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Fondazione Eni Enrico Mattei

Brief

Lessons to be learnt from COVID-19

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Abstract

FEEM Policy Brief

The evolution of COVID-19 in Italy brought major impacts in social and psychological terms. These impacts have been accelerated by the urban planning approaches applied in the contemporary development of Italian cities (1960-today). The most zoned territories, those with the least amount of green space and those with the fewest neighborhood groceries have suffered heavily the effects from the pandemic. On a building scale, moreover, the absence of common spaces and the smallness of housing units further exacerbated the social and individual effects of the lockdown. These urban planning patterns proved to be particularly ineffective in coping with an unforeseen extreme event, and thus require extensive rethinking. We can derive an important lesson from these failures also to reflect on climate change adaptation.

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01
COVID-19 evolution in Italy

Pandemic officially appears in Italy on 23 February 2020. At first, it seemed manageable with differentiated local tools, containing the evolution of the virus within well-defined territorial perimeters. The government quickly realized that it was unable to contain the effects of the first wave of COVID-19 with only territorial tools and imposed the first lockdown. The first lockdown began on 9 March 2020 and ended on 16 May.

The legislative tool used throughout the pandemic has been the DPCM - Decree of the Presidency of the Council of Ministers and proved to impose tight restrictions to citizens. From March the 9th it was forbidden to stray more than 300 meters from one's home unless one was 'self- certified'. It was possible to produce the certification for reasons of work, health or grocery shopping. It was forbidden to go outside one's municipality of residence even for

Figure 1 - The empty city

grocery shopping. It was forbidden to leave one's home for any non-health or work-related reason between 10pm and 5am. All schools were closed (teaching where possible takes place remotely). Ceremonies like weddings and funerals were suspended. Bars, restaurants, non-food shops, gyms, swimming pools, cinemas, theatres, museums, discos were closed. Sports events were cancelled.

Deaths in Italy during the lockdown period have been close to 1,000 per day, and in some areas the army had to intervene to remove entire trucks of coffins because local morgues were unable to cope.

In the previous five years, approximately 110,068 people died during the same period, in 2020 deaths increased by 50 per cent (ISTAT 2020).
The lockdown and the first wave of COVID-19 have brought very serious effects on the psychic health of the citizenry, with a radical increase in anxiety, obsessive and depressive cases among Italians (ISS 2020).

As of 18 May, all shops, bars, restaurants and even churches were allowed to reopen. (DPCM 16/05/2020).

02
Social impact Accelerators

During the lockdown, the criticalities of late-modern and contemporary settlement principles have emerged aggravating the effects of containment at different scales. The urban and building forms developed in the expansion of Italian cities from the 1960s to the present have shown no resilience and no adaptability to this disrupting event.

On a neighborhood scale, the main problems were twofold: access to green spaces and access to nearby grocery shops. During the lockdown, residential neighborhoods without extensive green areas and without neighborhood grocery shops showed less livability. In these areas, sociability became even rarer. The division of cities into monofunctional areas has deprived the possibility of a human-human and human-environment relationship, with serious psychological effects.

The second level of distress emerged at the condominium scale. Condominiums have no dedicated community spaces. By minimizing community interactions, common areas become forced spaces of passage rather than places for sharing. The absence of common spaces did not allow during the

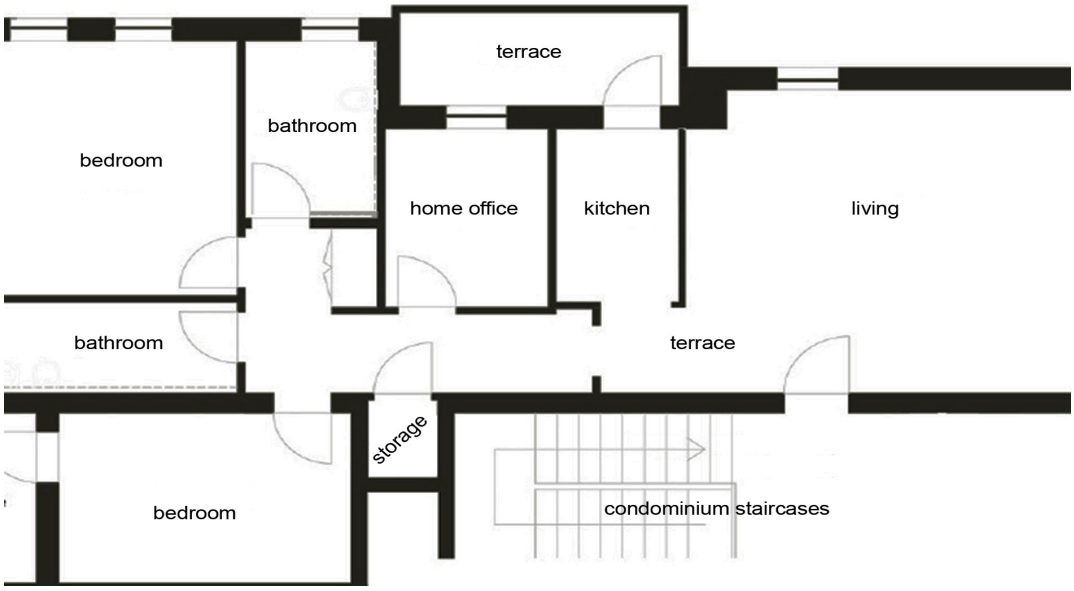

Figure 2 - Homes are inappropriately sized for resilience

lockdown to take advantage of the proximity of different households to exchange services and sociability. The absence of shared enclosed spaces did not allow for temporary workplaces outside the home, nor the sharing of skills and time for mutual support.

