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Post-pandemic and urban morphology Preliminary research perspectives about spatial impacts on public realm

Abstract

As Covid-19 evidence, urban density[*] proved to be a health risk factor, reclaiming the rethinking for higher sustainability. The investigation on post pandemic strategies in the metropolitan cities of Milan and Rotterdam shows emergent modes of spatial re-appropriation towards better risk adaptiveness.

[*] «Density is really an enemy in a situation like this, with large population centers, where people are interacting with more people all the time, that's where it's going to spread the fastest.» (Dr. Steven Goodman, epidemiologist at Stanford University). Citation in: Brian M. Rosenthal (March, 23, 2020) "Density Is New York City's Big 'Enemy' in the Coronavirus Fight" on <https://www.nytimes.com/2020/03/23/nyregion/coronavirus-nyc-crowds-density.html> (accessed 08. 05.2020, 11:00 a.m.).

Keywords

Covid-19 — Urban Morphology — Public Spaces — Social Distancing — Spatial Proximity

Adaptive, resilient, reversible

In the post-pandemic phase, the central question 'how does the infrastructure of public space and mobility need to adapt to a 1.5mt rule of social distancing' has been tackled by socio-economic metropolitan agendas. New York City is an exemplary case to describe the ongoing challenge in decentralizing public spaces (Hu, Haag 2020). The city closed more than 60 miles of its road network to allow the decongestion of main parks and squares, within an extremely compact urban structure characterized by fragmentation and lack of non-privatized open spaces.

Grounded on the experience of the *Superilles* project in Barcelona¹, new pop up and temporary bike lanes appeared in Berlin, Bogotá and Milan, while New Zealand has become the first country to experiment tactical urbanism as official governmental policy during the pandemic (Reid 2020). Temporary and *tactical urbanism* configure a common strategic approach to roll out effective techniques to cope with health emergency, that drive towards adaptiveness and resilience to risks. In the European context, the cities of Milan and Rotterdam are two interesting cases to look at regarding design strategies and tools for the post-pandemic phase, as they also differ in urban morphology.

Tactic urbanism and public realm. A comparative analysis on Milan and Rotterdam

The "comeback to a new ordinary" is the leading motto of the Milan municipality (2020) in the adopted *Urban adaptation Strategy*. The strategy invests in public realm in a preponderant way, focusing on two main aspects: the reorganization of the road network and the reuse and implementation



Fig. 1-8

1-2. Cycle routes in Porta Venezia e Corso Buenos Aires, Strade Aperte, Milan 2020 (source: Municipality of Milan).

3-4. New arrangement of Porta Genova, Piazza Aperte, Milan 2020 (source: Municipality of Milan).

5-6. Belloveso, Piazza Aperte, Milan 2020 (source: Municipality of Milan).

7-8. Tactic urbanism project, Dergano, Piazza Aperte, Milan 2020 (source: Municipality of Milan).

of free open spaces at the neighborhood scale². Both actions *Strade Aperte* and *Piazze Aperte* deal with the negotiation of public land occupation policies to guarantee and redesign free common services in the logic of the “15-minute city”³. Regarding the reorganization of the road network, the street section of several boulevards and the urban arteries of entry to the consolidated city has been reformulated for new cycle routes and slow mobility systems, reducing the space of vehicular traffic and installing promiscuous uses. Also new playgrounds and temporary pedestrian zones appear near to road junctions and leftovers, due to the new car speed limits. The cycle routes of Corso Buenos Aires and Corso Venezia, the Lazzaretto diffuse public spaces and parklets are some of the planned test beds for the redevelopment of open urban spaces in Milan.

Through tactical urbanism interventions, the aim is to provide new spaces as social relief valves for residents through unconventional re-appropriations of leftovers and residual spaces. The first actions have been taken especially in neighborhoods with scarce availability of public services. Temporary reuses and reversible interventions, able to face adaptability of the urban system to pandemic risk management, are the main features of the municipal strategy, with a prerogative for dialogue and social consultation.

In highly dense neighborhoods, with a scarcity of public open spaces, the choice of urban interventions depends on the morphological characteristics of the city. In the logic of sustainable development linked to new urban mobility systems (individual and collective), a new trend emerges for the compact city: redistributing common and collective spaces in a widespread way, at the same time thinking of a less defined public space that brings new quality to the whole.

Similarly, in North Europe from the Dutch ‘intelligent lockdown’ to the national motto ‘distancing gives freedom’ for both indoor and outdoor policy, the City of Rotterdam is working out on its urban resilience and recovery strategy after the crisis⁴.

Rotterdam council realises the need for a paradigm shift in the way the city is managed, towards bottom-up and resilient alternatives and a so-called *adaptive governance* which entails the involvement of multiple actors in decision-making. For example, because it is difficult to keep sufficient distance to each other in the city center, the municipality is distributing the available space as fairly as possible in close consultation with entrepreneurs for the re-arrangements of dining areas⁵. The social infrastructure of the city made of green spaces, market places, waterfronts and walkways has responded to the pandemic phase and it has become the tool for fast way to adapt city structure to the current demands of its recovery (van Eck, van Melik e Schapendonk 2020).

