



# TeMA

This Special Issue of TeMA - Journal of Land Use, Mobility and Environment, collects twenty-seven contributes of international researchers and technicians in form of scenarios, insights, reasoning and research on the relations between the City and the impacts of Covid-19 pandemic, questioning about the development of a new vision and a general rethinking of the structure and urban organization.



Journal of  
Land Use, Mobility and Environment

TeMA Journal offers papers with a unified approach to planning, mobility and environmental sustainability. With ANVUR resolution of April 2020, TeMA journal and the articles published from 2016 are included in the A category of scientific journals. From 2015, the articles published on TeMA are included in the Core Collection of Web of Science. It is included in Sparc Europe Seal of Open Access Journals, and the Directory of Open Access Journals.



*Special Issue*

**Covid -19 vs City -20**

scenarios, insights, reasoning and research



ISSN 1970-9889  
University of Naples Federico II

# TeMA

Journal of  
Land Use, Mobility and Environment

*Special Issue*

## COVID-19 vs CITY-20 SCENARIOS, INSIGHTS, REASONING AND RESEARCH

**Published by**

Laboratory of Land Use Mobility and Environment  
DICEA - Department of Civil, Architectural and Environmental Engineering  
University of Naples "Federico II"

TeMA is realized by CAB - Center for Libraries at "Federico II" University of Naples using Open Journal System

Editor-in-chief: Rocco Papa  
print ISSN 1970-9889 | on line ISSN 1970-9870  
Licence: Cancelleria del Tribunale di Napoli, n° 6 of 29/01/2008

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Given the short time to produce the volume, the Editorial Board of TeMA Journal carried out the scientific quality audit of the contributions published in this Special Issue.

The cover image is a photo collage of some cities during the Covid-19 pandemic quarantine (March 2020)

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## *Special Issue*

### COVID-19 vs CITY-20

#### SCENARIOS, INSIGHTS, REASONING AND RESEARCH

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## EDITORIAL PREFACE

Special Issue 1.2020  
Covid-19 vs City-20

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During the darkest weeks of the pandemic, walking through the empty streets of my city and trying to make sense out of this tragedy, not only as a person –with the fears and uncertainties of many– but also as a scholar of urban phenomena, the introductory phrase to the first volume of “Method”, by Edgar Morin, 1977, occurred to me. “Nous avons besoin d'une méthode de connaissance qui traduise la complexité du réel, reconnaisse l'existence des êtres, approche le mystère des choses. La méthode de la complexité demande: de concevoir la relation entre ordre/désordre/ organisation et d'approfondir la nature de l'organisation; de ne pas réduire un objet à ses éléments constitutifs ni l'isoler de son environnement; de ne pas dissocier la problème de la connaissance de la nature de celui de la nature de la connaissance. Tout objet doit être conçu dans sa relation avec un sujet connaissant, lui-même enraciné dans une culture, une société, une histoire”.

In these few lines, Edgar Morin highlights the main aspects of the new manifesto of contemporary scientific thought, based on which every scientific discipline can completely revise methodological and operative approaches than in the past.

For the sciences that study the city and the territory, the holistic approach, the theory of systems and the complexity paradigm seem to allow for an interpretation of the urban and territorial phenomena in progress that is more relevant to reality. Considering and studying the city and the territory as dynamic, complex and chaotic systems offers the greatest guarantees of relevance, especially if we consider the number and variety of catastrophic events that have been occurring in recent decades: from events related to the effects induced by climate change to the current viral pandemics; events that are difficult to predict and so significant that they are considered real challenges for the lives of many populations. On the other hand, in order to know these phenomena - which the chaos theory defines as random - and to understand their effects, it is essential to read them within the context in which they occur: the city and the territory (Gargiulo & Lombardi, 2016; Zucaro & Morosini, 2018).

From these premises and without any limits, neither disciplinary nor content, we invited some colleagues who study, with different skills, the urban and territorial environment to develop a reflection on what was going on in our country. Everyone answered our call with enthusiasm and agreed, despite what usually happens in scientific practice, whereby the flow of time is a necessary condition to develop opinions, that verifying procedures and discussing about the advancements of scientific community could have been adding elements for the quality of each contribute, also considering the emotional boost driven by these exceptional experiences.

