47

Essays

COVID-19 as a catalyst for collaborative city-making: from emergency to praxis

Andrea Ariano // DiAP (Dipartimento di Architettura e Progetto), Sapienza, Rome, Italy

Abstract

The crisis resulting from the spread of COVID-19 is having important consequences on the development of the contemporary city, notably in the rethinking of public and collective spaces. To avoid contagion, restrictive measures and social distancing have been put in place: the two main consequences have been the digitalization of many sectors and the spread of tactical urbanism actions. In this paper, it will be argued that hyperlocal, understood as a collective and participatory design facilitated by information technology, can be a solution not only to the ongoing emergency but to the challenges that contemporary society poses, since it appears to be a valuable practice in rethinking and redesigning our neighborhoods and cities in a more open, inclusive, and therefore more resilient way

Keywords
COVID-19; public space; hyperlocal; digital platforms; collaborative city-making.

COVID-19 as a catalyst for collaborative city-making: from emergency to praxis

Andrea Ariano

1. Introduction. To design is transforming crisis into value

In reality, architecture has become too important to be left to architects. A real metamorphosis is necessary to develop new characteristics in the practice of architecture and new behavior patterns in its authors: therefore all barriers between builders and users must be abolished, so that building and using become two different parts of the same planning process (Giancarlo De Carlo, 2007, p. 13).

Since its appearance on Earth, man has sought to improve his living conditions, in search of greater safety and comfort. The tool through which he has attempted to achieve this goal is design. Humans, when confronted with new problems tend to use their innate creativity and their ability to design to realize something new. (Manzini, 2015). The history of humanity is full of successes and failures, great crises, and innovations. On closer inspection, crisis is a necessary, but not sufficient, condition to achieve innovation. Moreover, what makes humans unique is not so much the ability to design, common to other species, but the capacity to self-design (Colomina and Wigley, 2017). As we continually redesign the world around us, we end up redesigning ourselves. Following this assumption, we could argue that through design we are constantly laying the basis of a new civilization. The challenges that today's world poses to us are enormous, complex, and interdependent. Between now and 2030 we are facing a "perfect storm"[1] of social, political, economic, and environmental crises. To avert the risk of sixth mass extinction, emergency and crisis will have to become the chronic scenario of our future. Despite the negative connotation we attribute to the word crisis today, its Greek etymology and its meaning in all modern languages are that of 'choice', 'change' or 'turning point' (Illich, 1996). The word crisis, historically, does not have a negative connotation. The crisis related to the spread of the COVID-19, to be included in the more general environmental crisis, is having extraordinary consequences on the development of our cities and our habits. As is often the case, crises accelerate trends already in place and there is no doubt that the crisis related to the spread of COVID-19 is acting as a catalyst for latent phenomena. Crises are periods of transition, historically they have allowed for major changes and transformations in short periods. To deal with the emergency, world governments have taken extraordinary measures, first the lockdown and then a gradual re-opening based on social distancing. This has led to the rapid digitalization of our society and, on the other hand, to a total rethinking of the spaces, both indoor and outdoor of the urban environment.

In this paper, we will first analyze the urban consequences related to the spread of the COVID-19. It will be outlined how the lockdown and the

1. John Beddington in Ian Sample, 'World Faces "Perfect Storm" of Problems by 2030, Chief Scientists to Warn', The Guardian, 18 March 2009; https://www.theguardian.com/science/2009/mar/18/perfect-storm-john-beddington-energy-food-climate.

measures of social distancing have invigorated the sense of community, and driven to collaborative and bottom-up planning, in many cases in the form of actions of tactical urbanism. At the same time, the digitalization process, accelerated by the ongoing crisis, is acting as a catalyst for these processes. The paper aims to demonstrate how hyperlocal, understood as a collective and participatory design facilitated by information technology, can be a solution not only to the current emergency but also a valuable tool to rethink our cities to face the challenges that contemporary society poses.

2. Consequences of COVID-19 on the urban space

The emergency related to the spread of the COVID-19 has often been compared to the climate crisis. Both are manifestations of the problematic relationship that man has with the environment and are both complex and interdependent challenges. Above all, both crises force us to keep the local and the global dimension together to respond adequately.

