TeMA

Journal of Land Use, Mobility and Environment

This special issue collects a selection of peer-review papers presented at the 8th International Conference INPUT 2014 titled "Smart City: planning for energy, transportation and sustainability of urban systems", held on 4-6 June in Naples, Italy. The issue includes recent developments on the theme of relationship between innovation and city management and planning.

Tema is the Journal of Land use, Mobility and Environment and offers papers with a unified approach to planning and mobility. TeMA Journal has also received the Sparc Europe Seal of Open Access Journals released by Scholarly Publishing and Academic Resources Coalition (SPARC Europe) and the Directory of Open Access Journals (DOAJ).



and sustainability of the urban system



SMART CITY

PLANNING FOR ENERGY, TRANSPORTATION AND SUSTAINABILITY OF THE URBAN SYSTEM Special Issue, June 2014

Published by

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

TeMA is realised 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

Lycence: 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



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 journals in the Areas 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 by their competences. 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, Università degli Studi di Napoli Federico II, Italy

EDITORIAL ADVISORY BOARD

Luca Bertolini, Universiteit van Amsterdam, Netherlands Virgilio Bettini, Università luav di Venezia, Italy Dino Borri, Politecnico di Bari, Italy Enrique Calderon, Universidad Politécnica de Madrid, Spain Roberto Camagni, Politecnico di Milano, Italy Robert Leonardi, London School of Economics and Political Science, United Kingdom Raffaella Nanetti, College of Urban Planning and Public Affairs, United States Agostino Nuzzolo, Università degli Studi di Roma Tor Vergata, Italy Rocco Papa, Università degli Studi di Napoli Federico II, Italy

EDITORS

Agostino Nuzzolo, Università degli Studi di Roma Tor Vergata, Italy Enrique Calderon, Universidad Politécnica de Madrid, Spain Luca Bertolini, Universiteit van Amsterdam, Netherlands Romano Fistola, Dept. of Engineering - University of Sannio - Italy, Italy Adriana Galderisi, Università degli Studi di Napoli Federico II, Italy Carmela Gargiulo, Università degli Studi di Napoli Federico II, Italy Giuseppe Mazzeo, CNR - Istituto per gli Studi sulle Società del Mediterraneo, Italy

EDITORIAL SECRETARY

Rosaria Battarra, CNR - Istituto per gli Studi sulle Società del Mediterraneo, Italy Andrea Ceudech, TeMALab, Università degli Studi di Napoli Federico II, Italy Rosa Anna La Rocca, TeMALab, Università degli Studi di Napoli Federico II, Italy Enrica Papa, University of Amsterdam, Netherlands

Journal of Land Use, Mobility and Environment

This special issue of TeMA collects the papers presented at the 8th International Conference INPUT 2014 which will take place in Naples from 4th to 6th June. The Conference focuses on one of the central topics within the urban studies debate and combines, in a new perspective, researches concerning the relationship between innovation and management of city changing.



CONFERENCE COMMITTEE

Dino Borri, Polytechnic University of Bari, Italy
Arnaldo Cecchini, University of Sassari, Italy
Romano Fistola, University of Sannio, Italy
Lilli Gargiulo, University of Naples Federico II, Italy
Giuseppe B. Las Casas, University of Basilicata, Italy
Agostino Nuzzolo, University of Rome, Italy
Rocco Papa, University of Naples Federico II, Italy
Giovanni Rabino, Polytechnic University of Milan, Italy
Maurizio Tira, University of Brescia, Italy
Corrado Zoppi, University of Cagliari, Italy

SCIENTIFIC COMMITTEE

Emanuela Abis, University of Cagliari, Italy
Nicola Bellini, Institute of Management, Scuola Superiore Sant'Anna Pisa, Italy
Mariolina Besio Dominici, University of Genoa, Italy
Ivan Blecic, University of Sassari, Italy
Dino Borri, Polytechnic University of Bari, Italy
Grazia Brunetta, Polytechnic University of Turin, Italy
Roberto Busi, University of Brescia, Italy
Domenico Camarda, Polytechnic University of Bari, Italy
Michele Campagna, University of Cagliari, Italy
Arnaldo Cecchini, University of Sassari, Italy
Donatella Cialdea, University of Molise, Italy