This Special Issue collects contributes developed in the last weeks with the aim of stopping our thought for the tragedy and lay the foundation for a broader reflection that will commit us in near future.

In the Editorial preface, I like to report a summary of the main topics developed in the contributes, which confirms that the sense and objectives of this initiative have been completely fulfilled.

The contributes have been included in the summary in alphabetic order, according to the surname of the first author.

In the first, “Covid-19 and simplification of urban planning tools. The residual plan”, Pasqualino Boschetto aims to develop an initial reflection on the Residual Plan, which could represent the urban plan coherent



with Postmodernism. The Covid-19 pandemic is further complicating the fate of the Urban Plan, increasingly complex, uncertain and unable to regenerate itself according to the new paradigms of the organization of the territory.

In the next paper, "Covid-19. Some moments of the 21st century, with a look at Milan", Roberto Busi argues how the relative pathos of death and poverty unleashed on Milan is, in fact, a contingency on the endless flux of the urban body in the long history of the city. The text temporally describes the impact of the pandemic and it is developed as a Gaussian curve: the two extremes being in points before and after the beginning of the curvature, the center with the peak of the curve and the two intermediates in its ascending and descending sections, respectively.

In the third article, "Health emergency and economic and territorial implications. First considerations", Salvatore Capasso and Giuseppe Mazzeo provide an overview of the territorial and economic implications related to the epidemic event on the basis of a set of economic, settlement and environmental indicators applied to the two territorial dimensions of the Italian Regions and Provinces. The connection with epidemic data was analysed to verify the possible presence and consistency of the correlation indices. Aim of the article is to highlight some territorial characteristics that may have facilitated the spread of the epidemic by identifying, at the same time, some actions that will positively affect them, in an evolutionary perspective. Then, Alessandra Cesaro and Francesco Pirozzi, in "About the effects of CoViD-19 on solid waste management" discuss the impact of the CoViD-19 emergency on both the generation and the management of solid waste originating from both household and healthcare activities. Data about the amount of waste produced and associated ordinary handling procedures were gathered in order to highlight how both have been affected by the measures implemented to cope with the emergency.

The next article "The city and natural resources. Pandemic disaster can be a driving force for new perspective", by Donatella Cialdea, contains some reflections, born during the preparation of the next National Table for River Contracts. Focal point of the reflection is that the pandemic can be a driving force for new perspectives, in which the urban condition can be revisited with a view to improving quality.

The sixth paper, "Evolution of mobility sector during and beyond Covid-19: viewpoint of industries, consultancies and public transport companies" by Pierluigi Coppola and Francesco De Fabiis, presents the results of a survey carried out between April and May 2020, among a panel of chief executives of industries, consultancies in the mobility sector, and Public Transport (PT) companies. The survey is focused on the analysis of their own business and their opinions about the effectiveness and the sustainability of the measures proposed for coping with the impacts of Covid-19 pandemic in the short-medium term.

Then, the theme of tourism is the focus of the paper by Fabio Corbisiero and Rosa Anna La Rocca titled "Tourism on demand: a new form of urban and social demand of use after the pandemic event". The authors particularly investigate the possible evolution of the tourist demand due to the pandemic occurred aiming at outlining the possible urban as well as social scenarios that will characterize the tourism-city relationship in the next future.

Following, Giancarlo Cotella and Elisabetta Vitale Brovarone in their paper "Questioning urbanisation models in the face of Covid-19: The crisis as a window of opportunity for inner areas" introduce the challenges that the present sanitary emergency raises for contemporary urban environments particularly focusing on the reasons behind the progressive abandonment of remote rural areas, and on the increasingly scarce accessibility to services for the inhabitants of these areas. The authors argue that policies dedicated to counteracting these trends are needed to enhance the overall resilience of societies in inner areas.

The next paper by Claudia de Luca, Simona Tondelli and Hanna Elisabeth Åberg, "The Covid-19 pandemic effects in rural areas. Turning challenges into opportunities for rural regeneration" presents some responses to the Covid-19 crisis collected through an open call for action within the RURITAGE project. It aims at show how rural areas can cope with emergencies and it builds the basis to rethink the current crisis as a crucial tipping point for a resilient development of rural territories.

