



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

Editorial correspondence

Laboratory of Land Use Mobility and Environment
DICEA - Department of Civil, Architectural and Environmental Engineering
University of Naples "Federico II"
Piazzale Tecchio, 80
80125 Naples
web: www.tema.unina.it
e-mail: redazione.tema@unina.it

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)

TeMA Journal of Land Use, Mobility and Environment offers researches, applications and contributions with a unified approach to planning and mobility and publishes original inter-disciplinary papers on the interaction of land use, mobility and environment. Domains include: engineering, planning, modeling, behavior, economics, geography, regional science, sociology, architecture and design, network science and complex systems.

With ANVUR resolution of April 2020, TeMA Journal and the articles published from 2016 are included in A category of scientific journals. From 2015, the articles published on TeMA are included in the Core Collection of Web of Science. TeMA Journal has also received the *Sparc Europe Seal* for Open Access Journals released by *Scholarly Publishing and Academic Resources Coalition* (SPARC Europe) and the *Directory of Open Access Journals* (DOAJ). TeMA is published under a Creative Commons Attribution 3.0 License and is blind peer reviewed at least by two referees selected among high-profile scientists. TeMA has been published since 2007 and is indexed in the main bibliographical databases and it is present in the catalogues of hundreds of academic and research libraries worldwide.

EDITOR IN-CHIEF

Rocco Papa, University of Naples Federico II, Italy

EDITORIAL ADVISORY BOARD

Mir Ali, University of Illinois, USA

Luca Bertolini, University of Amsterdam, Netherlands

Luuk Boelens, Ghent University, Belgium

Dino Borri, Polytechnic University of Bari, Italy

Enrique Calderon, Polytechnic University of Madrid, Spain

Roberto Camagni, Polytechnic University of Milan, Italy

Derrick De Kerckhove, University of Toronto, Canada

Mark Deakin, Edinburgh Napier University, Scotland

Aharon Kellerman, University of Haifa, Israel

Nicos Komninos, Aristotle University of Thessaloniki, Greece

David Matthew Levinson, University of Minnesota, USA

Paolo Malanima, Magna Græcia University of Catanzaro, Italy

Agostino Nuzzolo, Tor Vergata University of Rome, Italy

Rocco Papa, University of Naples Federico II, Italy

Serge Salat, Urban Morphology and Complex Systems Institute, France

Mattheos Santamouris, National Kapodistrian University of Athens, Greece

Ali Soltani, Shiraz University, Iran

ASSOCIATE EDITORS

Rosaria Battarra, National Research Council, Institute of Mediterranean studies, Italy

Gerardo Carpentieri, University of Naples Federico II, Italy

Pierluigi Coppola, Politecnico di Milano, Italy

Luigi dell'Olio, University of Cantabria, Spain

Isidoro Fasolino, University of Salerno, Italy

Romano Fistola, University of Sannio, Italy

Carmela Gargiulo, University of Naples Federico II, Italy

Thomas Hartmann, Utrecht University, Netherlands

Markus Hesse, University of Luxemburg, Luxemburg

Seda Kundak, Technical University of Istanbul, Turkey

Rosa Anna La Rocca, University of Naples Federico II, Italy

Houshmand Ebrahimpour Masoumi, Technical University of Berlin, Germany

Giuseppe Mazzeo, National Research Council, Institute of Mediterranean studies, Italy

Nicola Morelli, Aalborg University, Denmark

Enrica Papa, University of Westminster, United Kingdom

Dorina Pojani, University of Queensland, Australia

Floriana Zucaro, University of Naples Federico II, Italy

EDITORIAL STAFF

Gennaro Angiello, Ph.D. at University of Naples Federico II, Italy

Stefano Franco, Ph.D. student at Luiss University Rome, Italy

Federica Gaglione, Ph.D. student at University of Naples Federico II, Italy

Carmen Guida, Ph.D. student at University of Naples Federico II, Italy

Andrea Tulusi, Ph.D. at Second University of Naples, Italy

Special Issue

COVID-19 vs CITY-20

SCENARIOS, INSIGHTS, REASONING AND RESEARCH

Contents

- 5** EDITORIAL PREFACE
Carmela Gargiulo
- 9** **Covid-19 and simplification of urban planning tools. The residual plan**
Pasqualino Boschetto
- 17** **Covid-19. Some moments of the 21st century, with a look at Milan**
Roberto Busi
- 31** **Geographic Information and Covid-19 outbreak. Does the spatial dimension matter?**
Michele Campagna
- 45** **Health emergency and economic and territorial implications. First considerations**
Salvatore Capasso, Giuseppe Mazzeo
- 59** **About the effects of Covid-19 on solid waste management**
Alessandra Cesaro, Francesco Pirozzi
- 67** **The city and natural resources.**
Pandemic disaster can be a driving force for new perspective
Donatella Cialdea

- 81** **Evolution of mobility sector during and beyond Covid-19. Viewpoint of industries, consultancies and public transport companies**
Pierluigi Coppola, Francesco De Fabiis
- 91** **Tourism on demand. A new form of urban and social demand of use after the pandemic event**
Fabio Corbisiero, Rosa Anna La Rocca
- 105** **Questioning urbanisation models in the face of Covid-19.**
The crisis as a window of opportunity for inner areas
Giancarlo Cotella, Elisabetta Vitale Brovarone
- 119** **The Covid-19 pandemic effects in rural areas.**
Turning challenges into opportunities for rural regeneration
Claudia De Luca, Simona Tondelli, Hanna Elisabeth Åberg
- 133** **Shaping space for ever-changing mobility. Covid-19 lesson learned from Milan and its region**
Diego Deponte, Giovanna Fossa, Andrea Gorrini
- 151** **From social distancing to virtual connections**
How the surge of remote working could remold shared spaces
Luisa Errichiello, Daniele Demarco
- 165** **The paradigms of urban planning to emergency-proof.**
Rethinking the organisation of settlements at the time of a pandemic
Isidoro Fasolino, Michele Grimaldi, Francesca Coppola
- 179** **Virucity. Rethinking the urban system**
Romano Fistola, Dino Borri
- 189** **The role of the urban settlement system in the spread of Covid-19 pandemic. The Italian case**
Carmela Gargiulo, Federica Gaglione, Carmen Guida, Rocco Papa, Floriana Zucaro, Gerardo Carpentieri
- 213** ***“Passata è la tempesta ...”*. A land use planning vision for the Italian Mezzogiorno in the post pandemic**
Paolo La Greca, Francesco Martinico, Fausto Carmelo Nigrelli