Valerio Cutini, University of Pisa, Italy, Italy Luciano De Bonis, University of Molise, Italy Andrea De Montis, University of Sassari, Italy

Filippo de Rossi, University of Sannio (Dean of the University of Sannio), Italy

Lidia Diappi, Polytechnic University of Milan, Italy

Isidoro Fasolino, University of Salerno, Italy

Mariano Gallo, University of Sannio, Italy

Lilli Gargiulo, University of Naples Federico II, Italy

Roberto Gerundo, University of Salerno, Italy

Paolo La Greca, University of Catania, Italy

Giuseppe B. Las Casas, University of Basilicata, Italy

Robert Laurini, University of Lyon, France

Antonio Leone, Tuscia University, Italy

Anna Loffredo, Institute of Management, Scuola Superiore Sant'Anna Pisa, Italy

Silvana Lombardo, University of Pisa, Italy

Giovanni Maciocco, University of Sassari, Italy

Giulio Maternini, University of Brescia, Italy



Francesco Domenico Moccia, University of Naples Federico II, Italy Bruno Montella, University of Naples "Federico II" (Director of DICEA), Italy Beniamino Murgante, University of Basilicata, Italy Agostino Nuzzolo, University of Rome, Italy Sylvie Occelli, IRES Turin, Italy Rocco Papa, University of Naples Federico II, Italy Maria Paradiso, University of Sannio, Italy Domenico Patassini, IUAV, Venice, Italy Michele Pezzagno, University of Brescia, Italy Fulvia Pinto, Polytechnic University of Milan, Italy Giovanni Rabino, Polytechnic University of Milan, Italy Giuseppe Roccasalva, Polytechnic University of Turin, Italy Bernardino Romano, University of L'Aquila, Italy Francesco Russo, Mediterranean University Reggio Calabria, Italy Michelangelo Russo, University of Naples Federico II, Italy Ferdinando Semboloni, University of Firenze, Italy Agata Spaziante, Polytechnic University of Turin, Italy Michela Tiboni, University of Brescia, Italy Maurizio Tira, University of Brescia, Italy Simona Tondelli, University of Bologna, Italy Umberto Villano, University of Sannio (Director of DING), Italy Ignazio Vinci, University of Palermo, Italy Corrado Zoppi, University of Cagliari, Italy

LOCAL SCIENTIFIC COMMITTEE

Rosaria Battarra, ISSM, National Research Council, Italy Romano Fistola, DING, University of Sannio, Italy Lilli Gargiulo, DICEA, University of Naples Federico II, Italy Adriana Galderisi, DICEA, University of Naples Federico II, Italy Rosa Anna La Rocca, DICEA, University of Naples Federico II, Italy Giuseppe Mazzeo, ISSM, National Research Council, Italy Enrica Papa, University of Amsterdam, Netherlands

LOCAL ADMINISTRATIVE TEAM

Gennaro Angiello, TeMA Lab, University of Naples Federico II, Italy Gerardo Carpentieri, TeMA Lab, University of Naples Federico II, Italy Stefano Franco, TeMA Lab, University of Naples Federico II, Italy Laura Russo, TeMA Lab, University of Naples Federico II, Italy Floriana Zucaro, TeMA Lab, University of Naples Federico II, Italy



EIGHTH INTERNATIONAL CONFERENCE INPUT 2014

SMART CITY. PLANNING FOR ENERGY, TRANSPORTATION AND SUSTAINABILITY OF THE URBAN SYSTEM

This special issue of TeMA collects the papers presented at the Eighth International Conference INPUT, 2014, titled "Smart City. Planning for energy, transportation and sustainability of the urban system" that takes place in Naples from 4 to 6 of June 2014.

