The *new* normal or the *forgotten* normal: contesting COVID-19 impact on contemporary architecture and urbanism

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Abstract

Purpose – The term New Normal has become a buzzword to describe the anticipated changes in human life across the globe due to the impact of COVID-19. The paper's purpose is challenging the surrender for the notion of the "New Normal" and constructing a framework by which a call for understanding the practice of architecture, urbanism and city planning before the COVID-19 and contest its responsibility towards the city and the community.

Design/methodology/approach – Methodologically, literature review, analysis of emerging positions and interviews are the selected tools for conducting the research. The paper adopts a position perceiving COVID-19 has provided an opportunity for reflections and revisions about the way people dwell on Earth. The paper aims at analyzing the positive impacts of COVID-19 in sociological and urban perspective.

Findings – Consequently, the main finding of the paper, calls for reviving the forgotten normal in the way places, neighborhoods and cities are designed and planned. Lessons learned from the lockdown time and the actions taken will be analyzed with special attention to Gulf States.

Research limitations/implications – In months, New Normal developed as the most used expression since the spread of the pandemic. The COVID-19 pandemic marked the year 2020 with one of the biggest public health crises of all time, threatening to take away millions of lives. It is already initiating a massive economic crisis, triggering further negative consequences for human life, wellbeing and lifestyle. Numerous researchers illustrate that through history, humans faced the challenges of epidemics and pandemics and were able to use their will, capacities, resources and courage to resist and survive.

Practical implications – Pandemics such as COVID-19 have caused a critical reassessment of urban spaces. This paper examines the city's relationship to concepts such as the individual, society, creativity, production and power to understand the causes and effects of urbanization. Cities, especially the globally significant ones – such as Wuhan, Milan, Madrid, Paris, London, New York, Los Angeles – are disproportionally affected. Thus, the pandemic is evolving into an urban crisis, forcing us to reconsider our deeply held beliefs about good city form and the purpose of planning.

Social implications – The nature of the architectural, urban and planning theory and practice, is responsible for looking ahead, formulating visions and offering alternatives. Consequently, the methodological approach adopted in the paper is structured on three main pillars. First, observing, monitoring, and provide diagnosis (what we learned from isolation). Second, understanding the local, regional and global context as the COVID-19 crisis creates a ripple of change on all levels and requires both global and local understanding. Third, formulating visions and looking ahead

Originality/value – Suffering from epidemics and pandemics is new to our time and our contemporary experience but not new to the history of humankind. Revisiting the concepts of the New Normal vs. the Forgotten Normal and use the outcomes to construct an alternative framework for producing places in the post COVID-19 paradigm crystalize the value and originality of the paper.

Keywords New normal, COVID-19, Post COVID-19 architecture and Urbanism, Urban isolation, Social justice, Just cities, Post pandemic public spaces, Post COVID-19 Gulf cities

Paper type Research paper

1. Introduction

The pandemic situation has spread as a global disease which is creating fear, stress, minimizing social networks, etc. Pandemics such as COVID-19 have caused a critical reassessment of urban spaces and creates an era of unprecedented change and uncertainty,

with the urban environment under the spotlight (Berg, 2020). The paper examines the city's relationship to concepts such as the individual, society, creativity, vulnerability, justice and power to understand the causes and effects of urbanization. Cities, especially the globally significant ones – such as Wuhan, Milan, Madrid, Paris, London, New York, Los Angeles – are disproportionally affected. Thus, the pandemic is evolving into an urban crisis, forcing us to reconsider our deeply held beliefs about good city form and the purpose of planning (Alraouf *et al.*, 2020; EASAC, 2020; Ghosh, 2020). The pandemic provides an opportunity to re-examine the urban planning priorities in the post-COVID-19 world. The crisis of COVID-19 pandemic must be perceived as an opportunity and a motivation for assessment, reflection and holistic understanding of how the built environment is shaped in contemporary time. The scene of the COVID-19 pandemic and its aftermath continues to unfold before us and constructs an ethical challenge (Wolf, 2020). Therefore, the claim to have immediate solutions may be an immature conception. However, the nature of the architectural, urban and planning theory and practice, is responsible for looking ahead, formulating visions and offering alternatives. Consequently, the methodological approach adopted in the paper is structured on three main pillars. First, observing, monitoring, and provide diagnosis (what we have learned from isolation). Second, understanding the local, regional and global context as the COVID-19 crisis creates a ripple of change on all levels and requires both global and local understanding. Third, formulating a visionary framework for the future with an emphasis on Gulf cities. The paper formulates several research questions, starting with what are the lessons learned from the still-unfolding drama of the COVID-19, and moving to more speculative, future-exploring questions: How can we expect cities to recover once the pandemic has peaked? Is there a model of the city which is pandemic-resistant? How does the pandemic relate to the issues of scale, social justice and resilience? When considering pandemics and other crises and emergencies, should planners focus on the physical form (size, shape, structure, density) and the material elements of the city (infrastructure, buildings, open space) only, or should they also act on the economy, society, culture, governance and politics? What types of urban innovation can we expect, or promote, based on the lessons learned during the COVID-19 crisis?

2. The beauty of COVID-19: a logic for praising the pandemic
At the time of writing this article, more than 60 million people have been infected by the COVID-19 virus and the death toll tops 1.3 million (CVRC, JH University, 2020). COVID-19 has created a great disruptive reset of the global social, economic, and political systems. The necessity to understand how COVID-19 disrupted our social and economic systems is crucial for the future of communities, societies and countries around the world. As it is not a localized challenge, it is a global duty to understand what changes will be needed to create a more inclusive, resilient and sustainable world going forward. Schwab and Malleret (2020), explore the root causes of these crisis and why they lead to a need for a "Great Reset." Even before COVID-19, the world is overwhelmed with regional disputes, conflicts, economic crisis, environmental concerns and increased urbanization. Yet, in all such situations, no consolidated agreement was reached. Such position is clear from the way countries are dealing with a pressing issue like climate change (Keeling, 2020; Osaka, 2020; Wolf, 2020). The COVID-19 is different in this sense as it creates a solidarity platform realizing the borderless nature of the pandemic. As observed in the reaction of people, communities and countries, two positions are clear. First, the public position identifies COVID-19 as the deadly savage pandemic that froze the world's life in days. In such position, the solution is to take preventive measurements including lockdown, wearing masks and social distancing hoping that a vaccine would emerge soon to get life back to its normal rhythm. On the other hand, an alternative position suggested in the paper perceives the pandemic as an invitation for all and particularly architects, urban designers and city planners to revisit their responsibilities and

priorities. This alternative approach's main rational is to acknowledge COVID-19 as a unique opportunity to think, reflect and formulate a new logic of life. The plight of COVID-19 can be seen, from a different perspective as a bless. It is an opportunity to shake up and to show the deficiencies which were manifested in the global system, even before the pandemic broke out (Horton, 2020; Wolf, 2020). The recent call in the global north to revisit architecture and planning priorities, should allow for a new era in the developing countries' perception of the role of architects, urban designers and city planners. It may be appropriate to realize that the West is reviewing its ideas, ideals and accelerating a dialogue to produce new spatial theories and concepts that interacts with the fundamental variables triggered by the COVID-19 pandemic. Consequently, rather than viewing the pandemic as only a fatal crisis, it might be understood as the sort of work-making event that allows for new economic and intellectual beginnings (Ghosh, 2020). Crises also present opportunities for cities. Karunathilake (2020) emphasizes positive aspects about COVID-19 which include people are adapting to a pandemic situation, and they also understand what the ideal social behavior is in a similar situation. Also, they adapt themselves to the situation whilst contemplating the difference between a normal situation and a pandemic situation. As a result of social integration, families and communities engage in a high level of social cohesion or social conscience to face the difficult situation. Hence, everyone is getting used to a common lifestyle, sharing and caring for others, especially the elderly people. The power of human beings lies in being foresighted and having the ingenuity to take their destiny into their hands and to plan for a better future. Nothing more profound than crisis time to inspire communities to create better existential positions.