- 231 Covid-19 and spatial planning**
A few issues concerning public policy
Sabrina Lai, Federica Leone, Corrado Zoppi
- 247 Take advantage of the black swan to improve the urban environment**
Antonio Leone, Pasquale Balena, Raffaele Pelorosso
- 261 Imagining living spaces in extreme conditions: suggestions from a case study in Bari**
Giulia Mastrodonato, Domenico Camarda
- 269 Risk, health system and urban project**
Gerardo Matteraglia
- 283 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
Beniamino Murgante, Ginevra Balletto, Giuseppe Borruso, Giuseppe Las Casas, Paolo Castiglia
- 305 The resilient city and adapting to the health emergency.**
Towards sustainable university mobility
Francesca Pirlone, Ilenia Spadaro
- 315 Physical spacing and spatial planning.**
New territorial geographies and renewed urban regeneration policies
Piergiuseppe Pontrandolfi
- 327 Mega cities facing Covid-19 pandemic.**
How to use urban spaces in Tehran after the new pandemic
Elmira Shirgir
- 333 Rethinking rules and social practices. The design of urban spaces in the post-Covid-19 lockdown**
Maria Rosaria Stufano Melone, Stefano Borgo
- 343 Data analysis and mapping for monitoring health risk. What has the spread of the Covid-19 pandemic in northern Italy taught us?**
Michela Tiboni, Michèle Pezzagno, David Vetturi, Craig Alexander, Francesco Botticini
- 363 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
Maurizio Tira

TeMA Special Issue | Covid-19 vs City-20, 91-104

print ISSN 1970-9889, e-ISSN 1970-9870

DOI: 10.6092/1970-9870/6916

Received xxth February 2020, Available online 19th June 2020

Licensed under the Creative Commons Attribution – Non Commercial License 3.0

www.tema.unina.it

Tourism on demand. A new form of urban and social demand of use after the pandemic event

Fabio Corbisiero ^a, Rosa Anna La Rocca ^{b*}

^a OUT – University Observatory on Tourism, University of Naples Federico II, Italy

e-mail: fabio.corbisiero@unina.it

ORCID: <https://orcid.org/0000-0001-7947-2497>

^b Department of Civil, Architectural and Environmental Engineering, University of Naples Federico II, Italy

e-mail: larocca@unina.it

ORCID: <https://orcid.org/0000-0003-2248-5152>

* Corresponding author

Abstract

The Covid-19 pandemic is expected to lead to a critical reconsideration of the global volume growth model for tourism, for reasons related to the risks posed by global travel and the contribution of the tourism industry to global pollution, climate change and, more in general, the socio-cultural instability of certain geographical areas of the world. Nevertheless, it is possible to propose a different point of view by trying to accept this historical moment as an occasion to ponder over the need for a change in the unsustainability of the present lifestyles. Tourism in this can be a driver function to support this transition by giving to tourism flows a higher sense. Tourist destinations will have to change but how and how many tourist cities will be able to re-calibrate their supply system of services and facilities to host the "new tourists"? Could the on-demand model be a new way for tourists to enjoy their experience?

The paper, trying to give answers to these questions, proposes some reflections about the inevitable change imposed by the pandemic, aiming at outlining the possible scenarios that will characterize the tourism-city relationship in the next future and paying attention to the social aspects.

Keywords

Urban tourism; Climate change; Pandemic; Tourism on demand.

How to cite item in APA format

Corbisiero, F. & La Rocca, R.A. (2020). Tourism on demand. A new form of urban and social demand of use after the pandemic event. *Tema. Journal of Land Use, Mobility and Environment*, 91-104. <http://dx.doi.org/10.6092/1970-9870/6916>

1. Introduction

Recent decades have seen several large-scale outbreaks: severe acute respiratory syndromes such as “Middle East respiratory syndrome” or “Ebola virus disease” epidemic (Gostin & Lucey, 2015). Nevertheless the global event of the Coronavirus represents the major challenge that the world has had to face after the second world war so much to be defined a “pandemic”. A term that has been used most commonly to describe diseases that are new, or at least associated with novel variants of existing organisms; for example, the emergence of HIV/AIDS when it was recognized in the early 1980s, and historical epidemics of diseases, such as plague. Actually, coronaviruses are not the only pandemic threat with much concern being given to influenza as well as other diseases that make scientists and governments worry about a repeat of the devastation of the Spanish flu of 1918 (Vasilakis & Weaver, 2008). Nowadays several of these pandemics have been “normalized” and they are part of the global health business as usual, or to be more precise developing country business as usual, even though their annual impact can be enormous. Beyond the debilitating, often fatal, consequences for those directly affected, pandemics have a range of negative social, economic and political consequences. Sociologically, for the Covid-19 outbreak, the expansion of the contact between humans, wildlife, and livestock has been a major outcome of urbanization processes in different countries.

Urbanization and associated land-use changes, in conjunction with rising meat consumption, have brought reservoirs of wildlife diseases into closer contact with livestock and people (Wu et al., 2016) and the potential health impacts of zoonotic events and pandemic emergences are not limited to China only but represent the intersection of broader processes of urbanization, globalization, environmental change, agribusiness and contemporary capitalism. Through its capacity to produce and reproduce consumption spaces on a global scale, the expansion of tourism is one of these modes of urban change.

Tourism has been surely one of the sectors most affected by the pandemic. The growth of international tourism has been one of the most enduring and significant forces driving the world economy since the 1950s. From a mere 25 million international tourism arrivals in 1950, the numbers reached 450 million in 1990 and then quickly exploded to 1 billion arrivals by 2010. By 2018, the number of arrivals had increased to 1.4 billion and is estimated by the United Nations World Tourism Organization to account for \$1.4 trillion and 7% of the value of world goods and services (RTE, 2020). According to the UNWTO forecast analysis (2020), the sector will now lose about 60% of the total tourists' flow and about 80 billion dollars.

The Covid-19 pandemic requests an afterthought about the connection between the demand of use by tourist flows and their spatial adaptation, both referring to the urban aspects and, mostly, to the relationship between the host community and the tourist one. This is all the more true in relation with the forecasting models of growth used till now for tourism in which the lack of the attention paid to unexpected risks such as infectiousness and contagiousness. Novelli et al. (2018) noted that much research has been devoted to crisis management and recovery, but few studies have addressed health-related crises in developing countries and even fewer have addressed the indirect threat of epidemics on their tourism industries. Their study on the impact of the Ebola crisis on tourism in The Gambia (where no outbreak was recorded) showed “devastating consequences” on the country’s tourism industry and highlighted the importance of consumer perception and preparedness and proactively tackling the issue of crisis management failure.

The Covid-19 pandemic is expected to lead to a critical reconsideration of the global volume growth model for tourism, for reasons related to the risks posed by global travel and the contribution of the tourism industry to global pollution, climate change and, more in general, the socio-cultural instability of certain geographical areas of the world. Nevertheless, it is possible to propose a different point of view by trying to accept this historical moment as an occasion to ponder over the need for a change in the unsustainability of the present lifestyles.