INPUT (Innovation in Urban Planning and Territorial) consists of an informal group/network of academic researchers Italians and foreigners working in several areas related to urban and territorial planning. Starting from the first conference, held in Venice in 1999, INPUT has represented an opportunity to reflect on the use of Information and Communication Technologies (ICTs) as key planning support tools. The theme of the eighth conference focuses on one of the most topical debate of urban studies that combines , in a new perspective, researches concerning the relationship between innovation (technological, methodological, of process etc..) and the management of the changes of the city. The Smart City is also currently the most investigated subject by TeMA that with this number is intended to provide a broad overview of the research activities currently in place in Italy and a number of European countries. Naples, with its tradition of studies in this particular research field, represents the best place to review progress on what is being done and try to identify some structural elements of a planning approach.

Furthermore the conference has represented the ideal space of mind comparison and ideas exchanging about a number of topics like: planning support systems, models to geo-design, qualitative cognitive models and formal ontologies, smart mobility and urban transport, Visualization and spatial perception in urban planning innovative processes for urban regeneration, smart city and smart citizen, the Smart Energy Master project, urban entropy and evaluation in urban planning, etc..

The conference INPUT Naples 2014 were sent 84 papers, through a computerized procedure using the website www.input2014.it . The papers were subjected to a series of monitoring and control operations. The first fundamental phase saw the submission of the papers to reviewers. To enable a blind procedure the papers have been checked in advance, in order to eliminate any reference to the authors. The review was carried out on a form set up by the local scientific committee. The review forms received were sent to the authors who have adapted the papers, in a more or less extensive way, on the base of the received comments. At this point (third stage), the new version of the paper was subjected to control for to standardize the content to the layout required for the publication within TeMA. In parallel, the Local Scientific Committee, along with the Editorial Board of the magazine, has provided to the technical operation on the site TeMA (insertion of data for the indexing and insertion of pdf version of the papers). In the light of the time's shortness and of the high number of contributions the Local Scientific Committee decided to publish the papers by applying some simplifies compared with the normal procedures used by TeMA. Specifically:

- Each paper was equipped with cover, TeMA Editorial Advisory Board, INPUT Scientific Committee, introductory page of INPUT 2014 and summary;
- Summary and sorting of the papers are in alphabetical order, based on the surname of the first author;
- Each paper is indexed with own DOI codex which can be found in the electronic version on TeMA website (www.tema.unina.it). The codex is not present on the pdf version of the papers.



SMART CITY PLANNING FOR ENERGY, TRANSPORTATION AND SUSTAINABILITY OF THE URBAN SYSTEM Special Issue, June 2014

Contents

1.	The Plan in Addressing the Post Shock Conflicts 2009-2014. A First Balance Sheet of the Reconstruction of L'Aquila Fabio Andreassi, Pierluigi Properzi	1-13
2.	Assessment on the Expansion of Basic Sanitation Infrastructure. In the Metropolitan Area of Belo Horizonte - 2000/2010 Grazielle Anjos Carvalho	15-26
3.	Temporary Dwelling of Social Housing in Turin. New Responses to Housing Discomfort Giulia Baù, Luisa Ingaramo	27-37
4.	Smart Communities. Social Innovation at the Service of the Smart Cities Massimiliano Bencardino, Ilaria Greco	39-51
5.	Online Citizen Reporting on Urban Maintenance: A Collection, Evaluation and Decision Support System Ivan Blečić, Dario Canu, Arnaldo Cecchini, Giuseppe Andrea Trunfio	53-63
6.	Walkability Explorer. An Evaluation and Design Support Tool for Walkability Ivan Blečić, Arnaldo Cecchini, Tanja Congiu, Giovanna Fancello, Giuseppe Andrea Trunfio	65-76
7.	Diachronic Analysis of Parking Usage: The Case Study of Brescia Riccardo Bonotti, Silvia Rossetti, Michela Tiboni, Maurizio Tira	77-85
8.	Crowdsourcing. A Citizen Participation Challenge Júnia Borges, Camila Zyngier	87-96
9.	Spatial Perception and Cognition Review. Considering Geotechnologies as Urban Planning Strategy Júnia Borges, Camila Zyngier, Karen Lourenço, Jonatha Santos	97-108