The lockdown imposed globally meant that most citizens stayed at home, going out only to buy necessities and, in some cases, to work. Schools, universities, and most jobs have continued remotely. Interestingly, the spread of COVID-19 showed, at the same time, different and somewhat opposite trends: physical and local solutions, or on the contrary, digital and global. On the one hand, people have rediscovered the sense of community, for example shifting from supermarket chains to local neighborhood shops or harvesting their community gardens instead. On the other hand, the digitalization of many fields has almost wiped out distances on a global scale. Thus, while trade, solidarity, and care at the community level have drastically increased, the global digital infrastructure played a pivotal role in fighting the emergency. The contemporary city has clearly shown its dual nature: at the same time hardware and software. While the physical city seemed to have stopped, many productive, economic, social, and educational activities were possible thanks to the use of digital tools. The IT infrastructure allowed the operation of the physical one: 'platform delivery systems kept the stressed social fabric intact' (Bratton, 2020). The most emblematic case is the role of Amazon, that thanks to his planetary infrastructure entered the public sphere, acting as a public utility.

We are evolving into a platform society, where social and economic relations are increasingly mediated through an ecosystem of interconnected digital media platforms. Both locally and globally 'all kinds of urban practices that use the physical city as an interface to connect citizens are now partly mediated through online platforms' (de Waal, de Lange and Bouw, 2017). COVID-19 outbreak clearly showed it: even at the local level platforms like Nextdoor had a fundamental role in sharing information, providing mutual care, and promoting local trade. Cities themselves can be understood as 'platforms', or 'material interfaces' that connect individual city dwellers with collective practices, experiences and rhythms (Castells, 2002).

3. COVID-19 and the city as a platform

The phase following the lockdown envisaged a gradual re-opening of many activities with the implementation of social distancing measures, with important consequences on urban space. While many have argued that many of the rapid transformations taking place will be permanent, we are not yet able to predict the long-term impacts on cities.

Social distancing, also called physical distancing, means a set of actions of a non-pharmacological nature aimed at slowing or stopping the spread of a contagious disease. Social distancing aims to decrease the likelihood of contact of people carrying infection with uninfected individuals, to minimize disease transmission, morbidity, and, consequently, mortality. About the COVID-19, an

COVID-19 as a catalyst for collaborative city-making: from emergency to praxis

Andrea Ariano

interpersonal distance of 1 meter in most cases is sufficient to limit the risk of contagion[2].

The first major consequence of social distancing was the start of a debate about public space and its quality. Social distancing measures provoked a phenomenon of spatial scarcity since the capacity of the indoor and outdoor spaces have in many cases been halved. So many activities have taken place outside. From the Afghan women who attended the university's admission test in a sports field, to the new provisions for free public land employment for restaurants in Rome, the responses to the pandemic posed new questions and prompted us to occupy the space differently. New problems have led to new solutions. The most creative ones probably appeared in the entertainment world, where maintaining social distancing was a real challenge. From the Flaming Lips concert in which both the band and the spectators were in bubbles, to that of Sam Fender, in which 2500 people were divided into platforms that ensured social distancing, or even to the return of concepts that have fallen into disuse, such as drive-in cinemas. Historically one of the primary tasks of architecture was to divide, separate, and delimit. From Greek temples to the present day, architecture has been used to divide and organize space to meet citizens' needs. Today, to cope with the emergency, all urban spaces, indoors or outdoors, have been rethought and redesigned both in use and in form: if the task of architecture is to respond to the needs of citizens, today there is no doubt that architecture is playing a key role in the safety and health of citizens, de*signing distance*.

The second consequence of this new need is that on a global scale, citizens around the world had to face their *spatial ineducation* and therefore had to measure, perceive and reappropriate the space around them. Ordinary people were asked to readjust workspaces and collective spaces to ensure social distancing. Everywhere appeared signs with prohibitions, new provisions, or suggestions. In just a few months, the way people occupy spaces has been revolutionized. When not properly reported, citizens are asked to maintain a distance of at least 1 meter between them. So, in shops or on public transport, people had to start to deal with the space around them and occupy it accordingly.