Based on these premises, our study seeks to add new knowledge to the existing body of literature on the relationship between global crises, such as disease outbreaks and pandemics, and the preparedness of global and regional tourism-related institutions to coordinate crisis management and recovery actions. The challenges are not simply economic. In the framework of these considerations, the paper is articulated in two main parts. The first part refers to the situation before the pandemic considering tourism in its main aspects as a global phenomenon. In the second part, some considerations about the impact of the pandemic are pointed out and alternative forms of enjoying the tourist destinations are proposed. Next, in section "Conclusions" we argue that hopes for a return to pre-Covid-19 patterns of tourism must be questioned to rethink a more sustainable and resilient tourism system and to respond united to any future shocks.

2. Before the Covid

2.1 Tourist flows and spatial distribution: a balance issue

The connection between tourism and the city is complex. Cities are physical places where the needs of tourists and inhabitants intersect. This means that cities must face different demands by offering adequate structures and facilities. This condition characterizes the tourist cities and may represent a factor of their vulnerability. The tourist demand can be considered as an additional urban load that can compromise the balance of the global organization of the city affecting the urban quality of life. Nevertheless, tourism has been seldom studied as an intrusive activity mainly due to its indisputable positive economic effects. Tourism is a double-edged phenomenon being at the same time an economic resource and a generator of negative impacts (overcrowding, pollution, noise, soil and energy consumption, social conflicts) on urban systems. This second aspect concerns town planning more directly if we consider that the efficiency and the quality of life in a city also depend on the quality of services and infrastructures, that in summing up compose the urban supply (Esopi, 2018).

This can be better understood if we think of tourism as a system comprised of two main components: the demand-side and the supply-side. Tourism demand concerns the needs expressed by a non-residential population. On the other side, tourism supply refers to the presence in the city of facilities and structures to satisfy this demand. Town planning can influence the demand-side by intervening on the supply-side in terms of quantity, distribution, and qualities of facilities and structures to assure the efficiency of the city.

In this regard, it is possible to bring out that the urban planners' challenge consists in defining the conditions (policies and strategies) and the technical tools able to provide a qualified urban supply (of services, spaces, and facilities) that has to be compatible with urban characteristics and resources. Tourism planning and land-use, thus, are closely connected, and, if properly planned, tourism can be a "driving function" able to lead the city towards a more sustainable dimension.

Thinking in a systemic framework makes it possible to envisage that all the components (physical, functional, and social) engaged are connected and interact simultaneously. The change of status of one of the components determines a change of the entire city-system. Stressing this consideration, it is possible to connect the structural crisis of present cities to an entropic state in which the city loses energy and force to face internal as well as external risks that can occur unexpectedly. On the contrary, in normal conditions, the urban system evolves inside a sustainable range of development, where the production of entropy is under control. Tourism is probably the most representative urban activity of this phenomenon.

When tourism becomes too invasive, it generates entropic processes that progressively lead the city towards a gradual modification. This process can be identified as an effect of "urban ousting", which occurs when the tourist flows exceed and invade the urban space transforming the tourist in "entropic city users".

The urban ousting could be referred to two different types: a) "restricted" for instance during some big events (Olympic games, international fairs, Expo, etc.) that require specific management plans but it normally affects specific urban zones; b) "all-embracing" that is when tourism assumes more importance than consolidate urban activities causing the banishment of residents and the phenomenon of gentrification. Urban tourism tends to overlap with gentrified areas, especially because gentrification provides consumption facilities and a middle-class sense of place that attracts further consumers. The attraction of visitors accelerates the pressure of gentrification as the intensification of land use pushes up the value of commercial and residential properties. New spaces of consumption can increase land values and this process explains why property owners are particularly interested in promoting local tourism growth (Logan & Molotch, 2007).

Although urban tourism management and its flows are a discussion focus within the scientific literature (Urry & Larsen, 2011; Evans, 2000; Pearce, 1998; van den Berg, van der Borg, & van der Meer, 1995; Law, 1992), there is still a lack of interest in considering it as an integrative element of the city planning, of the transport design, or the urban regeneration policies (Pearce, 2015). Being a diffusive and an inter-sectorial activity, tourism can be the means to promote sustainable models of enjoying resources, and in this sense, it can promote a real change in visitors' behaviors paying more attention to energy transition, water consumption, waste production, the use of soft mobility, respect of the host population and so on. The search for an equilibrium also refers to the basic concept of carrying capacity and to the spatial distribution of tourist flows within the urban places.

Before the present pandemic crisis, the distribution of tourist flows inside the host system acted according to some known trend. Within the destination, tourism demand concentrates in time (normally corresponding with a holiday, big events, cultural exhibition, religious celebration, etc.) and in space normally corresponding with the areas in which attractions are localized (monuments, museums, shopping, historical center, cathedrals, etc.). When tourism loads exceed the threshold of the compatibility (with social, economic, and environmental resources), the host system collapses, and its levels of livability rapidly decrease. If this situation occurs, the "carrying capacity" of the system has been overcome.

In this sense, and strongly referring to tourism, the carrying capacity can be defined as the ability of the urban system to perform tourist functions without threatening those that are essential for residents (Thurot, 1980; Matheson & Wall, 1982; Grasselli, 1989)¹. This concept indeed is much more complex and takes into account at least three main components: a) the physical component that refers to the maximum number of persons that a place can bear before its breakdown; b) the functional component that refers to the system of services and facilities whose quality deeply affects the visitors' experience; c) the social component that refers to the well balanced relationship between tourists and host community. The threshold of the carrying capacity for a destination is determined by the balance among these three components. As both tourism, as well as the destination, are complex and dynamic systems it is not possible to individuate a certainly defined value corresponding to a specific point in which the perfect and stable equilibrium can be achieved (Fistola & La Rocca, 2014). Nevertheless, it is possible to refer to a "state of compatibility" in which the tourists' needs and the resources (social, economic, territorial) of the host community are well balanced, and a condition of no conflicts and no loss of energy is achieved. Tourism sustainability could thus coincide with this compatible

¹ There is a wide literature about definitions of tourism carrying capacity. Some scholars (Maggi et al. 2010) agree on the complexity of the concept and refer to different components based on three main relationships: a) environmental: refers to the capacity of natural resources that are in the tourist destination and their fruition by tourists; b) cultural: refers to the tourists' satisfaction based on their expectation; c) socio-economic: concerns to the social and economic satisfaction of the residents referred to the presence of tourists in their city. These relationships can be found in the definition by the UNWTO (1981) "the maximum number of people that may visit a tourist destination at the same time, without destroying the physical, economic and socio-cultural environment and an unacceptable decrease in the quality of visitors' satisfaction".

state of balance (even if dynamic) in which a widespread quality of life can be assured for all the urban typologies of users (citizens, residents, city-users, and visitors).