3. The fallacy of the "*New Normal*"
Over the past few months, the current discourse has been overwhelmed with messages from influencers, philanthropists, individuals and companies about how the normal never served the masses (Gates, 2020; Heinberg, 2020; Firas, 2020). The term "*New Normal*" is giving the illusion that we are entering a new paradigm where, once the pandemic is over and the vaccine is available. A new way of life and values would emerge. Nikiforuk (2006) predicts the pandemic we are now living, criticizing the behavior that we wrongfully call it normal. He calls for a review to what "normal" human behavior has done to our one and only home over the past few centuries. He argues that it should not take a pandemic to make us rethink the deadly pace of globalization and biological traffic in all living things. The combination of unfettered free trade in living organisms, increased mobility and urban crowding has created an increasingly volatile environment for the world's population. The paper argues that instead of creating a new normal, we must revisit the forgotten values, the notion of social justice and why we have neglected the repetitive calls for ending exploiting people and Earth in an unprecedented manner. Before aspiring for a new normal and suggesting that the salvation of the planet Earth and its almost 8 billion inhabitants relies on shifting to a new normal, we need to examine if the normal is the problem. Experts and researchers agree cities will never look the same and we must go to the era of the new normal (Carr, 2020; Wilkinson, 2020; Nevius, 2020). Yet, all what we are aspiring for in this new normal is our forgotten normal. The principles and values that people used to have in times when a more focus on a balanced way of life was a priority and a more people-based places and spaces were created.

4. The COVID-19 paradigm: critical observations and transformational signs
In a short timeframe and for the first time in the contemporary history, the life on Earth was subjected to a global threat affecting every territory and population. From homes to schools, offices, shops, parks to streets - all corners of city life have undergone fundamental alterations during COVID-19. The following observations summarized the highlights of the swift changes which took place globally.

4.1 Pandemics and urbanity: a historical account
The history of pandemics the world has witnessed spanned from the great Plague in 1720, the Cholera in 1820, the Spanish Flu in 1918, HIV in 1985 and the Sars in 2003, cemented the human power, struggle and resist to improve life (Tamborrino, 2020; Carr, 2020; Gharipour and DeClercq, 2020). Indeed, the study of historic global epidemics has illuminated the many ways in which urban life and architecture have changed during times of health crisis. With the outbreak of each epidemic, new scientific understandings of disease, new modes of governing of social life and interaction, novel efforts to intervene in and prevent infection, the exacerbation of social inequities, and the creation of new occupational and social roles. Each of these outcomes has been enacted and emplaced in the built environment over time and across diverse geographies through the design or re-design of buildings and public spaces, the quarantine or redirection of goods and people, the adoption of new social roles, and the imposition of new urban design policies and practices (De La Barra, 2000; Gharipour and DeClercq, 2020; Tamborrino, 2020). Nevius (2020) provides a historical account asserting how major city like New York was accustomed to change in urban planning policies due to successions of pandemics. Such policies include health infrastructure, connecting houses to the city's sewer system, housing for wellbeing, more parks and public gardens. From the 1850s onward, the movement to create Central Park and other city parks was not just about correcting the errors of the 1811 grid, but in improving the health – both physical and moral – of New Yorkers. Many cities across Europe primarily in England, France and Italy contain the reminders of past epidemics found in urban spaces. In Italy and as Tamborrino (2020) argues, territories and buildings designated and constructed for care during epidemics continue to stand, such as the quarantine island of the Lazaretto Vecchio in Venice's lagoon. In 1423, the island was chosen by the Senate of the Serenissima Republic to establish a hospital – the first in the world – for the treatment of plague-infected people. The emblematic skyline of Venice includes the 17th century Church of Madonna della Salute (Virgin Mary of Health), built as a votive offering for the city's release from the plague. Contemporary urban contexts in many countries of the world are experiencing accelerated urbanization, urban inflation and the celebration of metropolitan mega-cities. It also observed that highly overcrowded and underserved neglected places are most vulnerable to the ongoing epidemic attack. Forced isolation has also generated difficult, critical and stressful conditions in residential areas around the world. We have also been aware of the problem of dealing with the environment and the resources available to us and the prudence of this treatment to ensure the best and least harmful use. The balance of dealing with the environment is essential, especially as we reflect on explanations for the emergence and spread of pandemics because man is punished for his apparent violation on environment, ecosystems and the growth of wild urban sprawl (see Plate 1).
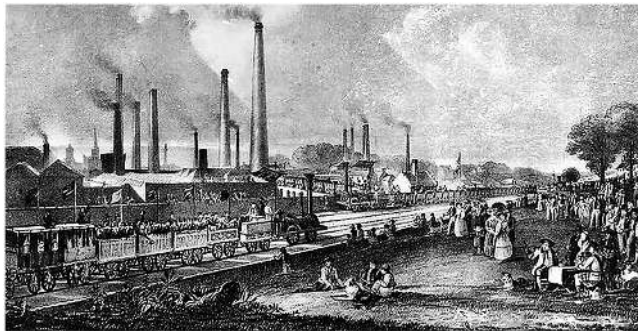
Plate 1.
Historically, cities in UK and Europe made a radical change in its infrastructure and the presence of public parks as a reaction to the cycles of epidemics during the 18th and 19th century

Source(s): Author

4.2 The risks of globalization and the rise of 'locality'
The current COVID-19 crisis has been understood as the product of globalization and urbanization. Recent research argues that rapidly expanding infrastructure networks and urban landscapes can themselves play a role in the emergence of potential outbreaks. (Boterman, 2020; Connolly *et al.*, 2020). COVID-19 has revealed the fragility of human societies and the speed with which our systems can collapse. Prominently, The COVID-19 pandemic has revealed the breakability of globalization. The first weeks of the COVID-19 crisis illustrates a global tendency towards inward thinking rather than regional or global thinking. Documented cases revealed cruel competition towards who would get medical masks, gloves, sanitizers and other needed supplies. The conflicts and the competition were extended to other major resources like food and energy. Evidently, the current crisis brings the world to an accelerated wave of return to return to self-centered national states and self-sufficient cities and regions. Along with disturbing expressions of nationalism and xenophobia – it also produced constructive examples of national collaboration and the sharing of information, know-how and supplies. Another significant aspect of the failure of globalization stems from the dire economic crisis during the surge of COVID-19 cases and the return of the lockdown policies in majority of European cities and American States. What some call "de-globalization" reveals what we already know: that not all nations, governments, or health services are created equal – and that this applies to sub-national groupings too. Spatial inequality will play a huge role in determining the eventual death map of the pandemic (Ghosh, 2020). Heinberg (2020) argues that the social dimension of the coronavirus epidemic must be a main concern for communities and States. The response is to strengthen community resilience. That means supporting local farmers, manufacturers, merchants, arts groups, and civic organizations of all kinds. A resilient community is one that can maintain its essential identity while adapting to the looming economic, energy, and environmental challenges of the 21st Century. Another significant change resulted from the pandemic was crystalized in the emergence of a new perception of the pressing culture of consumption. The actual lockdown in cities around the world resulted in a quarantine of people and more significantly, a quarantine of consumption.

