, H. W. (2004). *The medieval fortress: castles, forts and walled cities of the Middle Ages*. Da Capo Press.
- Kemp, B. J. (2018). *Anatomy of a civilization* (3rd ed.). Cambridge: Routledge.
- Kenzari, B., & Elsheshtawy, Y. (2003). The ambiguous veil. *Journal of Architectural Education*, 56(4), 17–25. <https://doi.org/10.1162/104648803321672924>
- Kiani, M. (2004). *Memari dore pahlavi aval*. Tehran: The Institute for Iranian Contemporary Historical Studies.
- Lamant, L. (2020). "Une histoire politique du balcon." Mediapart.
- Lefebvre, H. (2004). *Rhythmanalysis: Space, time and everyday life*. A&C Black.
- Lewis, B. W. (1992). *The world of islam: faith, people, culture*. Thames & Hudson.
- Marina. (2014, May 24). The Costume Researcher: My Fascination with La Tapada Limeña. Retrieved September 12, 2021, from <http://inmemoryoflatapada.blogspot.com/2010/08/la-tapada-limena.html>
- Pezzini, B. (1912). The 1912 Futurist exhibition at the Sackville Gallery, London: an avant-garde show within the old-master trade, 9.
- Rijal, H. B., Yoshida, H., & Umemiya, N. (2010). Seasonal and regional differences in neutral temperatures in Nepalese traditional vernacular houses. *Building and Environment*, 45(12), 2743–2753. <https://doi.org/10.1016/j.buildenv.2010.06.002>
- Safarkhani, M. (2016). *Balconies consigned to oblivion in iranian residential buildings the case of Tehran, Iran*. Middle East Technical University, Ankara.
- São Paulo Antiga. (1998). Arquivos curiosidades » Página 3 de 10 » São Paulo Antiga. Retrieved September 12, 2021, from <https://saopauloantiga.com.br/category/curiosidades-2/>
- Stamp, J. (2014). The medieval origin story of the balcony | History | Smithsonian Magazine. Retrieved January 23, 2021, from <https://www.smithsonianmag.com/history/the-origin-story-balcony-180951755/>
- The Associated Press. (2020). AP was there: Martin Luther King Jr. sentenced to chain gang. Retrieved January 8, 2021, from <https://apnews.com/article/3f85a1bb37df195b3f5fa70abfec6fc1>

- Traverso, V. (2020). Why do balconies inspire us? Retrieved September 12, 2021, from <https://www.bbc.com/travel/article/20200409-the-history-of-balconies>
- Welch, K. E. (2007). *The Roman amphitheatre: From its origins to the Colosseum*. Cambridge: Cambridge University Press.
- Whitacre, A. (2012, September 26). "The House Enters the Street": Praise for the New Book from Gretchen Henderson. Retrieved September 12, 2021, from <https://cmsw.mit.edu/the-house-enters-the-street-gretchen-henderson/>