The individuation of new forms of tourism aimed at reducing energy consumption and primary resources (water and soil), safeguarding the cultural heritage, respecting the identity values of a place can lead the whole system (the host community and the tourists) towards these states of equilibrium. The focus of the change will affect the supply-side dedicated to tourists particularly referred to transports, accommodations, and entertainment. The ability to reformulate the supply-side system according to a sustainable perspective (as has been before meant) is most likely a possibility to switch towards a "smart" dimension in which public and private sectors work in synergy for a common goal (La Rocca, 2013; Canfora & Corbisiero, 2014; Papa & Fistola, 2016). The responsible tourism, in this sense, rather than a further typology can be intended as a new approach to tourism issues, aimed at mitigating (through sustainable behaviors) the impacts deriving from unplanned development, in this, improving also the competitiveness of the destinations. In this way, the word tourism is understood in a positive sense, where the journey and the holiday are intended both as an opportunity for quality of life and an opportunity for cultural exchange as well. Taken together, they become a tool to foster the growth of more sustainable touristic flows.

In this regard, recent studies have underlined a growing sensitivity towards environmental issues by users who prefer certified structures and products even in the face of higher spending (UNEP & UNTWO, 2012). This trend allows us to make a consideration regarding the possibilities of a radical change in the lifestyles and cultures that tourism could generate.

In fact, as a pervasive activity² for which the social component has a fundamental role, tourism can influence behaviors and play a driving role in promoting more sustainable uses of cities and resources (decrease of waste production, reducing use of the water and energy consumption, etc.). Tourism, thus, being characterized by "transversality" and "pervasivity"³, can be a driving function able to shift the system towards sustainable conditions. In this sense, the tourism sustainability can coincide with a condition of possible equilibrium (between tourist demand and supply) where the city achieves widespread urban quality levels for all categories of users: residents, city users, and tourists.

3. After the Covid

3.1 Tourism's uncertain future

The bewilderment caused by Covid-19 has crushed every desire for escape and travel, temporarily closing the tourism golden age. This pandemic has grounded our hyper-mobility to a halt forcing us to stay rooted, and maybe it's the right moment to reflect on why we constantly feel compelled to be always "on-the-go" in contemporary society. The situation is unprecedented. Within the space of 3 months, the framing of the global tourism system moved from overtourism to "non-tourism" (Corbisiero & Ruspini, 2018).

There are already several future tourism studies that draw possible scenarios of the impact of Covid-19 on the tourism sector, once again emphasizing the role of economic driver that the tourism industry undoubtedly plays in the world. According to this perspective, the tourism industry is counting on a, probably reduced, revival of its activities in 2021. This optimism is based on four expectations: a vaccine, the relaxation of travel

² Despite the global crisis, before the Covid-19, tourism has had an uninterrupted growth over the past six decades more and more involving all different social levels and becoming a transversal activity, that involves several sectors (mobility, hospitality, leisure, etc.).

³ *Transversality* refers to the multiplicity of sectors (public and private) involved in tourist development. *Pervasive* refers both to the constant growth of tourism in the late sixty years and to the trend that characterizes actual demand, at all social levels, impatient of sharing its own experiences rapidly and in real-time.

restrictions, implementation of additional health measures for travelers and passengers to access the transports and the presence of a loyal clientele.

Though, these studies pay little attention to the unbalance that tourism can generate on the general organization of the destination, as previously underlined. This lack of attention determines a space in the scientific research trajectories that, on the contrary, could represent an innovative research path to propose strategies and resolute actions able to support the decision-makers in the fulfillment of objectives of wellness and quality of life for the whole communities involved in tourism activities.

Targeting the tourist of the future will involve an array of response-driven approaches across a range of socio-economic levels, markets and destinations. Many of these post-pandemic changes will be driven by new technologies that may herald an era of cyber-tourism. Therefore, there is a need for the tourism industry to position itself as a strategic early mover, in terms of planning, trialing and incorporating emerging ideas and technologies, and applying multiple strategies to deliver new options such as @-tourism. Such ideas will generate new tourism streams, thereby further strengthening the industry's global competitiveness into the future.

Countries and destinations will need to assess the impacts of the Covid-19 and any further future pandemics using both monetary and non-monetary metrics. These values should also be evaluated concerning other structurally ingrained, institutional conditions and global factors such as climate change, that are increasing the vulnerability of less affluent regions already struggling to build resilience after disease outbreaks and related social backlash (e.g., from Ebola, Zika virus and HIV/AIDS) (Milano, Novelli & Cheer, 2019).

In such a situation, this pandemic represents a transformative moment or opportunity that will change the tourism, whose re-birthing will require new sets of values, new paradigms, and a dramatic shift from the over-tourism, overconsumption, and excessive greed that defined much pre-Covid-19 tourism. These discussions are fledgling, and they are not so obvious.

To assess the impacts of Coronavirus is a real complicate task because of several aspects concerning particularly the uncertainty due to the little information about the virus's behavior and evolution. If the economic impacts need to be supported by in-depth analyses, all the same they are the most evident; the social impacts, on the contrary, are more intricate to individuate as they concern the tourists' behaviors and much more their perception of the danger that will affect their choices. The recent trends elaborated by UNWTO (2020) highlight the decrease of the global tourist movement and, although still in uncertain conditions, it is possible to individuate at least three types of factors that will carry weight on the inevitable change that the pandemic has imposed. These factors can be described as:

- direct factors related to the perception of the risk which is therefore dependent on the trend of the spread of the epidemic (and, therefore, the end of the health emergency);
- indirect factors referred to the spending capacity in activities that at the moment are considered not a primary asset, such as tourism;
- indirect factors referred to the organization and the quality of the supply chain that will have to be able to ensure the safety conditions required.

In the first case, it can be reasonably assumed that the most direct impacts will concern the long-haul travel model, generating a contraction of the distances that the tourist flows will be willing to travel by predicting an increase in domestic flows and rebound tourism within their regions of residence.

In the second case, the aspects mostly connected with the job crisis generated by the pandemic, and the consequent closedown of medium-size activities must be considered. It should also be considered that this aspect affects both the supply-side and the demand-side (expenditure capacity).

In the third case, reference is made to the contraction in the supply-chain, like transports and accommodation, as well as several other ancillary services related to tourism (catering, culture and entertainment, events...).

The report by Cerved Industry Forecast "The impact of Covid-19 on the tourism and transport sector" (March 2020) compares three typologies of scenarios: a) absence of shock; b) basic scenario; c) pessimistic scenario. The first one evaluates the trend of tourism and transport if the Covid had not occurred. The second puts the deadline of the emergency phase at the end of May and presumes that the economic upturn will occur two months after the deadline.