The third level of failure was at a home scale. A flat of about 100 square meters usually does not have enough space for a couple to work remotely and ensure access to distance learning for at least one child. For almost all Italian families, this has meant working or accessing school services from bedrooms. Newer flats in metropolitan cities have small kitchens and dining areas, which are more useful for eating meals than for cooking.

03
The reaction in literature

The literature in the fields of urbanism, sociology and planning has developed various reflections and studies on this experience. After such a disaster, it is necessary to advance reflections and proposals in order to prevent negative effects of non-resilient development models again.

The first interesting element revealed in the literature is the direct connection between morbidity and the absence of accessible and interpretable open spaces of proximity. The urban parameters that seem to best describe citizens' exposure to the pandemic threat take into account the per capita availability of public open space that inhabitants can freely enjoy in their relationships. Indeed, a direct proportionality relationship between usable space and resilience to contagion has been demonstrated (Sgobbo, 2021, pp. 256; Hamidi et al., 2020; Carozzi, 2020)

The second element that emerges is the need to develop complex, articulated, and multifunctional spaces: «we may need to find different physical forms of density, permitting people to communicate, to see neighbors, and to participate in street life even as they temporarily separate, [...] to explore forms of diversity which could relate the green city and the healthy city, and to use tech to affirm the power of community in the city» (Sennett, 2020).

Finally, the literature suggests the need for transformation of the design of public and private space, rethinking the density and purpose of open and closed spaces (Pasqui, 2021; Galderisi, 2014). In brief, by developing a design thinking capable of designing a new city, not disaggregated and unsustainable, but also not individualistic and zoned.

04
Lessons for Climate Change Adaptation

We can learn from this experience by developing appropriate planning in relation to climate change adaptation. Some of the aspects highlighted by COVID-19 can also

Figure 3 - We need complex spaces

be considered in order to address climate issues. This can be achieved at all project scales.

A first insight is the acknowledgement of the fragility of buildings and flats without spaces that can be rapidly redefined for other uses. Climate impacts will certainly put many areas of our cities in a condition of temporary segregation. We will need to quickly rethink work, education and childcare spaces, compensating for the disruption of mobility with dedicated areas. Moreover, the presence of such spaces could foster collaboration between apartment blocks in managing moments of disruptive impacts.

A second lesson is the greater fragility of urban areas without neighborhood access to food supplies. The disruption of traffic or mobility on a large scale, in the absence of neighborhood grocery shops, will cause difficulties in access to food, leading to the collapse of non-self-sufficient neighborhoods.

A third lesson, perhaps the most obvious for climate change, is the need for interpretable, accessible and available green areas. These areas are not only of ecological value, which has already been described extensively in the climate change literature. The availability of such green areas has proven to be a very relevant tool for reducing the severe and long-term effects of the pandemic.

05
Conclusions: Rethinking the path

The recovery tools applied after COVID-19 (110% Superbonus, PNRR Recovery Plan) are encouraging the increase of building volumes, the extension of green spaces and the improvement of climate proofing of the building stock but without attention to cooperative aspects. It is essential to rethink the supporting models applied of recovery in order to bring the lessons of COVID-19 into urban and architectural planning and design, sharpening the recovery tools proposed by the government and the European Union to these ends.

Bibliografia

ISTAT 2020, https://www.istat.it/it/archivio/256854

ISS 2020, https://www.epicentro.iss.it/coronavirus/sars-cov-2-salute-mentale

Carozzi, Felipe, Provenzano, Sandro & Roth, Sefi, *"Urban density and COVID-19"*, IZA Discussion Papers, No. 13440, Institute of Labor Economics (IZA). Bonn, 2020.

Galderisi, Adriana, "*Urban Resilience: a framework for empowering cities in face of heterogeneous risk factors",* A| Z ITU Journal of the Faculty of Architecture, 11(1), 2014, pp. 36-58.

Hamidi, Shima, Sadegh Sabouri, and Reid Ewing, *"Does density aggravate the COVID-19 pandemic? Early findings and lessons for planners"*, Journal of the American Planning Association 86.4, 2020, pp. 495-509.

Pasqui, Gabriele, *"Stare in modo diverso nelle città: tra questione ambientale e questione sociale"*, in Bellandi, Marco, Ilaria Mariotti, and Rosanna Nisticò, eds., *"Città nel COVID-19: Centri urbani, periferie e territori alle prese con la pandemia".* Roma: Donzelli Editore, 2021.

Sennett, Richard, Cities in the Pandemic, 2020,
https://www.publicspace.org/multimedia/-/post/cities-in-the-pandemic

Sgobbo, Alessandro. *"Città e pandemie. Densità urbana e densificazione dopo il COVID-19"*, BDC. Bollettino Del Centro Calza Bini 20.2, 2020, pp. 241-260.

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