

THE RESILIENCE CITY/THE FRAGILE CITY. METHODS, TOOLS AND BEST PRACTICES

2 (2018)

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Cover Image by Maria Rosa Tremiterrera of Am Sandtorkai, one of the main streets of HafenCity, a new district located on the waterfront of the City of Hamburg. HafenCity can be considered "a city in the city" and one of the most resilient urban areas in the world to the flooding events thanks to its urban redevelopment strategy.

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 transport, land use and environment. Domains include: engineering, planning, modeling, behavior, economics, geography, regional science, sociology, architecture and design, network science and complex systems.

The Italian *National Agency for the Evaluation of Universities and Research Institutes* (ANVUR) classified TeMA as scientific journal in the Area 08. TeMA 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.

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TeMA

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CALL FOR PAPERS: TEMA VOL. 11 (2018)

The Resilience City/The Fragile City. Methods, tools and best practices.

The fragile/resilience city represents a topic that collects itself all the issues related to the urban risks and referred to the different impacts that an urban system has to face with. Studies useful to improve the urban conditions of resilience (physical, environmental, economical, social) are particularly welcome. Main topics to consider could be issues of water, soil, energy, etc.. The identification of urban fragilities could represent a new first step in order to develop and to propose methodological and operative innovations for the planning and the management of the urban and territorial transformations.

The Journal also welcomes contributions that strategically address the following issues:

- new consideration of the planning standards, blue and green networks as a way to mitigate urban risks and increase city resilience;
- the territorial risks and fragilities related to mobility of people, goods, knowledge, etc.;
- the housing issue and the need of urban regeneration of the built heritage;
- socio-economical behaviour and the "dilemma" about emergency and prevention economy;
- the city as magnet of the next future's flows (tourism, culture, economy, migration, etc.).

Publishing frequency is four monthly. For this reason, authors interested in submitting manuscripts addressing the aforementioned issues may consider the following deadlines

- first issue: 10th January 2018;
- second issue: 10th April 2018;
- third issue: 10th September 2018.

CALL FOR PAPERS: GENERAL CALL.

Papers in Transport, Land Use and Environment

The Journal welcomes papers on topics at the interdisciplinary intersection of transport and land use, including research from the domains of engineering, planning, modeling, behavior, economics, geography, regional science, sociology, architecture and design, network science, and complex systems

EDITORIAL PREFACE: TEMA JOURNAL OF LAND USE MOBILITY AND ENVIRONMENT 2 (2018)

THE RESILIENCE CITY/THE FRAGILE CITY. METHODS, TOOLS AND BEST PRACTICES

ROCCO PAPA

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The 11th volume of TeMA Journal consecrates the three issues of 2018 to promote the scientific debate on the fragile/resilience city that represents a topic collecting itself all the issues related to the urban risks and referred to the different impacts that an urban system has to face with. Studies useful to improve the urban conditions of resilience represent the aim of our editorial work of this year. The identification of urban fragilities could represent a new first step in order to develop and to propose methodological and operative innovations for the planning and the management of the urban and territorial transformations.

The section "Focus" contains two articles. The first article, titled "Urban commons: social resilience experiences to increase the quality of urban system" by Gulia Esopi (University of Pavia, Italy), defines a specific typology of urban commons and aims to show how these are social resilience-based phenomena that can increase the quality of urban system. The contemporary urban studies debate intends the city as a complex system that interacts with other cities creating a complex global network. This research shows that many of urban common characteristics are social resilience based and they reinforce social component capacities.

The second article "Second law of thermodynamics and urban green infrastructure - A knowledge synthesis to address spatial planning strategies" by Mehrnaz Molavi (University of Guilan, Turkey) outlines the necessity for cities to cope with natural disasters. The case of Lahijan, close to the Caspian Sea is studied with the aim of value the level of its resilience. The performed analyses based on the combination of inferential statistics techniques and the Delphi technique revealed that Lahijan is totally in the low spectrum of resilience. The author conclusions underline the need of supporting and strengthening community-based activities, disaster risk reduction, and capacity increase of institutional adaptability in order to assist Lahijan residents to encounter to the human hazards, natural hazards, and increasing risks resulting from change.

The section "Land Use, Mobility and Environment" collects two articles. The first article, titled "The Value of Urban Density", by Fabio Alberto Hernandez Palacio, Sabrina Scherzer, Yngve Karl Frøyen (Norwegian University of Science and Technology), deals with the relationship between urban density and environmental sustainability, through a study based on real estate values. The case study covers residential property prices in Trondheim, Norway and analyses 23 distinct urban areas for the average price per square meter and three density measures: density of coverage, density of housing units and population density. A simple hedonistic pricing model was used based on 1,255 sales transactions for the period 2014 and 2015 which includes the characteristics of the property, such as the type of property and the age of the property; proximity measures, such as distance to the next school or bus stop; and the three density measures. The model, applied to the complete data set and to the two subsets of the outskirts of Trondheim and the center of Trondheim, shows unexpected but interesting results.

The second article, titled "Applying spaces syntax measures in analysing the spatial structure of street network to understand mobility pattern and land use. - A case of an Indian city, Mysore", by Harcharan Pappu (Sri Venkateshwara College of Architecture, India), debates on the comprehensive application of space syntax techniques in analysing the spatial structure of the street network to an Indian city, Mysore. The study

is done by breaking the structure into components and analyzed using different measures like integration and choice using depth map software. The analysis is then related to the existing mobility pattern and land use to construe how the spatial structure influences the mobility pattern and land use.

The section "Review Pages" defines the general framework of the issue's theme, with an updated focus on websites, publications, laws, urban practices and news and events on the subject of energy reduction consumption in the transport sector. In particular, the Web section by Rosa Morosini describes three web resources of: (i) Corine Land Cover; (ii) Italian National Institute for Environmental Protection and Research and (iii) European Environment Agency. The Books section by Gerardo Carpentieri briefly reviews three relevant books related to the Issues' theme: (i) Land Use Planning for Urban Flood Risk Management; (ii) Building urban resilience: A guide for Red Cross and Red Crescent engagement and contribution and (iii) Smart Planning: Sustainability and Mobility in the Age of Change. The Law section by Maria Rosa Tremiterra keeps readers up to date with comparison between three legislative documents, in order to increase the flood resilience in the EU Member states (Netherland, England and France). The Urban Practices section by Gennaro Angiello presents two case studies for planning for resilience in two mediterranean capitals: (j) Rome and (ii) Athens. The News and Event section by Andrea Tulisi, proposes a selection of conferences on the topic of Big Data as the tool for urban antifragility.