The pessimistic scenario puts the deadline at the end of 2020 envisaging an economic upturn in the six months later, and global isolation of several countries. For Italy, which was the first country in Europe to have managed to isolate the coronavirus, the future analysis that are taking shape before the end of Covid-19 allude to the risk that the country will be isolated and in difficulty concerning the historical issues of fiscal stability and political stability that mark its weakness. The impact is also hurting areas of Italy barely touched by the virus. Italy's tourism federation announced that damage to the tourism sector is estimated at 200 million for the first quarter of the year.

Even though the three scenarios consider the support of public funding, the total loss in revenue is expected in the range from 29 to 64 billion of euros in the period 2020-2021 with a large regional variability. The basic scenario particularly evaluates the loss in revenue for the tourism and transport sectors to be about -20% in 2020, with about 22 % of expected rebound that is much higher than the overall trend expected for Italy (respectively -7,4% in 2020 and + 9,6% in 2021). At the end of the forecast period, the turnover of the companies in the travel & tourism sector would not regain the levels of 2019, with overall losses of 29 billion euros (22 billion in 2020 and 7 billion in 2021) compared to a scenario without shock (in absence of Coronavirus). In the pessimistic scenario, the sector's turnover would suffer 41.5% losses in 2020 (against 17.8% of the Italian economy as a whole) with a rebound of 42.2% in 2021. This would result in overall revenue losses of approximately 64 billion euros (43 billion in 2020 and 21 billion in 2021). The forecasts also identify the sectors of the supply chain most involved: hotels and travel agencies, catering, car rental, air transport with airport management, conferences, and the organization of fairs and events.

The territorial distribution (fig. 1), despite its inhomogeneity, highlights a condition of constant suffering for some regions such as Liguria, Calabria, or Val d'Aosta. The regions most exposed as to the number of employees in the tourism and transport sector would be Sardinia and Lazio.

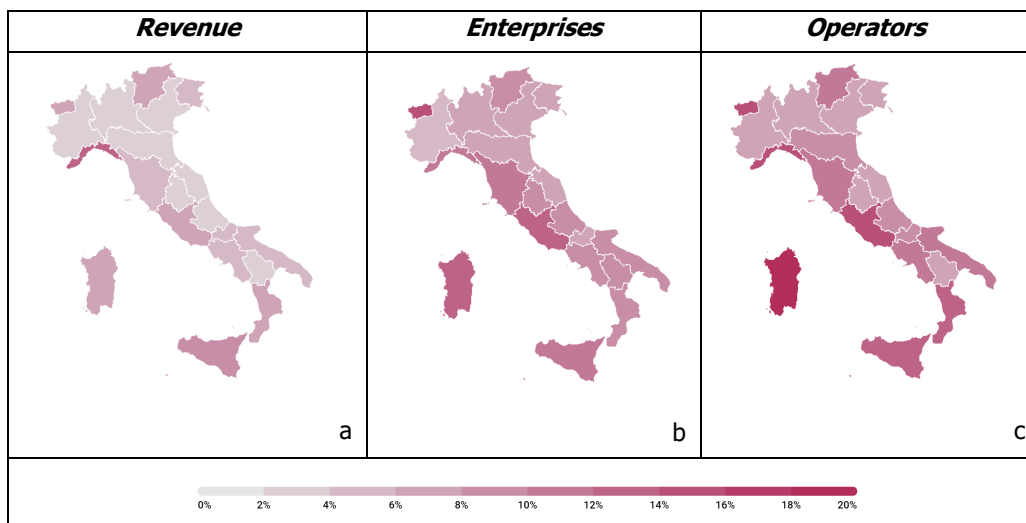


Fig. 1 Territorial distribution of the crisis post coronavirus in Italy referred to revenue (a), enterprises(b) and operators(c) (elaboration on CERVED data)

The Interim Economic Outlook of the OECD (2020), on the other hand, showed a severe slowdown in the production of GDP for the period 2020-2021 underlining the economic crisis that will affect the tourism sector especially as concerns to the reduction of the visitors from China and Asian countries to Europe.

The World Travel and Tourism Council (2020) has ranked countries that will be most exposed to the reduction of tourism mobility (fig. 2). The ranking refers to the percentage generated by the tourism industry on GDP, highlighting (again using economic indicators) the position of Italy as one of the countries with a strong tourist vocation. Even though in a loss condition, Italy stays in a favorable condition compared with the other European countries in the ranking, such as Greece, Portugal, and Spain (fig. 2).

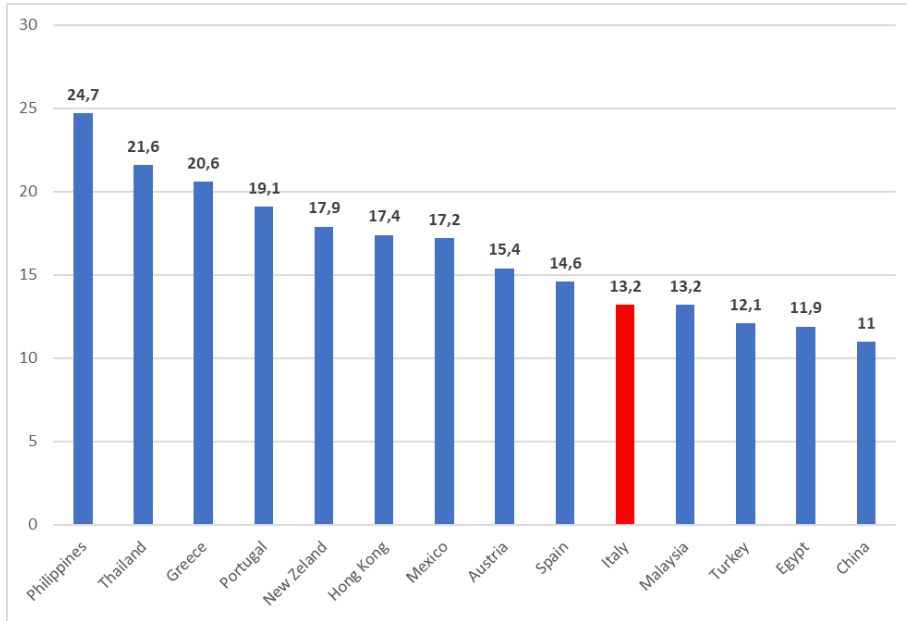


Fig. 2 Percentage generated by the tourism industry on national GDP (elaboration according to WTTC data)

The IPSOS surveys (2020) investigated the aspects relating to the age of possible travelers who suffered the most from the uncertainty related to the spread of the pandemic (fig. 3). The “grey-tourists” (over 45 years) express a bigger difficulty than young generations in planning their holidays even for a short period. This, theoretically, could be correlated to the segment of age that in Italy was most affected by the virus, and, on the other side, it could also be related to a greater reluctance of grey tourists for the habits changing required to contain the contagion.