10.	Dilemmas in the Analysis of Technological Change. A Cognitive Approach to Understand Innovation and Change in the Water Sector Dino Borri, Laura Grassini	109-127
11.	Learning and Sharing Technology in Informal Contexts. A Multiagent-Based Ontological Approach Dino Borri, Domenico Camarda, Laura Grassini, Mauro Patano	129-140
12.	Smartness and Italian Cities. A Cluster Analysis Flavio Boscacci, Ila Maltese, Ilaria Mariotti	141-152
13.	Beyond Defining the Smart City. Meeting Top-Down and Bottom-Up Approaches in the Middle Jonas Breuer, Nils Walravens, Pieter Ballon	153-164
14.	Resilience Through Ecological Network Grazia Brunetta, Angioletta Voghera	165-173
15.	ITS System to Manage Parking Supply: Considerations on Application to the "Ring" in the City of Brescia Susanna Bulferetti, Francesca Ferrari, Stefano Riccardi	175-186
16.	Formal Ontologies and Uncertainty. In Geographical Knowledge Matteo Caglioni, Giovanni Fusco	187-198
17.	Geodesign From Theory to Practice: In the Search for Geodesign Principles in Italian Planning Regulations Michele Campagna, Elisabetta Anna Di Cesare	199-210
18.	Geodesign from Theory to Practice: From Metaplanning to 2nd Generation of Planning Support Systems Michele Campagna	211-221
19.	The Energy Networks Landscape. Impacts on Rural Land in the Molise Region Donatella Cialdea, Alessandra Maccarone	223-234
20.	Marginality Phenomena and New Uses on the Agricultural Land. Diachronic and Spatial Analyses of the Molise Coastal Area Donatella Cialdea, Luigi Mastronardi	235-245
21.	Spatial Analysis of Urban Squares. 'Siccome Umbellico al corpo dell'uomo' Valerio Cutini	247-258

22.	Co-Creative, Re-Generative Smart Cities. Smart Cities and Planning in a Living Lab Perspective 2 Luciano De Bonis, Grazia Concilio, Eugenio Leanza, Jesse Marsh, Ferdinando Trapani	259-270
23.	The Model of Voronoi's Polygons and Density: Diagnosis of Spatial Distribution of Education Services of EJA in Divinópolis, Minas Gerais, Brazil Diogo De Castro Guadalupe, Ana Clara Mourão Moura	271-283
24.	Rural Architectural Intensification: A Multidisciplinar Planning Tool Roberto De Lotto, Tiziano Cattaneo, Cecilia Morelli Di Popolo, Sara Morettini, Susanna Sturla, Elisabetta Venco	285-295
25.	Landscape Planning and Ecological Networks. Part A. A Rural System in Nuoro, Sardinia Andrea De Montis, Maria Antonietta Bardi, Amedeo Ganciu, Antonio Ledda, Simone Caschili, Maurizio Mulas, Leonarda Dessena, Giuseppe Modica, Luigi Laudari, Carmelo Riccardo Fichera	297-307
26.	Landscape Planning and Ecological Networks. Part B. A Rural System in Nuoro, Sardinia Andrea De Montis, Maria Antonietta Bardi, Amedeo Ganciu, Antonio Ledda, Simone Caschili, Maurizio Mulas, Leonarda Dessena, Giuseppe Modica, Luigi Laudari, Carmelo Riccardo Fichera	309-320
27.	Sea Guidelines. A Comparative Analysis: First Outcomes Andrea De Montis, Antonio Ledda, Simone Caschili, Amedeo Ganciu, Mario Barra, Gianluca Cocco, Agnese Marcus	321-330
28.	Energy And Environment in Urban Regeneration. Studies for a Method of Analysis of Urban Periphery Paolo De Pascali, Valentina Alberti, Daniela De Ioris, Michele Reginaldi	331-339
29.	Achieving Smart Energy Planning Objectives. The Approach of the Transform Project llaria Delponte	341-351
30.	From a Smart City to a Smart Up-Country. The New City-Territory of L'Aquila Donato Di Ludovico, Pierluigi Properzi, Fabio Graziosi	353-364
31.	Geovisualization Tool on Urban Quality. Interactive Tool for Urban Planning Enrico Eynard, Marco Santangelo, Matteo Tabasso	365-375