The redesign of the new spaces, given the emergency and temporary character, took place with poor and easily available materials, such as ribbons, tape and paint. In some cases, real infrastructures were created with the use of only paint: it is the case of the new bike lane in Milan or the enlargement of the sidewalks in Barcelona. Interventions such as those just mentioned are in the field of tactical urbanism, which includes under this expression all those small-scale actions that have a great effect at the urban level (Lydon and Garcia, 2015). Tactical urbanism aims to build better places, offering alternative visions and new scripts. The strength of tactical urbanism is the high degree of innovation, the replicability of solutions, and the community spirit that it promotes. Even

2. Chu, D. K., Akl, E.A., Duda, S., Solo, K., Yaacoub, S., Schünemann, H. J. (2020) Physical distancing, face masks, and eye protection to prevent person-to-person transmission of SARS-CoV-2 and COVID-19: a systematic review and meta-analysis. In *The Lancet,* Volume 395, p. 1973-1987.
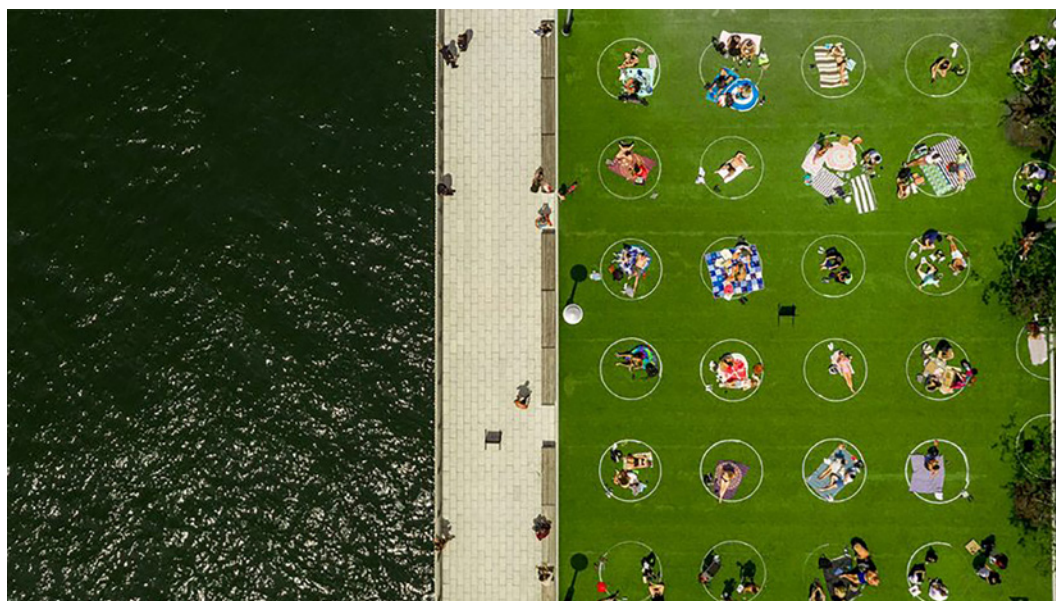
Figure 1

Social distancing measures in Domino Park, New York City. Photo by Marcella

though the tactical urbanism approach has been using for a long time, contemporary cities have seen such actions multiply in the last decade for different reasons, including the fact that more people live in the city, the economic recession, the advent of the Internet and the growing disconnect between governments and citizens (Lydon and Garcia, 2015).