> People would have to get used to living with fewer possessions and travelling less, as the virus disrupts global supply chains and transportation networks. The impact of the virus will be cultural and crucial to building an alternative and profoundly different world. Edelkoort (quoted from Firas, 2020)

As Edelkoort (Firas, 2020) Argues, the COVID-19 pandemic will lead to a global recession of a magnitude that has not been experienced before but will eventually allow humanity to reset its values. "It seems we are massively entering a quarantine of consumption where we will learn how to be happy just with a simple dress, rediscovering old favorites we own, reading a forgotten book and cooking up a storm to make life beautiful." So, the future may carry an imperative, not a luxury, the deep and sincere search for, activate and develop the self-capabilities at all levels in order to stimulate the transformation from consuming to productive beings. Consumption here means not only material goods and food, but also the consumption of ideas and concepts produced in contexts that do not belong to us and do not understand the features of our existence.

4.3 Our environment: the world we de/construct
In the last few months, a crucial question emerges; have we destroyed the environment and it would now react? The question was raised to justify the emergence of the sudden pandemic. Parallel to the questioning of the way the environment is treated, recent evidences suggest that there are some environmental positive aspects of the COVID-19 observed. After long number of years, mother Earth is in tangible break from pollution and Carbon emissions resulted from the accelerating urbanization which was adopted globally with all the energy

thirst activities related. For instance, Carbon emissions and pollution from Chinese industry have declined since the virus first hit the country (Monks, 2020). Few months without production cleared the skies and allowed people to breathe again. Animals around the world have been spotted crawling back into cities whose inhabitants have abandoned their spaces and isolated in their homes due to the COVID-19 pandemic. Carbon emissions resulted from urban traffic, including cars and aircraft, have also been reduced. It also served to purify the air, improve its quality and the traditional withdrawal of layers of smoke that dominated the landscape of cities, especially in China, India and some developing countries (Osaka, 2020; Saadat *et al.*, 2020). Hundreds of images are shared through satellite channels and social media, each of which is trying to prove one or more of the following: If the world stops all unnecessary activities, it will be possible to reduce air pollution. Keeping people isolated in their homes is an urgent necessity that will improve the state of air purity, especially in large cities. Stopping work in factories and moving in the streets will reduce the emission of pollutants, especially particles suspended in the air, making the air purer. The research shows that there is a significant association between contingency measures and improvement in air quality, clean beaches and environmental noise reduction (Zambrano-Monserrate *et al.*, 2020). As Keeling (2020) argues, the first to link the relationship between fossil fuel consumption and the high atmospheric concentration of carbon dioxide, measurement data show that the Earth needs to reduce at least 10% in fossil fuel uses worldwide and continue for a year to see a tangible impact on the global average CO_2 concentration in the atmosphere. The data show that the alleged impact has not yet been achieved and that the Earth is in urgent need to continuous decline in using fossil fuel source and move swiftly and globally towards renewable sources, mainly the sun and other natural sources. Hence, we rely on the most suitable for geographical locations, and less dependent on technical techniques that cannot be localized. The COVID-19 pandemic changes people's travel patterns and behaviors while working in a way that can reduce the use of fossil fuels. As Keeling emphasizes, only sustainable and sustained reductions in our dependence on fossil fuels will enable us to reduce atmospheric Carbon emissions levels in our challenge to global climate change. Evidently, climate change and extreme weather events further exacerbate negative effects of the unsustainable urbanization process and further deepen poverty and vulnerability in cities. Do people, governments and political systems act only when a threat is personal and immediate? Why does not the world treat the existential threat of climate change like an infectious disease?

4.4 The culture of fear: on solitude, loneliness and isolation

History has repeatedly proved that fear and its politicization is the greatest influence on the behavior of human society (Vincent, 2020). I argue that in the time of COVID-19 two forms of fear can be observed. First, fear from isolation and loneliness, which was a result of the lockdown, an unprecedented measurement adopted by millions around the world. The fact that people were forced to stay home for days, weeks then months, have resulted in number of social and psychological challenges. Loneliness is often described as the state of being without any company or in isolation from the community or society (Alberti, 2019). The COVID-19 pandemic seems to have brought our frenzied speed of modern society to a relentless pause and has literally crumpled the culture of unlimited social interaction. Under these social restrictions, individuals are forced to reconcile with this terrifying reality of isolation which can contribute to domestic inter-personal violence and boredom (Banerjee and Rai, 2020). Another crucial aspect in the emerging culture of isolation is the acceleration of human communication via safe bubbles and the triumph of the second life: digital platforms as viable communication tools (Banerjee and Rai, 2020). The crisis has empowered digital platforms, from distance learning to virtual conferencing and online shopping. The second

form of emerging fear is the one from others as people realized that community members are the main source of the infection and the only way for protection is to stay away from people. A concept that was developed later to social distancing or more accurately physical distancing. Evidently, the culture of fear is growing, especially with the certainty that humans are the primary vector of coronavirus. People and city dwellers are becoming torn between their desire for social interaction and being forced to be isolated and maintain strict levels of social distancing. The poor are required to go out for a living, as they cannot afford to stay home. Their lives and providing family essentials are based on what they gain from their daily work. The affluent and rich classes can choose when to communicate and with whom. They have the capacity and resources to apply isolation and maintain social distancing. Remarkably, for this class, isolation is successful only because of the sacrifice of low-income people who are serving them in their isolation. The poor people who working in farms, shops, bakeries and food delivery, are the ones facilitating protective and feasible social distancing for the privileged. While some interesting images show major cities in the world totally deserted, they were not telling the whole story. The same cities, just when you move from the glamorous center to the back roads, it was documented full of people going to their shops, factories, bakeries from the early morning hours to prepare what the isolated rich people need and to keep receiving their wages as the alternative would be starvation for them and their families (Kimmelman, 2020). The way the divide between rich and poor in the COVID-19 crisis, raises a crucial question about how residential neighborhoods are planned and designed? Does this social divisiveness produce a classification of architecture that we might call the architecture of isolation, or separation? Can closed, gated and walled communities be marketed as the best and safest solution in the time of a sweeping pandemic? Alternatively, intensify the architectural and urban efforts in the humanization of the housing sector, open spaces and the whole city can characterize the Post CVID-19 architecture and urban paradigm (see Plate 2).

4.5 Social justice, equal opportunities and just cities

COVID-19 illustrated new levels of inequalities and vulnerabilities. More than a decade ago, Harvey (2008) argues that we increasingly live in divided and conflict-prone urban areas. In the past three decades, the neoliberal turn has restored class power to rich elites. The results

Source(s): Author

Plate 2.
Social distancing is
affecting the behavior
of people and
transform the most
social places; urban
parks into places
exhibiting isolation
and loneliness,
Washington DC

are indelibly etched on the spatial forms of our cities, which increasingly consist of fortified fragments, gated communities and privatized public spaces kept under constant surveillance. COVID-19 Paradigm showed clearly that social and urban justice still far from being an achieved goal in our contemporary societies. While people were invited to stay home and practice social distancing when out, most of the world population cannot afford such practice. Bliss and Capps (2020) argue that relative to rural areas, urban centers do provide stronger chains of viral transmission, with higher rates of contact and larger numbers of infection-prone people and historically, urbanites paid a price for this vulnerability (Florida, 2018). Yet, when the factors of health services availability and the just distribution of care, significant result can be concluded; "Rural populations have less means to contract it, but rural populations have less means to treat it." The concept of just cities declines profoundly when we move to the context of developing counties as Balbo (1993) illustrates:

> [the city] is splitting into different separated parts, with the apparent formation of many "micostates". Wealthy neighborhoods provided with all kinds of services, such as exclusive schools, golf courses, tennis courts and private police patrolling the area around the clock intertwine with illegal settlements where water is available only at public fountains, no sanitation system exists, electricity is pirated by a privileged few, the roads become mud streams whenever it rains, and where house-sharing is the norm. Each fragment appears to live and function autonomously, sticking firmly to what it has been able to grab in the daily fight for survival (Balbo, 1993).