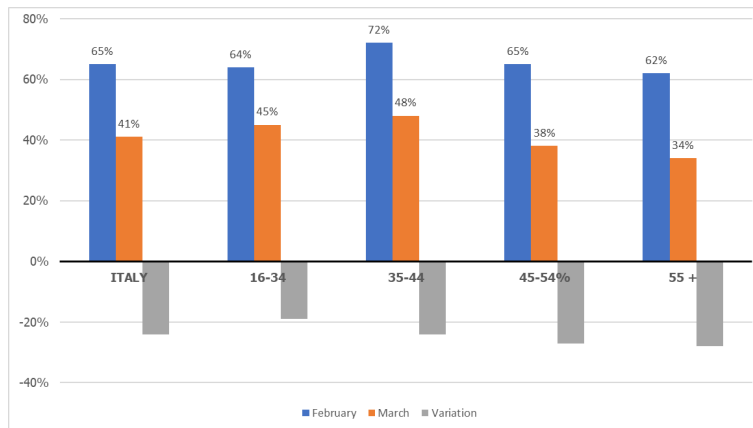


Fig. 3 The results of the IPSOS survey on the holiday forecasts of Italians by age after the ordinance “I stay at home” (11 March 2020)

Referring to the production of policies and measures envisaged for the worldwide containment of Covid-19, the Organization for Economic Co-operation and Development (OECD) elaborated an interactive map (updated to 11 May 2020) that allows for the comparison among states concerning: a) containment measures; b) fiscal measures; c) monetary policy and prudential regulations; d) measures to promote burden-sharing within the private sector; e) other measures including structural policy measures.

In this respect, figure 4 represents the Italian situation per region referred to the production of policies during the two phases of the pandemic.

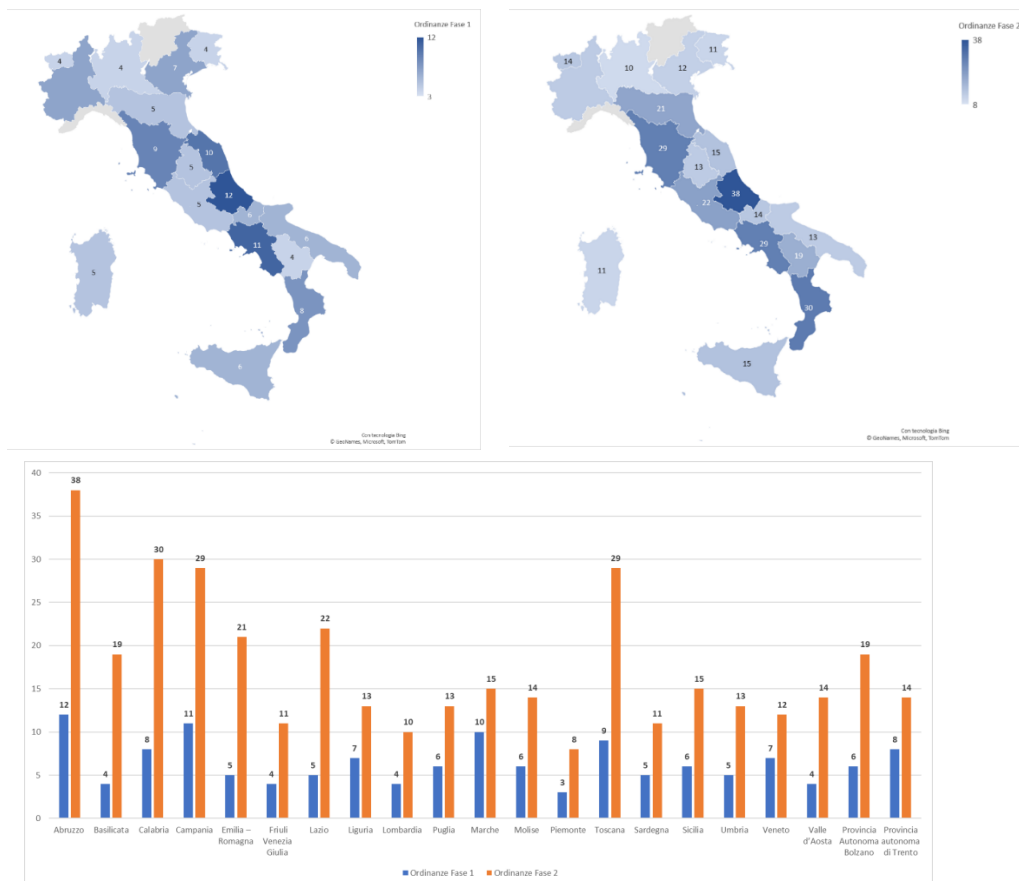


Fig. 4 Territorial distribution of the production of regulatory measures in Italy during phase 1 and phase 2.

The main measures refer to the OECD categories a) especially during phase 1 of the lockdown and b) during phase 2 mostly aimed at recovering economical fall. As concerns the tourist sector, measures mainly are targeted to give rules for interpersonal distances and for sanitizing the common spaces in accommodation and food facilities.

Nevertheless, a lack of general and integrated perspectives must be underlined in the management of the territorial emergence at a political level. Given the rapid pace of developments, the overview of regional responses is not comprehensive and in some cases regional policy responses have been working in progress, or simply remained at the stage of public announcements.

3.2 A new model of urban competitiveness and tourist attractiveness: tourism on demand

The Covid-19 pandemic should lead to a critical reconsideration of the global volume growth model for tourism, for interrelated reasons of risks incurred in global travel. Tourism increase has been historically defined by

virtually all tourism organizations - UNWTO, ICAO, CLIA, or WTTC - as growth in tourism numbers. This perspective has already been questioned in the context of the global financial crisis (Hall, 2011) and as the challenges of over-tourism, climate change (Zucaro & Morosini, 2018), and Covid-19 pandemic further illustrate, this perspective is outdated. These changes are also expected to generate new social migration (climate refugees) and new conflicts for the conquest of primary resources (e.g. water). This forecast framework necessarily requires a rethinking of the forms of spatial adaptation of tourist flows which concern both mobility and the relationship between the tourist population and the host community. In this sense, the pandemic can be seen as an opportunity as well as a challenge.

The Covid-19 crisis represents in fact an opportunity to critically reconsider tourism's growth paths, and to question the logic of more arrivals implying greater benefits. For example, as a result of the significant decline in demand, airlines have begun to phase out old and inefficient aircrafts. Video-conferencing has become widely adopted by smart-workers, including students forced into distance learning, and business travelers avoiding non-essential air travel. Many business travelers will welcome opportunities to fly less. In Italian cities, the full lockdown responses appear to have seen a significant rise in cycling and outdoor activities. Adding to this, Italians seem to regain confidence, and interestingly, a greater involvement in environment-friendly activities, desiring rural areas as a refuge from urban life.

It is a shared opinion that tourism is an important factor in the economies of all countries, and in a nutshell, it has so far been one of the main agents capable of improving the level of regional as well as urban competitiveness; it is probably because of its central role that cities and regions have become real "tourist products".