4. From tactical urbanism to hyperlocal

We have seen how the *social distancing* design quest has given rise to new and very creative solutions that have been replicated, modified, and improved on a global scale. From this point of view, the Internet and social media have been of paramount importance in sharing these practices. At the same time, we have seen how today many urban practices are mediated by the digital layer and how more and more economic and social activities take place on digital platforms. It is interesting to underline how in the last years practices of collaborative and participatory city-making are mediated through digital platforms as well. We refer to this new practice enabled by digital tools and open-source activities under the definition of hyperlocal[3]. The neologism hyperlocal suggests a sort of augmented and hybrid condition, where the local and the global, the physical and digital coexist. The prefix hyper is used to strengthen the notion of local, and at the same time to connect to the digital world, and to the seminal notion of *hypertext*. Thanks to the use of information technologies, the physical and digital layers are intertwined and they

3. Cfr. 4D Hyperlocal: A Cultural Toolkit for the Open-Source City. In *Architectural Design*, 87, 2017

Figure 2

Reallocated road space for walking and cycling - Milan, Italy (Copyright REUTERS/Daniele Mascolo)

Figure 3

Reallocated road space for walking - Barcelona, Spain (Copyright REUTERS)

both have a positive impact on the other one. Hyperlocal supports social processes, networks and shared resources as part of community development, increasing the social relevance of planning frameworks and pilot projects (Bullivant, 2017). Hyperlocal is an emerging form of digitally facilitated - or four-dimensional - design, sort of augmented tactical urbanism, that like the latter 'it is underpinned by a belief that on-the-ground engagement and shared resources are of fundamental benefit to the evolution of communities and cities' (Bullivant, 2017). Two very innovative projects that put these reasons in place and show what hyperlocal is - and especially what it could be - are the Luchtsingel Bridge in Rotterdam and the STEEM Park in New York. Both are designed, supported, and funded by the local community with the help of architects and designers. Digital platforms played a central role in the development of these two projects. Luchtsingel can be seen as the

COVID-19 as a catalyst for collaborative city-making: from emergency to praxis

Andrea Ariano

consequence of a post-crisis economy, while STEEM Park is an advanced experimentation with blockchain and cryptocurrency platforms.

5. Luchtsingel, Rotterdam

The Luchtsingel is the world's first crowdfunded public infrastructure project. Over 2000 participants contributed to the idea to connect the Center and the North of the Rotterdam in order to bring back the vitality and energy to once lively spots that have become abandoned throughout the years. As the project would have been extremely costly for the township, whereas the redevelopment could not be postponed anymore, the architecture firm ZUS had launched an initiative for crowdfunded city-making. Entrepreneurs and residents were welcomed to become crowdfunders of the public space. Through a digital platform, everyone could buy a plank or a part of the bridge with his name engraved on it and support the construction of the infrastructure.

Firstly, the crowdfunding campaign was supposed to help with the generation of revenue that would speed up the start of the construction and could attract new funders. Secondly, such an initiative created a support for the project and helped to legitimate it and firmly embed it in the cityscape. The completion of the bridge was followed by three projects that had finally transformed Rotterdam North from neglected industrial areas into the vibrant and constantly growing neighborhood. Now there can be found the Dakakker - an example of the urban farming roof, placed in a former office building (the Schieblock), with the fruits and vegetable gardens, as well as the greenhouses and active beehives. This place has become a prototype for in-city sustainable development. Next followed the Delftsehof, which became one of Rotterdam's most vibrant nightlife areas, and then the Pompenburg Park, where a vegetable garden has been landscaped next to a playground. All together

Figure 4
Luchtsingel Bridge, photo by Ossip van Duivenbode

these four public spaces revitalized an entire sector of the center of Rotterdam, with the Luchtsingel bridge being the unifying factor and the heart of the redevelopment project. The collaborative approach and the incremental character of the project

6. STEEM Park, New York

STEEM Park is the first public design project fully funded by cryptocurrency. Based in Herbert Von King Park in Brooklyn, New York, STEEM park was created by designers Kirk Finkel and Michael Lee, co-founders of the Incubator SNDBX, in order to promote an entirely new way to establish a community network and promote interaction within the group of interested and involved members. STEEM Park is a public garden designed and funded exclusively through Steemit.com, a social media website that rewards impactful content with digital currency (STEEM). The best contents are supported directly by the users in the forms of likes and shares that give the authors financial support. In this way, the SNDBX team raised money through blog posts and cryptocurrency donations.