The painful disparity between rich and poor was clearly observed during the COVID-19 pandemic (Wilkinson, 2020). The disease is worsening present inequalities in society along the lines of class and race disparities, uneven patterns of mobility, access to sanitation infrastructures and ability to self-isolate (Mirsha *et al.*, 2020; Heinberg, 2020). These social and infrastructural imbalances can influence responses to an outbreak and must be perceived as part of the answer to mitigating against future epidemics (Connolly *et al.*, 2020). While developers and governments still see the meaning of development is in the fast pace of urbanization, the poor were forced to maintain extending their world of slums. Such a phenomenon invited Harvey (2008) to brilliantly describe it as they collide between the planets as building site with the "planet of slums". He was referring to Davis (2006) profound analysis of the expansion of the informal sector in contemporary urbanity as a global predicament. Moskowitz (2018) uncovers the massive, systemic forces behind gentrification in elected American cities. The misleadingly question of who can and cannot afford to pay the rent goes to the heart of America's crises of race and inequality. In the fight for economic opportunity and racial justice, nothing could be more important than housing. The growing inequality is a real problem for the economic and social health of cities – both in wealthy cities but also in fast-growing cities of the global south as effects of the pandemic are aggravating divides (Tabary, 2020; Boterman, 2020). While about 1.8 billion people are homeless or live in inadequate housing, a call for having a summer or farmhouse is becoming popular for the classes that can afford it. After the pandemic, many people from the city realized they need a village house as shelter, a place where you are always welcome to escape to in case of necessity. Wilkinson (2020) argues that one billion people live in slums or informal settlements where water for basic needs is in short supply and where space is constrained, and rooms are often shared. In other words, they cannot wash their hands and self-isolate. She stresses that we need to consider how COVID-19 could impact people living in densely populated and unsanitary environments, and what could mitigate the worst of these impacts. This is challenging as the health and social needs of these populations are often invisible. COVID-19 is being called a once-in-a-century pandemic (Gates, 2020). Will it be a turning point for people living in precarious urban environments? Crises can be productive when established ways of thinking or acting are transgressed by stress or rupture. Historically, epidemics have acted as catalysts in transforming how diseases are handled (De La Barra, 2000). The extent and direction of transformation depend on how an epidemic and its context are interpreted and by whom. Are

vulnerable groups blamed and are their problems misdiagnosed? Is the epidemic an "eye-opener" to underlying conditions that fuelled the disease? COVID-19 sheds strong light on urban vulnerability and the economic barriers to conduct social distancing or lockdown as (Wasdani and Prasad 2020; Mishra *et al.*, 2020) argue that whatever social distancing measures are deemed necessary by government leaders to contain the proliferation of COVID-19, they will only be successful if sufficient economic support have been allocated to those who occupy the most vulnerable of spaces. Batty (2020) argues that Social distancing may well be here to stay especially if the disease becomes endemic and we are unable to eliminate it which is quite possible as in the case of various strains of influenza. As cases of COVID-19 among individuals living in slums in Mumbai and Haryana are confirmed, it is ever important for meaningful and swift actions to be undertaken that would make social distancing achievable for this population as, to not do so, has the potential to pose unimaginable havoc to humanity.

5. The principal question: a new paradigm or a new normal – architectural and urban lessons learned: the forgotten normal

As Horton (2020) argues, we need to learn the lessons of this pandemic and we need to learn them fast because the next pandemic may arrive sooner than we think. In the following section, the knowledge gained from the way buildings and places were altered during the COVID-19 crisis, will be discussed. In so doing, some significant questions are confronted including would a less consumerist society, with fewer possessions and less travel, need a different urban setting? Will societies have more solidarity, or less? Will local communities be more engaged? Will governments be held more accountable? What transformations of urban cultures can we expect, and how can we retain and improve them through planning and design? All of which supported the main hypothesis of the paper. The necessity is not for a new normal but reactivate the qualities and the values that used to characterize people-centered architecture and urbanism. The coming sections highlight the lessons learned as resulted from literature review, case studies examined, and interviews conducted.

5.1 First: from planning cities to sustaining community

For the last few decades, the concepts of global, mega and metropolitan cities substantiated strongly in the contemporary urban discourse (Sassen, 1991, 2002). The crisis confirms that planning is not just about the physical aspects of a city but also about the engagement of its people. Citizens are using social networks to get engaged voluntarily, generating social capital. City planners and designers realized the paramount importance of engaging with the locals even more than before. Has the astonishing pace and scale of urbanization over the last hundred years contributed to human well-being?

> Man's most successful attempt to remake the world he lives in more after his heart's desire. But, if the city is the world which man created, it is the world in which he is henceforth condemned to live. Thus, indirectly, and without any clear sense of the nature of his task, in making the city man has remade himself. (Park, 1967, p. 3).

The urbanization of the world has unlocked formidable potential in the fields of culture, politics and economy. But the rise of the city has also unleashed a host of challenges, from ecological crises to class divides and individual alienation. Cities face an unprecedented urbanization pressure, which reflects in a rapid and uncontrolled built infrastructure human scale and cultural distinctiveness, which in turn significantly compromises sustainability, resilience, social cohesion, inclusiveness and economic opportunities. In discussing the scale of the city, degree of urbanization, no need to envision a "new normal" as the topic was analyzed extensively when the urban revolution became evident. Lefebvre (1996, 2003) predicts that urbanization was central to the survival of capitalism and therefore bound to

become a crucial focus of political and class struggle, but that it was gradually eradicating the distinctions between town and country through the production of integrated spaces across national territory.

> Without doubt, measures such as self-isolation, staying indoors and practicing social distancing are more difficult in a very compact city setting, "However, compact cities do provide benefits even in a crisis such as this, for example access to basic services and medical care. The benefits of a well-planned compact city include shorter commute times, cleaner air, and reduced noise and the consumption of fossil fuels and energy. Esteban Leon, the head of UN-Habitat's City Resilience Global Program.

Urban villages can be isolated and protected more easily than huge cities. Moreover, they foster a sense of belonging and dynamic social interaction. Urban planners should promote subregions efficiently connected via public transportation while internally enjoying a high degree of self-sufficiency. The C40 network of cities working on climate action advocates for a 15-min city model, where people can reach their destination within 15 min of walking, cycling or using mass transit. Decades ago, Roger (1998), calls for the necessity of connecting work, dwelling and leisure in a more overlapped, connected and compacted urbanity rather than independent zones. Moving to a more compacted and walkable urbanity would lead to changes in the transportation modes (EASAC, 2020). Later, "New Urbanism" made a successful articulation on the economic and environmental benefits of walkable, pedestrian/bike-friendly cities where people's mobility is no longer impaired by their access to private vehicles (Ellis, 2002). Pollution levels in cities all over the world have plummeted. Air quality is healthy again. Transformed mobility patterns affect our daily lives – citizens switch to walking and give up driving. Shall we see this process as a threat equal to the collapse of the global economy or do we need to learn how to stick to these practices in the post-COVID-19 world? Activating town centers will require a holistic approach- rather than piecemeal one resulting in less impact and benefit -to how we design/plan/manage these centers. Town centers with strong character, identity, legibility and permeability combined with mix of offerings/uses tend to attract people, businesses and visitors. Hence, it is essential to create the right conditions for these places to flourish providing the community with places to enjoy, living and safely socialize (Dixon, 2020; Chang, 2020; Batty, 2020). Harvey (2008) concludes that Urbanization has played a crucial role in the absorption of capital surpluses, at ever increasing geographical scales, but at the price of escalating processes of creative destruction that have dispossessed the masses of any right to the city whatsoever (see Figure 1).
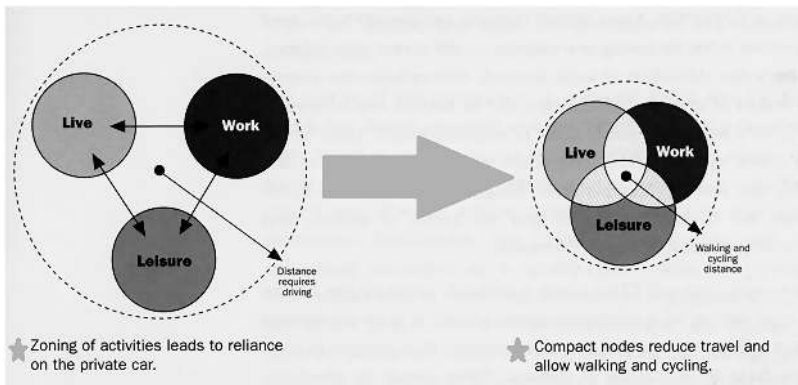