Through new seven urban projects⁶, Rotterdam council aims at giving more space to green urban lungs, as attractive public places where residents and visitors meet, move and recreate. Giving more space for cyclists and pedestrians, possibilities for new water storage in the city centre, for reduction of heat stress, urban renewal and densification is at the core of these strategies. The transformation of Hofplein roundabout and parts of the busy motorway Westblaak to urban parks is an example.

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Photo: Municipality of Rotterdam



Photo: Municipality of Rotterdam

Fig. 9-16

9-10. Tactic urbanism project, Angilberto II, Piazza Aperte, Milan 2020 (source: Municipality of Milan).

11-12. Spatial reconfiguration in Venini-Spoleto streets, Piazza Aperte, Milan 2020 (source: Municipality of Milan).

13. Re-arrangement of (outdoor) dining areas in Nieuwe Binnenweg, Rotterdam 2020 (Ph. Credits Yagiz Soylev).

14. Re-arrangement of the lecture room at the Kunsthal (interiors), Rotterdam, (Ph. Credits Yagiz Soylev).

15-16. Blaakpark at Westblaak now and in the future, Rotterdam (source: Municipality of Rotterdam).

and densification is at the core of these strategies. The transformation of Hofplein roundabout and parts of the busy motorway Westblaak to urban parks is an example⁷. Here, *Temporary and tactical urbanism* as strategic approach from one side and a *redefinition of the role of local government* from the other side emerge as interwoven instruments to cope with the conditions that pandemic arises. Several studies are currently being carried out on how Rotterdam can recover from the COVID-19 crisis, learn and thrive⁸.

Preliminary research perspectives

The brief overview on the adaptation strategy of the post-pandemic phase in Milan and Rotterdam has addressed specific spatial assets that belong to their urban and metropolitan contexts, dealing with density and public open spaces⁹.

By enlightening effective tools and alternative models of re-appropriation of urban voids, to “make” space for the community or to temporally re-occupy it, this contribution aims at establishing the basis for a deeper exploration on the concept of “space of proximity” and a new urban model of *public space decentralization*¹⁰. Not only temporary solutions facilitate physical distance in the event of pandemics, but sustainable high-quality public space, easily adaptable to future challenges become crucial in the short, medium and long term in dense urban areas (Honey-Roses, Jordi, et al. 2020).

Notes

¹ The *Superilles* or *Supermanzana* project and its current stage of execution is available in real time updates on: <https://ajuntament.barcelona.cat/superilles/es/> (accessed 21. 07.2020, 7:00 a.m.)

² Two main documents have been published from Comune di Milano. They are *Strade Aperte*, and *Piazze aperte*, as executive branches of the Adaptation Strategy regarding the rethinking of public realm in post pandemic conditions. See: https://www.comune.milano.it/documents/20126/992518/Strade+Aperte_IT_200430_rev.pdf/a100d04c-6b55-ae74-e0f8-b52563e07822?t=1589460655416

³ Natalie Whittle (July, 17, 2020) “Welcome to the 15-minute city” on: <https://www.ft.com/content/c1a53744-90d5-4560-9e3f-17ce06aba69a> (accessed 23. 07.2020, 1:27 p.m.) The model refers to the concept “La ville du quart d’heure” developed by Carlos Moreno and currently experimented in Paris Metropolitan Area.

⁴ For Dutch measures against coronavirus see: <https://www.government.nl/topics/coronavirus-covid-19/tackling-new-coronavirus-in-the-netherlands/public-life> (accessed 20. 07.2020, 4:00 p.m.).

⁵ Measures Coronavirus Rotterdam see: <https://www.rotterdam.nl/wonen-leven/coronavirus/> (accessed 20.07.2020, 4:00 pm)

⁶ For the description of the seven urban projects of the City of Rotterdam, as a recovery strategy in the post-pandemic phase, see: <https://www.rotterdam.nl/bestuur-organisatie/stadsprojecten/> (accessed 10.09.2020, 4:00 pm)

⁷ On the Research-by design proposal of Shift Architecture and Urbanism: <https://www.stirworld.com/see-features-shift-au-creates-research-by-design-market-to-control-covid-19-contamination2> (accessed 20.07.2020, 4:00 p.m.).

⁸ About the ongoing study on the impact of COVID-19 on Rotterdam see: <https://www.ihs.nl/en/news/ihs-vcc-study-impact-covid-19-rotterdam> (accessed 20.07.2020, 4:00 pm).

⁹ About the relation between urban density and the Covid19 diffusion see the preliminary analysis of the American case in: Richard Florida (April, 3, 2020) “The Geography of Coronavirus” on <https://www.citylab.com/equity/2020/04/coronavirus-spread-map-city-urban-density-suburbs-rural-data/609394/> (accessed 08. 05.2020, 11:10 a.m.). However urban density shows also limits and challenges for post pan-

demic urban design as pointed by: Lloyd Alter (April, 8, 2020) “Urban design after the coronavirus” on <https://www.treehugger.com/urban-design/urban-design-after-coronavirus.html> (accessed 15. 05.2020, 3:50 p.m.).

¹⁰ Beyond Georg Simmel and Emile Durkheim social studies on spatial settings, references are also to: Löw M. (2016).

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