The following paper by Diego Deponte, Giovanna Fossa and Andrea Gorrini, "Shaping space for ever-changing mobility. Covid-19 lesson learned from Milan and its region" raises a question on the established transit-oriented development approach, focusing on spaces "in between" and not only on nodes and networks. The results show that the streets represent by far the most strategic asset of the urban public realm. They can be reshaped in resilient infrastructure capable to respond to new forms of mobility based on a renewed Mobility-as-A-Service paradigm, as final result of different travel behaviors of the post

pandemic scenario, among which an expected reduction of the overall "mobility consumption" (space) and new temporal urban rhythms (time).

Then, the paper "From social distancing to virtual connections: How the surge of remote working could remold shared spaces", by Luisa Errichiello and Daniele Demarco, offers a critical reflection on how ICTs can influence our perceptions of places and argues that places play a key role in influencing the patterns of remote workers' identity construction. The authors caution about the dark side of digital connectivity, pointing at the risks that a prolonged detachment from reality and the loss of places can put on remote workers' identity.

Following, the paper "The paradigms of urban planning to emergency-proof. Rethinking the organisation of settlements at the time of a pandemic" by Isidoro Fasolino, Michele Grimaldi and Francesca Coppola, offers a critical reflection on how this health crisis can be an opportunity to rethink the functioning of the city, its spaces, its times and its forms of social and economic interaction, according to the most recent scientific paradigms widespread within the urban planning field.

The next paper, by Romano Fistola and Dino Borri "Virucity, Rethinking the urban system", proposes a reflection about the virus impacts on urban system and envisages possible post-Covid urban scenarios hoping a general rethinking of the time and the space use of the future cities.

The following paper "The role of the urban settlement system in the spread of Covid-19 pandemic. The Italian focus", by Carmela Gargiulo, Federica Gaglione, Carmen Guida, Rocco Papa, Floriana Zucaro and Gerardo Carpentieri, proposes a focus on three main aspects of the spread of coronavirus in our country: on any correlations that have been established between the spread of the Covid-19 virus and the settlement system of our country; on urban and territorial phenomena that can be associated, positively or negatively, with the spread of the virus; on any correspondence between homogeneous clusters of Italian provinces (due to the current most significant phenomena of a settlement nature) and the intensity and spread of the infection.

The authors of the next contribution, Paolo La Greca, Francesco Martinico and Fausto Carmelo Nigrelli, in "Passata è la tempesta ..". A land use planning vision for the Italian Mezzogiorno in the post pandemic" highlight issues that are deemed relevant for including inner areas of Italian Southern regions into the process of economic recovery after the pandemic, in order to avoid the deepening of the long-lasting North-South imbalance, in the light of the growing depopulation of this part of Italy. They especially focus on the role of Health Services, Education, Built-up Environment, and Transports, considered as key elements for promoting a well-balanced use of existing territorial assets.

The next paper, "Covid-19 and Spatial Planning. A few issues concerning public policy" by Sabrina Lai, Federica Leone and Corrado Zoppi, examines various issues of territorial planning such as collective public spaces and shopping centers, urban and regional mobility infrastructures and services, changes in food supply and on the mitigation of negative impacts connected to climate change in order to focus more attention on public administrative bodies, professionals, entrepreneurs and authorities participating in the profit and non-profit sectors, and local communities and a fresh start to planning after the lockdown period, especially in an attempt to provide new approaches to mitigate risk related to Covid-19 and which represented a great challenge for a number of commonplaces of the current planning culture.

Then, the paper "Take advantage of the black swan to improve the urban environment" by Antonio Leone, Pasquale Balena and Raffaele Pelorosso, discusses the current Covid related environmental issues providing recommendations for more effective actions that would address the urban planning towards a comprehensive sustainability of future cities.

The next contribute is by Giulia Mastrodonato and Domenico Camarda and it is titled "Imagining living spaces in extreme conditions: suggestions from a case study in Bari", which describes how the coronavirus emergency influenced the perception of the surrounding spaces by submitting a survey to the students of the Polytechnic University of Bari (Italy), both during the lockdown phase and immediately after.