Figure 1.
Compact mixed-use nodes reduce journey requirements and create lively sustainable neighborhoods. The normal that aspired

Source(s): Author, diagram based on Rogers, 1998

A rise in demand for car travel was observed during the COVID-19, reversing the slow decline which has been happening in many countries since the late 20th century. A condition which threatens the compact city concept. During the Second World War, the idea that we should "decentralize" our activities away from big cities took on a new urgency. Throughout the 19th century, the drive towards urban planning was based around the notion that we should return to the countryside to avoid the evils of the big city. Indeed, the garden cities movement and the idea of new towns reflected these concerns. And this was long before we acquired the ability to travel individually using the automobile. Indeed, the history of the city in the 20th century is one of letting the city "breath" through a decentralization of congested activities from housing to industry to services in edge cities, low-density urban sprawl and new communities far from the central city. Combined with working from home and severe social distancing, these old ideas look increasingly attractive as Batty (2020) argues.

5.2 Second: envisioning the housing sector in the post COVID019 era: from real-estate to real dwellings

At the level of the dwellings, we noticed a new beginning resulted from a growing questioning of how people use the houses' spaces during the lockdown. The pandemic has emphasized, more than ever before, how integrally linked housing is to health and life. It has accentuated the importance of "home" – also as a place of safety, work, education, and security. The perpetual need to find new housing conditions after distinct experiences of people living in an extended lockdown that started with days and extended to months in cities around the world. From the site visits, interviews and online meetings, it was concluded that many families rediscovered and reprioritized the spatial components of their homes. Such a process came as a result to the need to perform multi essential activities which are new to the house including work, schooling and recreation. It has also been shown that the house can play a trilogy of work, study and recreation. Hence, functional flexibility in houses has crystallized as an important aspect. On the notion of home as a Workplace, for many, home is the new workplace during the COVID-19 era and such phenomenon is also promoted as the new normal we should get used to (Tabary, 2020). Again, we forget to realize that the concept of home-based office is a decade old practiced concept. Extensive efforts were already geared in the last few years to evaluate how such concept will affect productivity and will allow workers to have a more sociable and healthier lives. We are also entitled to ask about the multiplicity of measures of the residential home and its impact on the psychology of its residents. From a single-family townhouse to small residential buildings or multi-family dwellings to high-rise towers with hundreds of apartments. Another emerging pattern is the tolerance towards tenants suffering from the economic consequences of the crisis. Contradictory to the common practice analyzed holistically by (Desmond, 2016), unexpectedly it's possible, in many countries, to stop evictions and foreclosures, and to suspend payment on mortgages for primary residences and utility bills. Could some of these extraordinary measures be retained after the pandemic in cases of poverty, job losses and similar hardship? This is not new normal, but it is normal and took place in a lot of communities around the world when the dignity of human was the ultimate priority supported by social solidarity and compassion (see Plate 3).

It is imperative in the post COVID-19 era to revisit the production of houses in contemporary cities and particularly in developing countries including the Middle East. A review the current housing stock and encourage developers, owners and residents to take advantage of what they have learned from the period of isolation. A conclusion related to the development of their homes and the improvement of their lifestyle must be articulated to guide the rehabilitation of the existing stock and enlighten the future housing projects. On a related note, a complete reformulation of the new housing and neighborhoods design system

Source(s): Author

and the development of regulations, standards and requirements that can produce more humane housing is urgently needed. The post COVID-19 era will see a more understanding, mature and demanding user. A user who learned from the crisis, the significant of claiming a house which is holistically would create a sense of home not just a shelter or place of protection. By the same principle, real estate investors may be under pressure from a new quality of users and customers. As argued in several webinars discussing the future changes, the criterion for users' demand for new housing projects will be whether they will bring us a beautiful isolation if the pandemic scenario and the inevitability of isolation in housing spaces are repeated. The interest in housing design will be accompanied by an awareness of the importance of the urban context. Hence, the importance of the residential neighborhoods and how it facilitates a healthy, safe, social, human life and provides services through acceptable walking distances and supports the requirements of children and families. Here, it highlights the importance of just and fair treatment of residential areas because they contain humanitarian groups that deserve a dignified, healthy and safe life regardless of their economic abilities. Thus, the criteria for the design and planning of villas and upper-class areas should not be radically different from the housing areas designated for the poor and low-income when it comes to the creation of livable and safe places. Make large-scale public investments in affordable and adequate housing and slum upgrading to ensure that marginalized groups have access to shelter that facilitates physical and mental health during the pandemic and beyond. Future-proof investments to ensure extension of adequate water and sanitation coverage are also needed (UN, 2020).

In this section, we try to go beyond housing as an independent building unit, to discuss the concept of the housing as part of an urban and social fabric. The following are the most important observations and reflections that have accompanied the monitoring of the urban context in many residential areas in Arab cities after the outbreak of the COVID-19 and the activation of spatial isolation at various levels. Moving beyond the actual boundaries of internal housing spaces, different outcomes resulted from the conducted interviews, visits and behavioral observations.

The value of the residential neighborhood is becoming essential and participants acknowledged that the quality of life is not relaying only on a house where you can be isolated safely. The value of the proximity particularly the location of the family, work and shopping in a converging setting. The value of the neighbor and the larger family and the urban reflection in maximizing the value of context outside the home. The value of social solidarity versus social divergence and distancing. The outcomes also include the dire need for more human and pedestrian friendly neighborhoods. Some concrete conclusions can be drawn including:

(1) The value of public spaces and parks and the certainty that it is not an extravagance, especially in poor areas, but an effective means of improving human health physically and psychologically,

(2) The logic and safety of movement to and from homes,

(3) Connectivity with nature via (courtyard/terrace/balconies/roof garden/front or backyards),

(4) The value of local life and belonging to the neighborhood and its local community,

(5) Finally, Urban equity among the community sectors is essential because overcrowded and poor areas which lack services are vulnerable and the, most affected by the COVID-19 (see Figure 2).

Most residents interviewed stressed the regret for the limited relation between their dwellings and any form of nature. In their opinion COVID-19 taught them that Connectivity with nature is not a luxury and it is a must investment in the future. One of the most important observations that take shape during the isolation of dwellings is the relationship of housing to nature. The spatial elements to strengthen this relation are balconies, gardens, roofs, inner courtyards and all other elements which guarantee providing natural lighting and ventilation. Especially after realizing that this connectivity with nature positively affects the family members and relieves them of the enormous psychological effects of forced isolation and the lack of social and sometimes professional life. 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 (Tamborrino, 2020).