The idea behind this was to promote the project that is based on the history of Herbert Von King Park and its neighborhood. For that, SNDBX wrote 30 blog posts about the story of the district, local community leaders, the design process and the final installation of the STEEM Park. The appreciation and engagement of the audience helped to raise the sum equivalent to USD 10,000.
Altogether, STEEM Park has become an example of a new type of public interaction and cooperation. It has demonstrated a new way of urban development and city activism independent of the government's financial support. While the park installation itself is not a massive project, the implications of this new type of process have huge implications. Moreover, this project was meant to show

Figure 5
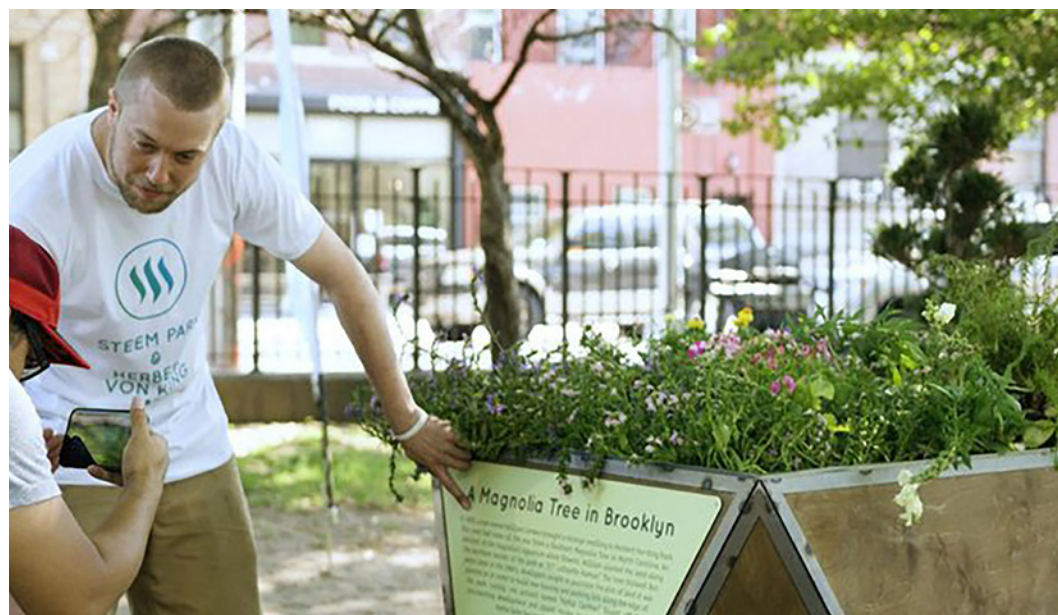Building and installation of the furniture in STEEM Park, New York (1)

Figure 6
Building and installation of the furniture in STEEM Park, New York (II)

how something material and valuable can be created with the use of the intangible cryptocurrency.

7. Conclusions and new perspectives

In this paper, we have seen how the Covid-19 outbreak is having great consequences on urban practices, firstly through the implementation of digital platforms. In the same way, we have seen how groups of organized citizens are taking action to transform their neighborhoods to cope with social distancing measures. Digital tools act in this case as catalysts and multipliers, facilitating collaborative and bottom-up processes. As shown in the two case studies presented, hyperlocal practices existed before the COVID-19 outbreak, even if they were not common. This paper aims to underline how the emergency we are facing can be a catalyst for this kind of practice, at least for three different reasons. Firstly, the digitalization of many realms and the spread of digital platforms. Secondly, the community engagement at the scale of the building, neighborhood, or even city that we re-discovered during the pandemic crisis. Last but not least, new necessities and wills that appeared during the COVID-19 outbreak and that will represent a new direction of urban development from the bottom-up, as the redesign of public space, the care of the urban green zones, the quest for alternative mobility solution.