32.	Visual Impact in the Urban Environment. The Case of Out-of-Scale Buildings Enrico Fabrizio, Gabriele Garnero	377-388
33.	Smart Dialogue for Smart Citizens: Assertive Approaches for Strategic Planning Isidoro Fasolino, Maria Veronica Izzo	389-401
34.	Digital Social Networks and Urban Spaces Pablo Vieira Florentino, Maria Célia Furtado Rocha, Gilberto Corso Pereira	403-415
35.	Social Media Geographic Information in Tourism Planning Roberta Floris, Michele Campagna	417-430
36.	Re-Use/Re-Cycle Territories: A Retroactive Conceptualisation for East Naples Enrico Formato, Michelangelo Russo	431-440
37.	Urban Land Uses and Smart Mobility Mauro Francini, Annunziata Palermo, Maria Francesca Viapiana	441-452
38.	The Design of Signalised Intersections at Area Level. Models and Methods Mariano Gallo, Giuseppina De Luca, Luca D'acierno	453-464
39.	Piano dei Servizi. Proposal for Contents and Guidelines Roberto Gerundo, Gabriella Graziuso	465-476
40.	Social Housing in Urban Regeneration. Regeneration Heritage Existing Building: Methods and Strategies Maria Antonia Giannino, Ferdinando Orabona	477-486
41.	Using GIS to Record and Analyse Historical Urban Areas Maria Giannopoulou, Athanasios P. Vavatsikos, Konstantinos Lykostratis, Anastasia Roukouni	487-497
42.	Network Screening for Smarter Road Sites: A Regional Case Attila Grieco, Chiara Montaldo, Sylvie Occelli, Silvia Tarditi	499-509
43.	Li-Fi for a Digital Urban Infrastructure: A Novel Technology for the Smart City Corrado lannucci, Fabrizio Pini	511-522
44.	Open Spaces and Urban Ecosystem Services. Cooling Effect towards Urban Planning in South American Cities Luis Inostroza	523-534



45. From RLP to SLP: Two Different Approaches to Landscape Planning Federica Isola, Cheti Pira	535-543
46. Revitalization and its Impact on Public. Space Organization A Case Study of Manchester in UK, Lyon in France and Łódź in Poland Jarosław Kazimierczak	545-556
47. Geodesign for Urban Ecosystem Services Daniele La Rosa	557-565
48. An Ontology of Implementation Plans of Historic Centers: A Case Study Concerning Sardinia, Italy Sabrina Lai, Corrado Zoppi	567-579
49. Open Data for Territorial Specialization Assessment. Territorial Specialization in Attracting Local Development Funds: an Assessment. Procedure Based on Open Data and Open Tools Giuseppe Las Casas, Silvana Lombardo, Beniamino Murgante, Piergiuseppe Pontrandolfi, Francesco Scorza	581-595
50. Sustainability And Planning. Thinking and Acting According to Thermodinamics Laws Antonio Leone, Federica Gobattoni, Raffaele Pelorosso	597-606
51. Strategic Planning of Municipal Historic Centers. A Case Study Concerning Sardinia, Italy Federica Leone, Corrado Zoppi	607-619
52. A GIS Approach to Supporting Nightlife Impact Management: The Case of Milan Giorgio Limonta	621-632
53. Dealing with Resilience Conceptualisation. Formal Ontologies as a Tofor Implementation of Intelligent Geographic Information Systems Giampiero Lombardini	ool 633-644
54. Social Media Geographic Information: Recent Findings and Opportunities for Smart Spatial Planning Pierangelo Massa, Michele Campagna	645-658
55. Zero Emission Mobility Systems in Cities. Inductive Recharge System Planning in Urban Areas Giulio Maternini, Stefano Riccardi, Margherita Cadei	659-669