5.3 Third: rethinking Urban space: can public life survive COVID-19?
In the wake of the pandemic, museums and cultural heritage sites have closed. Concerts have been cancelled and movie theatres have stopped running. New digital initiatives have been

Source(s): Author

Figure 2.
Revisiting the design of residential neighborhoods in Gulf cities to encourage walkability and the presence of vibrant public spaces, the case of Doha

developed to cope with the current lack of cultural life. Although the current COVID-19 fight requires social distancing and isolation, proximity and density make many urban systems more efficient, while lower density enables access to nature and local resources. In the wake of the pandemic, we will seek an integration of higher and lower densities, rather than commending the virtues of one or the other. Assess the idea of physical and demographic density in the post-COVID-19 era and its relationship to the concept of spatial belonging. Rethinking public spaces is challenging as the need for sociability and community integration has become a prim individual and collective need. People appeared, as documented, from the windows in Chinese, Italian and Spanish to feel and support the local communities. Months of lockdown have sparked an unprecedented use of available parks and public spaces and prompted fresh debate about how cities should allocate space or alter busy streets and sidewalks into new shared places. One impact of COVID is urban dwellers needing more outdoor space – to commute, eat, socialize and exercise. Streets which account for about 80% of public space in many cities are transformed and became targets for a tangible and desirable change (see Plate 4).

A wave of open streets, which are closed to or significantly restricting cars, can be seen in many cities around the world from Washington DC, the US capital to small cities in Europe and Asia. Open and active streets will help bring foot traffic to areas that otherwise would feel abandoned and deserted. Park and green spaces life in a pandemic have also exposed a hidden inequality over who gets it, with the poorest often shut out of public spaces (Brion, 2020). So, communities that do not have access to a robust, well-maintained park system are suffering (Mitchell, 2003). The neighborhoods located in poor and vulnerable communities have the least access to parks, and they have the least greenery. Even within contemporary American city, the same phenomenon is observed as documented in the work of nonprofit organizations including Project for Public Spaces (PPP) and Resilient Cities Catalyst (RCC). This connectivity with nature should be crystalized in two levels. In the context of systematically designed parks and green spaces but also in providing access to forests, valleys, riverbanks and other natural contexts. Hence, this is not a new normal but rather emphasizing the right of city dwellers to enjoy encounters with nature via their own homes or by being encouraged to use natural spaces and assets in their adjacencies. Given the new impacts of COVID-19 on cities, how will the diverse ways in which COVID-19 influences our public spaces evolve and change across contexts? Honey-RosesIsabelle et al. (2020). Question if future cities will be hyper-hygienic, absent of crowds and public life, patrolled, controlled,

Source(s): Author

further segregated, and surveilled? These dystopian futures cannot be dismissed. Or can we reimagine and plan cities in ways that are ecologically sustainable, healthy and just?

5.4 Fourth: Gulf cities transformed
For long decades, Gulf cities fail to stop the unprecedented spread of its urbanism. As argued by different researchers (Al Hathloul, 2004; Alraouf, 2017) urban sprawl in Gulf cities was encouraged and celebrated as a manifestation of the State's prosperity and progress. The dominance of single-family houses and gated communities accelerated the pattern. Additionally, cheap oil prices, tax-free cars and high incomes make horizontal development of Gulf cities uncontested city development strategy. The COVID-19 pandemic has hit the economies of the Gulf Arab countries, just as they were, with different degrees, in the process of diversifying their economy away from overdependence on oil profits. Conversely, lower oil prices and production will result in less income with which to shift from a public sector-dominated economy to one with more robust non-oil sectors. COVID-19 may warn us of the importance of formulating a new social contract because the epidemic is sweeping and does not differentiate between social, economic or ethnic circles. We have realized that the upper classes cannot protect themselves and leave the middle and poor classes to suffer because the latter's neglect intensifies the existence of the epidemic. Thus, helping all human beings to regain their lives and support them must be balanced, fair and equitable. Here, it is important to find solutions that are compatible with different contexts and certainty acknowledging the specificity of each society and understand its requirements and dynamics. We live in a critical time that will determine how cities will operate, handle COVID-19 pandemic related threats, provide high quality of life and economic opportunities. Before the COVID-19 era, declared aspirations for cities are to be more inclusive, livable, climate resilient, economically vibrant and competitive. Extensive literature alerted to the valuable resilience and sustainability lessons that can be learned from traditional urban planning, neighborhood design and architecture, which systematically incorporate three critical components: harmony with natural conditions; human scale; and cultural uniqueness (see Plates 5 and 6).

Source(s): Author

Plate 6.
Images documenting, the before and after: the transformation of Urban centers streets in Doha to accommodate public transportation, active sidewalks and green spaces
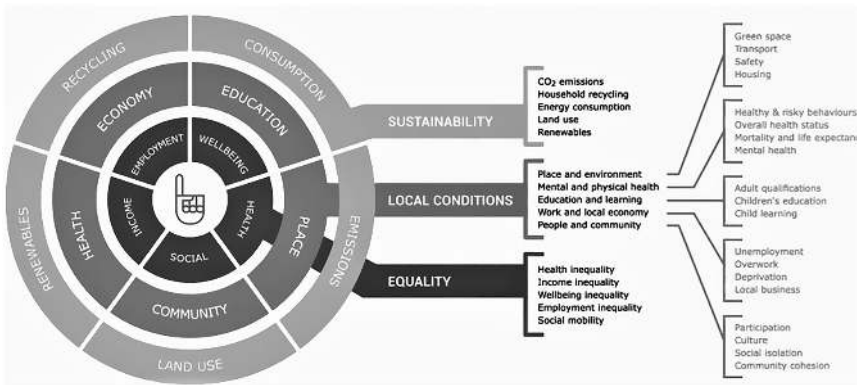
Source(s): Author

Due to the extended lockdown, families started to realize that the current housing condition is not viable. The exaggerated focus on the house and particularly the internal spaces and neglecting the public spaces and the sense of families-friendly neighborhoods. Open, public and green spaces are not optional and not merely looks for beautification of cities. "The most obvious things this pandemic has revealed in the little details of city living are sidewalk widths and balcony depth. Community members stated to use available green and recreational spaces in a substantial manner. For instance, Qatari Urban Planning Authority just started articulating a national strategy for open, green and recreational spaces. The COVID-19 era is paving the way for an alternative strategy for urban mobility which is based on decentralization, promoting transit-oriented development (TOD) and creating a hierarchy of urban centers equipped with all community facilities and needs. The realization of the new urban condition urged both authorities like the urban planning department and families alike to consider new measures which would guarantee more resilient homes and city spaces.

One revealing dilemma during the COVID-19 era is questioning the right size for a family house in the Gulf cities. On one hand, resources should be preserved and the exaggerated sizes of family houses in the Gulf should be revised. The conducted interviews assert the fact that for a family of two or three members to occupy an average of 500 m^2 house is

inconceivable yet it is the reality for locals in all Gulf cities (Alraouf, 2017). On the other hand, COVID-19 era established a new relation between Gulf families and their homes. On our investigation in residential areas dedicated to Qataris, we have documented emerging patterns including enhancing the quality of backyards, shaded roof gardens, outdoor spaces adjacent to indoor Majlis, and more significantly replacing areas designated for receiving guests into areas for online schooling, recreation and more family-based activities' alcoves. Additionally, and so revealing that different neighborhoods dwellers start pressing the municipalities to enhance the urban conditions of their neighborhoods. The demand was based on the dire need for walking, cycling and other outdoor activities which can be performed outside the boundaries of houses (see Figure 3).