COVID-19 showed as well that urban design must offload the 'dinosaurian' concept of the contemporary city, centralized, rigid and slow, and somehow incapable to adapt to new necessities. We should start thinking about our cities as open, flexible, and incomplete systems, who require continuous modifications and mediations. We should start thinking about cities as complex ecosystems 'made through a myriad of interventions and little changes from the ground up. Each of these multiple small interventions may not look like much, but together they give added meaning to

56

COVID-19 as a catalyst for collaborative city-making: from emergency to praxis

Andrea Ariano

the notion of the incompleteness of cities and that this incompleteness gives cities their long lives, thereby outlasting other more powerful entities' (Sassen, 2015).

In the last decades, cities have become a keyspace for large-scale adoption of new technologies, which have today a massive imprint on urban space. In many cases, the development of the contemporary city coincides with the development of the information technologies applied to it. So, in a way, the characters of information technology pour into the city. Till now the implementation of information technologies in the city was dominated by the smart city paradigm: a vertical, top-down approach that fetishes data. The two case studies proposed are examples of a new trend that leverage technology but is not driven by it, where production is based on participation, 'democratizing the ability to make useful things' (Greenfield, 2017).

In the same way, we should start thinking about cities like hackable systems. In the world of computer science with the term hacking, we refer 'to the process of clever or playful appropriation of existing technologies or infrastructures or bending the logic of a particular system beyond its intended purposes or restrictions to serve one's personal, communal or activism goals' (de Waal and de Lange, 2019). In the process of city-making, we can refer to *civic hacking* as a powerful tool that incorporates hacker culture and suggests a novel logic to organize urban society through social and digital media platforms creating new types of public spaces (de Waal and de Lange, 2019).

For architects and designers collaborating with local communities and different actors can be a new field of intervention, with huge consequences on the development of the city. This kind of approach seems to be useful not just for the current emergency, but especially for the big challenges ahead of us. So, the established linear design methods should be replaced by flexible processes and experiential means, fostering a what…if? approach and test-feedback loops. If we want to transform our cities to respond to XXI century society needs', our goal should shift from the creation of spaces to collaboration with users, and then from centralized and vertical to distributed and collaborative processes.

COVID-19 as a catalyst for collaborative city-making: from emergency to praxis

Andrea Ariano

References

Bratton, B. (2020) 18 lessons from quarantine urbanism. *Strelka Mag* [online] Available at: https://strelkamag.com/en/article/18-lessons-from-quarantine-urbanism. (Accessed 15 september 2020)

Bullivant, L. (2017) The Hyperlocal: Less Smart City, More Shared Social Value. Archit. Design, 87: 6-15.

Colomina, B., & Wigley, M. (2017). Are we human? The archaeology of design. Ennetbaden: Lars Muller Publishers.

de Waal, M., de Lange, M. (2019) Hackable City, Singapore: Springer

de Waal, M., de Lange, M. and Bouw, M. (2017) The Hackable City: Citymaking. *Platform Society. Archit. Design*, 87: 50-57.

De Carlo, G. (2007) Architecture's Public, in Architecture and Participation, (ed. by Peter Blundell Jones, Doina Petrescu and Jeremy Till). Abingdon: Spon Press.

Greenfield, A. (2017) Practices of the Minimum Viable. *Utopia. Archit. Design*, 87: 16-25.

Illich, I. (1996) The right to useful unemployment and its professional enemies. London: Marion Boyars.

Lydon, M. and Garcia A. (2015) The Next American City and the Rise of Tactical Urbanism. In M. Lydon, A. Garcia (eds.) *Tactical Urbanism*. Island Press, Washington, D.C.

Castells (2002) The Culture of Cities in the Information Age. In Ida Susser (ed.), The Castells Reader on Cities and Social Theory, Malden, MA: Blackwell.

Manzini, E. (2015) Design, when everyone designs: An introduction to design for social innovation. Cambridge: MIT Press.

Saggio, A. (2020) Thoughts on a Paradigm Shift. The IT Revolution in Architecture, Raleigh (NC): Lulu.com.

Sassen, S. (2015) Epilogue, in Foth, M., Brynskov, M. and Timo Ojala, T. (eds.) *Citizen's Right to the Digital City Urban Interfaces, Activism, and Placemaking*. Singapore: Springer.