The challenge, of course, consists of the ability to defeat the virus, by knowing it and thus predisposing the pharmacological and medical remedies as rapidly as possible. The opportunity refers to the ability to share knowledge and defining alternative patterns of using cities and resources in coherence with the peculiarities of all the involved components (social, physical, and functional), thus promoting a sustainable perspective.

Tourism on demand (TOD) is one of the possible patterns that can be implemented in the short term to test forms of use that, on one side, allow for the monitoring of tourist flows which are also required by emergency and non-invasive; on the other side, it allows for a distribution of the tourists load that should be compatible with the carrying capacity of the system involved. The flow management have to become a priority theme on the agenda of all the local governments that have decided to intervene effectively on the consequences induced by overtourism. Particularly, the knowledge of how many tourists a place, town, or larger destination can tolerate is turning out to be among the major challenges seized by an ever-increasing number of policymakers and scholars.

In considering the future development of international tourism, both the travel industry and tourist-receiving countries should be concerned to identify those factors which are likely to influence the direction of future demand. In this sense, digital transformation can unlock innovation and ensure the competitiveness of security protocols of European touristic systems.

This condition requires a coordination and cooperation effort at various levels: political-administrative, socio-economic, territorial. Integration within the tourism sector is a difficult task, as different levels of responsibilities and purposes of the public sector as well as of the private sector are involved (La Rocca, 2014) Nevertheless, some hypotheses of policies to be adopted can be formulated to achieve a balanced status, even though dynamic and not stable. In particular, we refer to the definition of interventions that have to be framed into the objectives of:

- restraint policies;
- policies for the management of tourist flows;
- participation planning policies.

As to the first point, interventions must consider the need not to exceed the maximum capacity that an urban system can sustain. At present, it must be considered that the pandemic has defeated the risk of "overtourism" as we used to define it. This aspect has to be considered in the definition of a local urban master plan where the distribution of the urban charges has to be decided by the planning of the supply-side elements (urban services and facilities). As for the second issue, policies should also concern visitors management techniques to distribute tourist flows inside the destinations diverting them from the most congested attraction areas to alternative paths for visiting the city.

Sensible areas of the urban system should be considered as "protected areas" where some restrictions may be applied to reduce tourist impacts. In particular, these measures should aim at:

- reducing the use of sensible areas (demand-side);
- varying timing and distribution of use (supply-side);
- improving action that can modify visitor behaviors (supply-side).

As for the third point, measures must concern the participation of all the actors (public and privates) involved in the process of tourist development according to a sharing approach to the decision-making policies. Such an approach permits to reduce the conflicts that inevitably occur between tourists and residents and to promote more sustainable forms of tourism. The balance among the whole of the interests that tourism development involves is necessarily based on the realization of an efficient system of governance. Governance in tourism is largely discussed in the scientific literature and it mainly refers to the cooperation and partnership between public administrations and private stakeholders as the fundamental condition for the success of a tourist destination. The proposed policies can be considered as the first guidelines for reducing the risk of generating dangerous entropic phenomena within the functional system (such as urban ousting) which could produce an entropic decay of the urban system as a whole.

4. Conclusions

Pandemics are an important issue for society and tourism, even if many of their potential threats and the actions needed to manage them have either been ignored or forgotten by the State, industry, and politicians at large. This paper tried to underline how pandemics and viruses may provide an impetus for individuals to transform their travel behaviors, even though transformation in the tourism system is extremely difficult. On one hand, research in tourism highlights the need to consider biodiversity conservation and climate change imperatives in combination with destination models that seek to reduce leakage, enhance wellbeing, and better capture and distribute tourism value (Gössling et al., 2016). In contrast, there are strong business and political voices claiming that the economy, including tourism itself, should be opened up as soon as possible so that it can return to "normal", and that affected businesses should receive substantial government financial support without necessarily having to meet any sustainability or climate change mitigation requirements. For example, the International Air Transport Association (IATA) has called on the International Civil Aviation Organisation (ICAO) to amend the carbon offsetting and reduction scheme for international aviation (CORSIA), or risk airlines pulling out of the scheme (Topham & Harvey, 2020). Clearly, without appropriate regulatory and governance settings to ensure that government bailouts of the tourism industry, including the transport sector, come with environmental caveats, the prospects for an immediate major paradigm or third-order change for more sustainable forms of tourism becomes all the more unlikely.

At the time of writing, there is no evidence that sustainability is a consideration within massive economic stimulus package in Italy, although several European environment ministers have called for plans prepared for the European Green Deal to be central in rebuilding European economies. The absence of the voice of the Italian environment minister in this "new blue-green deal" is puzzling. Nevertheless, the ongoing existential

threats posed by climate change, biodiversity loss, and exposure to zoonotic diseases means that the demands for more sustainable forms of tourism are essential for rethinking our cities.

Changes to tourism as a result of Covid-19 will be uneven in space and time over the world. While some destinations will undoubtedly reconsider the nature of their tourism industry and focus more on local and more sustainable forms of tourism, without substantial institutional and governmental interventions, which are currently overwhelmed with saving lives and creating conditions to restart domestic economies, the juggernaut that is international tourism will roll on.

For many destinations and governments, the question about the sustainability of tourism has to be measured with the "business as usual" model. Maybe the world of tourism should disconnect this slogan to figure out the future of tourism. Further, tourism scholars also need to consider if their research should be "community-responsive" to have a meaningful impact on the society, as research for its own sake drives to nowhere.

These reflections will necessarily have to start from a deep understanding of how to revamp domestic tourism, which even if it will not compensate for the decline of international tourism flows, will be crucial to revive the tourism. Coordinated approaches with other connected sectors heavily hit by the crisis, like the creative and cultural ones, will be of the essence to make the recovery successful.

Finally, it is paramount especially for Italian stakeholders to use the Covid-19 outbreak to improve crisis management strategies and strengthen international and domestic co-ordination mechanisms and mutual learning across Regions and tourism sub-sectors to rethink a more sustainable and resilient tourism system and to respond united to any future shocks. A critical rethinking of the neoliberal approach to space, of the touristification and commodification of our spaces should urge a radical discussion for a novel conceptualization of space - both inside and outside - tourism and hospitality. This would mean setting the ground for a novel spatial imagination for destination dynamics welcoming the unintended, unexpected, indeterminate multiplicity of untidy guests. This historical moment is also prompting us to enact a deeper connection between urban space (Alkan Meshur, 2016) and rural dimension and leads us to remember the enormous importance of exploring possible paths considering all the involved variables, in order to be ready and try to anticipate responses.