6. Conclusions

Drawing on the early evidence reported in the literature, analysis of regional and global positions and Gulf cities dwellers' interviews outcomes, the paper tried to understand major impacts on various urban sectors, identify key factors that should be considered for better preparation and response. The different questions paused in the paper articulate a framework by which cities can response to long-term complex challenges and short-term crises primary in the fields of housing, neighborhoods planning and public spaces. Hence, the suggested framework is structured around three main levels; the city, the urban and the architectural. The current pandemic has shown that society and city are capable of rapid transformation and adaptation. Avoiding a return to the pre-pandemic status quo and instead transforming cities globally for future resilience, inclusion, green and economic sustainability has never been more urgent. On the city level, the conclusions emphasize a need for a more compacted and town-like scale of cities. The tendency towards developing mega cities and metropolitan territories should be replaced by more village-like urbanity. On the urban level, a move to a more compacted urbanism is needed. Such move must be coupled with an understanding of urban density as a positive factor if it is not reaching the crowding level which can be of a threat to the health and safety of the community. It is imperative to move from dealing with the formulation of communities as land subdivisions projects to planning projects aimed at creating happy, healthy and sustainable human-friendly communities. Hence, a more focus on public spaces, parks, sidewalks, vibrant street, accessible waterfronts and social spaces is

Source(s): Author, based on TPI, 2020

Figure 3.
The framework of the
Thriving Places Index
goes beyond the typical
notions of
sustainability and
resilience to include
wellbeing inequalities,
community cohesion
and equality

highly recommended. Planning residential neighborhoods as people-friendly spatial territories where the principles of sociability, slow rhythm of movement and walkability, are prioritized. On the architectural level, both residential and working places should be revisited to accommodate patterns of usage during the extended lockdown. The aim is creating a more functional, healthier and morally fulfilling dwelling experiences. The extended lockdown and isolation increased the user's awareness and provided better understanding of the family requirements and spatial needs. Therefore, it is significant to appreciate the value of the users, understand the social and cultural context, understand spatial disparities and avoid stereotypical solutions. On the residential units and workplaces levels, a serious consideration of the growing impact of the digital era in learning, work, shopping and entertainment is needed. Flexibility and spatial dynamics of residential and workspaces is a must to accommodate the diversity of family's activities. Introducing the use of transformational furniture which would be altered to cope with multi-task functions and spaces. Particularly in the case of Gulf cities, COVID-19 would inspire a move towards compacted and decentralized urbanity as oppose to the current urban sprawl. Revisiting the concept of extended family house was concluded from the interviews reflecting the need for social and family solidarity during a similar crisis. It was also documented in the interviews that families are looking for sharing a common open space that allows communication and interaction. Going back to the main hypothesis regarding the new normal versus the forgotten normal, such a common social space is a normal practice in traditional Gulf cities where the space called *Hara* or *Fareej* was a manifestation of a well-connected environment for related families. Human-friendly green spaces, public parks and local recreational facilities are a basic requirement and not only for privileged areas but low-income and poor areas. More significantly, is the call for the importance of a design response in creating a new era of private, public and spaces and thoughtful built environments that are described as healthy, epidemic-resistant and stimulating a balanced life. Results from literature review and analyzing the regional and global context suggest that evoking the forgetting normal should emphasize on the notion of just cities and spatial justice. In the post COVID-19 urbanity, the main objective of creating neighborhoods for people should be based on providing humanitarian and affordable housing, not just human shelters. Urban planners need to identify and promote infrastructure of residential and public spaces equipped with the needed community facilities that prevents the most vulnerable populations from being the prime victims of pandemics. Public spaces in the post-COVID world will remain valued for the possibilities they offer for socialization, recreation, community building, and identity formation. Cities and towns, primarily in the Gulf, need to reformulating standards and regulations for the design of residential neighborhoods to produce human spaces and not just a quantitative intervention controlled by real-estate developers. An integrated matrix of procedures, initiatives, regulations and transformations are needed. A matrix that include understanding the importance of the strong connectivity with nature, outdoor spaces, the importance of the vibrant streets, the livable sidewalks, the effective service space through limited and safe walking distances and the multiplicity of public and green spaces and urban agriculture. Learning the lessons from COVID-19 must be used to help increase resilience, and plan and manage for future pandemics and shocks as well. But this will mean building and re-imagining visions for how we want out cities to be. City visioning, with a strong community participatory component, should be an essential constituent of the visioning process.

References

Al Hathloul, S. (2004), "Planning in the Middle East, moving toward the future", *Habitat International*, Vol. 18 No. 5, pp. 641-643.

Alberti, F. (2019), *A Biography of Loneliness: The History of an Emotion*, Oxford University Press, Oxford.

Alraouf, A., Hanzl, M. and Bogunovich, D. (2020), *Post COVID-19 Urbanism: A Challenge to All City and Regional Planners*, The International Society of City and Regional Planners Publications, available at: https://isocarp.org/post-covid-19-urbanism/ (accessed 6 May 2020).

Alraouf, A. (2017), "Interrogating Qatar's urbanity as a catalyst for building knowledge-based societies and economies", in Bertelsen, R.G., Noori, N. and Rickli, J.-M. (Eds), *Strategies of Knowledge Transfer for Economic Diversification in the Arab States of the Gulf*, Gerlach Press, London, pp. 53-66.

Balbo, M. (1993), "Urban planning and the fragmented city of developing countries", *Third World Planning Review*, Vol. 15 No. 1, pp. 23-35.

Banerjee, D. and Rai, M. (2020), "Social isolation in Covid-19: the impact of loneliness", *International Journal of Social Psychiatry*, Vol. 66 No. 6, pp. 525-527.

De La Barra, X. (2000), "Fear of epidemics: the engine of urban planning", *Planning Practice and Research*, Vol. 15 Nos 1-2, pp. 7-16.

Batty, M. (2020), "The Coronavirus crisis: what will the post-pandemic city look like?", *Environment and Planning B: Urban Analytics and City Science*, Vol. 47 No. 4, pp. 547-552.

Berg, R. (2020), "How will COVID-19 affect urban planning?", available at: https://thecityfix.com/blog/will-covid-19-affect-urban-planning-rogier-van-den-berg/ (accessed 18 April 2020).

Bliss, L. and Capps, K. (2020), "Are suburbs safer from coronavirus? Probably not", available at: https://www.citylab.com/life/2020/03/coronavirus-data-cities-rural-areas-pandemic-health-risks/607783/ (accessed 23 August 2020).

Boterman, W.R. (2020), "Urban-rural polarization in times of the corona outbreak?", *Journal of Economic and Social Geography*, Vol. 111 No. 3, pp. 513-529.

Brion, C. (2020), *Protests, Pandemic Pile Pressure on U.S. Public Space*, Thomson Reuters Foundation, available at: https://news.trust.org/item/20200611153545-djwn1/ (accessed 18 April 2020).

Carr, S. (2020), *The Topography of Wellness: Health and the American Urban Landscape*, University of Virginia Press, Charlottesville.

Chang, V. (2020), "The post-pandemic style", available at: https://slate.com/author/vanessa-chang (accessed 2 November 2020).

Connolly, C., Ali, S.H. and Keil, R. (2020), "On the relationships between COVID-19 and extended urbanization", *Dialogues in Human Geography*, Vol. 10 No. 2, pp. 213-216.

Corona Virus Resource Center (2020), Johns Hopkins University, available at: https://coronavirus.jhu.edu/map.html (accessed 16 November 2020).

Davis, M. (2006), *Planet of Slums*, London and New York, NY, Verso.