Then, Pierluigi Matteraglia, with the paper "Risk, health system and urban project, highlights the relationship between risk and the Veneto health system", which is analysed from the point of view of urban project. The focus is the reorganization and the strengthening measures (health presidium) to face new pandemics and / or health crises.

The following paper, "Geographical analyses of Covid-19's spreading contagion in the challenge of global health risks. The role of urban and regional planning for risk containment", written by Beniamino Murgante, Ginevra Balletto, Giuseppe Borruso, Giuseppe Las Casas and Paolo Castiglia, questions about the outbreak of Covid-19 out of China in Europe, dealing with why and why with such strength Italy has been seriously

hit. In order to try to give an answer to these questions, authors realized a vast and articulated database of indicators at provincial level in Italy, performing several geographical and statistical analyses, that suggest that policies based on urban regeneration, sustainable mobility, green infrastructures, ecosystem services can create a more sustainable scenario able to support the quality of public health.

The paper which follows, "The resilient city and adapting to the health emergency. Towards sustainable university mobility", by Francesca Pirlone and Ilenia Spadaro aims to highlight the importance of the Quadruple Helix principle by analysing the specific measures that each actor can implement in order to reduce health risk. The focus is on the Prince project about sustainable university mobility.

Then, Piergiuseppe Pontrandolfi in their paper "Physical spacing and spatial planning. New territorial geographies and renewed urban regeneration policies" pay particular attention to the responses to limit the impact of the Covid-19 pandemic on the growth and development of the country imply a reconfiguration of territorial and institutional geographies. The paper, in addition to giving general reinterpretation of the administrative geographical areas, investigates the functions and skills necessary after the lockdown in the new territorial governance tools, on flexible forms of planning, adaptable to the spaces to be governed.

In the next paper by Elmira Shirgir, "Megacities facing Covid-19 pandemic. How to use urban spaces in Tehran after the new pandemic", the new ways people are using the city in Tehran after arrival of the pandemic have been studied and suggestions for guaranteeing the safety of urban spaces from now on have been discussed.

Then, Maria Rosaria Stufano Melone and Stefano Borgo, in the paper "Rethinking rules and social practices. The design of urban spaces in the post-Covid-19 lockdown", deepen the consequences that pandemic, particularly the adaptation to social distancing, is having on the design of urban public and private areas. The motivation for this analysis is to investigate and raise awareness of the consequences of changes in social practices. The work shows just one way to analyse architectural design, and should be considered as a contribution to a much needed broad and inclusive discussion about how we want urban spaces to be.

The following paper, "Data analysis and mapping for monitoring health risk. What has the spread of the Covid-19 pandemic in northern Italy taught us?" by Michela Tiboni, Michèle Pezzagno, David Vetturi, Craig Alexander and Francesco Botticini, offers a reflection on what we have learned from this pandemic regarding the need to have a monitoring system for phenomena related to health risk, in order to reduce the vulnerability of the health system.

The last paper is from Maurizio Tira, "About the sustainability of urban settlements. A first reflection on the correlation between the spread of Covid-19 and the regional average population density in Italy, Milan", who argues that sustainable urban development solutions is a dramatically urgent need. Even if it is not yet clear if a link exists between the spread of the virus, the health consequences and the environmental conditions, what probably will need to be assessed is the effect of population density on the spread of contamination, and that will probably force decision-makers to rethink the whole organization of our urban life to defend ourselves from largely unknown threats.

Finally, I would like to remind that this volume is the first editorial product since TeMA Journal has been added is the A-category of scientific journals. There could not be a better start for this new phase of higher responsibility and commitment for our editorial work and for this I have to thank all those who contributed to create this volume. First, I want to thank the colleagues that, with their works, have given scientific rigor and methodological approach to many of the topics that have been discussed during these months, with some approximations and superficialities. One further vote of thank is also due to the Board that encouraged us to follow up this initiative, not forget about Associate Editors and Editorial Staff that, with their engagement and the know-how gained during these years, made the publication of the Special Issue possible.

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