References

Alkan Meshur, H. F. (2016). Evaluation of Urban Spaces from the Perspective of Universal Design Principles: The Case of Konya/Turkey. *TeMA - Journal of Land Use, Mobility and Environment*, 9(2), 191-208. <https://doi.org/10.6092/1970-9870/3786>

Canfora, F., & Corbisiero, F. (2014). Centro Direzionale of Naples. A "Smart" Concept. *Tema. Journal of Land Use, Mobility and Environment*, 7(3), 315-332. <http://dx.doi.org/10.6092/1970-9870/2792>

Corbisiero, F. & Ruspini, E. (2018). Millenials and Generation Z: challenges and future perspectives for international tourism. *Journal of Tourism Futures*. Vol. 4, n. 1.

Esopi, G. (2018). Urban commons: social resilience experiences to increase the quality of urban system. *TeMA - Journal of Land Use, Mobility and Environment*, 11(2), 173-194. <https://doi.org/10.6092/1970-9870/5532>

Evans, G. (2000). Planning for urban tourism: a critic of borough development plans and tourism policy in London, *International Journal of Tourism Research*, Vol. 2, n. 5.

Fistola, R. & La Rocca, R.A. (2014). The Sustainable City and the Smart City: measuring the urban entropy first. In: Marchettini N., Brebbia C.A., Pulselli R. and Bastianoni S. (eds), *The Sustainable City* (pp.537-548). Boston: WIT Press.

Gössling, S., Ring, A., Dwyer, L., Andersson, A. C., & Hall, C.M. (2016). Optimizing or maximizing growth? A challenge for sustainable tourism. *Journal of Sustainable Tourism*, 24(4), 527-548.

Gostin, L.O., & Lucey, D. (2015). Middle East respiratory syndrome: a global health challenge. *Jama*, 314(8), 771-772.

Grasselli, P. (1989) *Economia e politica del turismo*. FrancoAngeli, Milano.

Hall, MC (2011). A typology of governance and its implications for tourism policy analysis. *Journal of Sustainable Tourism*, Routledge, 19:4-5, 437-457. <http://dx.doi.org/10.1080/09669582.2011.570346>

La Rocca, R.A. (2013). Tourism and City. Reflections about Tourist Dimension of Smart City. *TeMA - Journal of Land Use, Mobility and Environment*, 6(2), 201-214. <https://doi.org/10.6092/1970-9870/1483>

La Rocca, R.A. (2014). The Role of Tourism in Planning the Smart City, *TeMA. Journal of Land Use, Mobility and Environment*, 7(3), 269-283. <http://dx.doi.org/10.6092/1970-9870/2814>

Law, CM, (1992). Urban tourism and its contribution to economic regeneration. *Urban Studies*, vol. 29.

Logan, J. R., & Molotch, H. L. (2007). *Urban fortunes: The political economy of place*. Berkeley, CA: University of California Press.

Maggi E., Fredella L.F. (2010) The carrying capacity of a tourist destination. Conference Paper, available on research gate <https://www.researchgate.net>

Matheson A. & Wall G. (1982). *Tourism: economic, physical and social impacts*. Longman.

Milano C., Novelli M. & Cheer J.M. (2019) Overtourism and Tourismphobia: A Journey Through Four Decades of Tourism Development, Planning and Local Concerns. *Tourism Planning & Development*, 16:4, 353-357.

Novelli, M., Gussing Burgess, L., Jones, A., Ritchie, B.W. (2018), "No ebola...still doomed' – the ebolainduced tourism crisis". *Annals of Tourism Research*, Vol. 70, pp. 76-87.

Papa R. & Fistola R. (2016) (eds). *Smart Energy in the Smart City Urban Planning for a Sustainable Future*. Switzerland: Springer International Publishing.

Pearce, DG, (1998). Tourism development in Paris: public intervention. *Annals of Tourism Research*, Vol. 25 n. 2.

Pearce, DG, (2015). Urban Management, destination management, and urban destination management: a comparative review with issues and examples from New Zeland. *International Journal of Tourism Cities, Emerald*, Vol. 1, n. 1.

RTE (2020). How the coronavirus may hit the tourism industry, Retrieved from: <https://www.rte.ie/brainstorm/2020/0303/1119857-coronavirus-tourism-ireland/> [Access on May 24, 2020].

Thurot, JM. (1980). *Capacité de charge et production touristique*. Chet, Université d'Aix-Marseille.

Topham, G., & Harvey, F. (2020, April 8). Airlines lobby to rewrite carbon deal in light of coronavirus. *The Guardian*. <https://www.theguardian.com/business/2020/apr/08/airlines-lobby-to-rewrite-carbon-deal-due-to-coronavirus> [accessed on 22 May 2020]

UNEP & UNWTO (2012). *Tourism in the Green Economy – Background Report*. Printed by the World Tourism Organization, Madrid, Spain.

UNWTO (2020) *Tourism and Covid-19*, Retrieved from: <https://www.unwto.org/tourism-covid-19-coronavirus> [Access on May 29, 2020]

Urry, J., & Larsen, J. (2011). *The tourist gaze 3.0*. Sage.

van den Berg, L, van der Borg, JIJ, and van der Meer, J, (1995) (eds). *Urban Tourism: Performance and strategies in eight European cities*. Avebury: Aldershot.

Vasilakis N, & Weaver, SC. (2008). The history and evolution of human dengue emergence. *Adv Virus Res*, vol. 72, 1-76.

Wu, S., Powers, S., Zhu, W. & Hannun, Y. A. (2016). Substantial contribution of extrinsic risk factors to cancer development. *Nature* 529, 43–47.

Zucaro, F., & Morosini, R. (2018). Sustainable land use and climate adaptation: a review of European local plans. *TeMA - Journal of Land Use, Mobility and Environment*, 11(1), 7-26. <https://doi.org/10.6092/1970-9870/5343>

Web reference

<https://www.ipsos.com/it-it/il-turismo-al-tempo-del-covid-19-parte-2> [accessed on 30 April 2020]

<https://know.cerved.com/impres-mercato/gli-impatti-del-covid-19-sui-ricavi-delle-impres-italiane> [accessed on 30 April 2020].

<https://wtcc.org/> [accessed on 19 May 2020]

<https://www.unwto.org/unwto-convenes-global-tourism-crisis-committee> [accessed on 19 May 2020]

<https://www.oecd.org/economic-outlook> [accessed on 22 May 2020]

Author's profile

Fabio Corbisiero

Sociologist, Ph.D., Associate Professor in Sociology of Tourism at Department of Social Sciences, University of Naples Federico II. His research activities refer to the analysis of touristic phenomena focused especially on the urban areas and social vulnerability. He is the Coordinator of OUT – Osservatorio Universitario sul Turismo of University of Naples Federico II.

Rosa Anna La Rocca

Architect, Ph.D., Associate Professor in Urban and Regional Planning at DICEA, University of Naples Federico II. Her research activities refer to the analysis of phenomena that can change the urban organization and they are focused on the study of three main relationships: tourism and town planning; land use and mobility, innovation technologies and urban transformations.