Desmond, M. (2016), *Evicted: Poverty and Profit in the American City*, Broadway Books, Portland.

Dixon, T. (2020), "What impacts are emerging from Covid-19 for urban futures?", available at: https://www.cebm.net/covid-19/ (accessed 12 October 2020).

EASAC – the European Academies' Science Advisory Council (2020), *Towards a Sustainable Future: Transformative Change and Post-COVID-19 Priorities*, German National Academy of Sciences Leopoldina, Berlin.

Ellis, C. (2002), "The new urbanism: critiques and rebuttals", *Journal of Urban Design*, Vol. 7 No. 3, pp. 261-291.

Firas, M. (2020), "Interview with Li Edelkoort", available at: https://www.dezeen.com/2020/03/09/li-edelkoort-coronavirus-reset/? (accessed 23 April 2020).

Florida, R. (2018), *The New Urban Crisis: How Our Cities Are Increasing Inequality, Deepening Segregation, and Failing the Middle Class-and What We Can Do about it*, Basic Books, New York.

Gates, B. (2020), "Responding to covid-19 — A once-in-a-century pandemic?", available at: https://www.nejm.org/ (accessed 6 October 2020).

Gharipour, M. and DeClercq, C. (2020), "The epidemic urbanism initiative (EUI)", *Two International Conferences on Historic Pandemics and A Roundtable on 'Cities, Social Equity, and Pandemics in History*, The EUI YouTube Channel.

Ghosh, R. (2020), available at: https://www.versobooks.com/blogs/4648-rethinking-the-city-urban-experience-and-the-covid-19-pandemic.

Harvey, D. (2008), "The right to the city", Published in, available at: https://newleftreview.org/issues/II53/articles/david-harvey-the-right-to-the-city#_ednref4 (accessed 15 October 2020).

Heinberg, R. (2020), "Coronavirus, economic networks, and social fabric", available at: https://www.resilience.org/stories/ (accessed 12 November 2020).

Honey-RosesIsabelle, J., Anguelovski, I. and Bohigas, J. (2020), "The impact of COVID-19 on public space: an early review of the emerging questions–design, perceptions and in-equities", *Cities and Health*, pp. 1-17.

Horton, R. (2020), *The COVID-19 Catastrophe: What's Gone Wrong and How to Stop it Happening Again*, Polity Press, Cambridge.

Karunathilake, K. (2020), "Positive and negative impacts of COVID-19, an analysis with special reference to challenges on the supply chain in South Asian countries", *Journal of Social and Economic Development*. doi: 10.1007/s40847-020-00107-z.

Keeling, C. (2020), available at: https://scripps.ucsd.edu/programs/keelingcurve/ founder of the climate Observatory at Scripps Institution of Oceanography, UC-San Diego.

Kimmelman, M. (2020), "Can city life survive coronavirus?", available at: https://www.nytimes.com/2020/03/17/world/europe/coronavirus-city-life.html? (accessed 8 June 2020).

Lefebvre, H. (1996), *Writings on Cities*, Wiley-Blackwell, New York.

Lefebvre, H. (2003), *The Urban Revolution*, University of Minnesota Press, Minneapolis.

Mishra, S.V., Gayen, A. and Haque, S.M. (2020), "COVID-19 and urban vulnerability in India", *Habitat International*, Vol. 103, 102230.

Mitchell, D. (2003), *The Right to the City: Social Justice and the Fight for Public Space*, The Guilford Press, New York.

Monks, P. (2020), "Here's how lockdowns have improved air quality around the world", available at: https://www.weforum.org/agenda/2020/04/coronavirus-lockdowns-air-pollution/ (accessed 17 August 2020).

Moskowitz, P. (2018), *How to Kill a City: Gentrification, Inequality, and the Fight for the Neighborhood*, Bold Type Books, New York.

Nevius, J. (2020), "New York's built environment was shaped by pandemics", available at: https://ny.curbed.com/2020/3/19/21186665/coronavirus-new-york-public-housing-outbreak-history (accessed 16 July 2020).

Nikiforuk, A. (2006), *Pandemonium*, Viking, Toronto.

Osaka, S. (2020), "Why don't we treat climate change like an infectious disease?", available at: https://grist.org/climate/why-dont-we-treat-climate-change-like-an-infectious-disease/ (accessed 30 July 2020).

Park, R. (1967), *On Social Control and Collective Behavior*, University of Chicago Press, Chicago, p. 3.

Rogers, R. (1998), *Cities for a Small Planet*, Basic Books, London.

Saadat, S., Rawtani, D. and Hussain, C.M. (2020), "Environmental perspective of COVID-19", *The Science of the Total Environment*, Vol. 728, p. 138870.

Sassen, S. (1991), *The Global City*, Princeton University Press, New York, NY, London, Tokyo, Princeton.

Sassen, S. (Ed.), (2002), *Global Networks, Linked Cities*, Routledge, London.

Schwab, K. and Malleret, T. (2020), *COVID-19: The Great Reset*, Agentur Schweiz, Zürich.

Tabary, Z. (2020), "Cities reboot: urban life in the age of COVID-19", available at: https://longreads.trust.org/ (accessed 20 October 2020).

Tamborrino, R. (2020), "Here's how locking down Italy's urban spaces has changed daily life", available at: https://www.weforum.org/agenda/2020/03/coronavirus-locked-down-italy-urban-space/ (accessed 23 November 2020).

United Nations (2020), *COVID-19 in an Urban World*, Policy Report, UN Publications, New York.

Vincent, D. (2020), *A History of Solitude*, Polity Press, Cambridge.

Wasdani, K.P. and Prasad, A. (2020), "The impossibility of social distancing among the urban poor: the case of an Indian slum in the times of COVID-19", *Local Environment: The International Journal of Justice and Sustainability*, Vol. 25 No. 5, pp. 414-418.

Wilkinson, A. (2020), "The impact of COVID-19 in informal settlements – are we paying enough attention?", available at: https://www.ids.ac.uk/opinions/ (accessed 6 October 2020).

Wolf, M. (2020), "This pandemic is an ethical challenge", 25 March 2020, *Financial Times*, Vol. 357 No. 40, p. 17.

Zambrano-Monserrate, M., Ruano, M. and Sanchez-Alcalde, L. (2020), "Indirect effects of COVID-19 on the environment", *The Science of the Total Environment*, Vol. 728, pp. 1-4.

Further reading

Akcan, E. (2020), "How to build a better world", Interview by Ryan Mulcahy, available at: https://www.radcliffe.harvard.edu/news/in-news/how-build-better-world (accessed 21 July 2020).

Jon, I. (2020), "A manifesto for planning after the coronavirus: towards planning of care", *Planning Theory*, Vol. 19 No. 3, pp. 329-345.

Murray, W. (2014), *Geographies of Globalization*, 2nd ed., Routledge, London.

Park, A. (2020), "Preventing the next pandemic: how public health can use new technology to get ahead of future outbreaks", *Time*, MARCH 30, 2020, Vol. 195, No. 11, pp. 43-44.

Poon, L. (2020), "A lesson from social distancing: build better balconies", available at: https://www.bloomberg.com/news/articles/2020-04-20/lesson-from-coronavirus-build-better-balconies (accessed 18 May 2020).

Sennett, M. (2018), *Building and Dwelling: Ethics for the City*, Farrar, Straus and Giroux, New York, NY.

Sharifi, A. and Khavarian-Garmsir, A. (2020), "The COVID-19 pandemic: impacts on cities and major lessons for urban planning, design, and management", *Science of the Total Environment Journal*, available at: https://www.researchgate.net/publication/344351226 (accessed 24 November 2020).

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