56.	Urban Labelling: Resilience and Vulnerability as Key Concepts for a Sustainable Planning Giuseppe Mazzeo	671-682
57.	Defining Smart City. A Conceptual Framework Based on Keyword Analysis Farnaz Mosannenzadeh, Daniele Vettorato	683-694
58.	Parametric Modeling of Urban Landscape: Decoding the Brasilia of Lucio Costa from Modernism to Present Days Ana Clara Moura, Suellen Ribeiro, Isadora Correa, Bruno Braga	695-708
59.	Smart Mediterranean Logics. Old-New Dimensions and Transformations of Territories and Cites-Ports in Mediterranean Emanuela Nan	709-718
60.	Mapping Smart Regions. An Exploratory Approach Sylvie Occelli, Alessandro Sciullo	719-728
61.	Planning Un-Sustainable Development of Mezzogiorno. Methods and Strategies for Planning Human Sustainable Development Ferdinando Orabona, Maria Antonia Giannino	729-736
62.	The Factors Influencing Transport Energy Consumption in Urban Areas: a Review Rocco Papa, Carmela Gargiulo, Gennaro Angiello	737-747
63.	Integrated Urban System and Energy Consumption Model: Residential Buildings Rocco Papa, Carmela Gargiulo, Gerardo Carpentieri	749-758
64.	Integrated Urban System and Energy Consumption Model: Public and Singular Buildings Rocco Papa, Carmela Gargiulo, Mario Cristiano	759-770
65.	Urban Smartness Vs Urban Competitiveness: A Comparison of Italian Cities Rankings Rocco Papa, Carmela Gargiulo, Stefano Franco, Laura Russo	771-782
66.	Urban Systems and Energy Consumptions: A Critical Approach Rocco Papa, Carmela Gargiulo, Floriana Zucaro	783-792
67.	Climate Change and Energy Sustainability. Which Innovations in European Strategies and Plans Rocco Papa, Carmela Gargiulo, Floriana Zucaro	793-804



68.	Bio-Energy Connectivity And Ecosystem Services. An Assessment by Pandora 3.0 Model for Land Use Decision Making Raffaele Pelorosso, Federica Gobattoni, Francesco Geri, Roberto Monaco, Antonio Leone	805-816
69.	Entropy and the City. GHG Emissions Inventory: a Common Baseline for the Design of Urban and Industrial Ecologies Michele Pezzagno, Marco Rosini	817-828
70.	Urban Planning and Climate Change: Adaptation and Mitigation Strategies Fulvia Pinto	829-840
71.	Urban Gaming Simulation for Enhancing Disaster Resilience. A Social Learning Tool for Modern Disaster Risk Management Sarunwit Promsaka Na Sakonnakron, Pongpisit Huyakorn, Paola Rizzi	841-851
72.	Visualisation as a Model. Overview on Communication Techniques in Transport and Urban Planning Giovanni Rabino, Elena Masala	853-862
73.	Ontologies and Methods of Qualitative Research in Urban Planning Giovanni Rabino	863-869
74.	City/Sea Searching for a New Connection. Regeneration Proposal for Naples Waterfront Like an Harbourscape: Comparing Three Case Studies Michelangelo Russo, Enrico Formato	871-882
75.	Sensitivity Assessment. Localization of Road Transport Infrastructures in the Province of Lucca Luisa Santini, Serena Pecori	883-895
76.	Creating Smart Urban Landscapes. A Multimedia Platform for Placemaking Marichela Sepe	897-907
77.	Virtual Power Plant. Environmental Technology Management Tools of The Settlement Processes Maurizio Sibilla	909-920
78.	Ecosystem Services and Border Regions. Case Study from Czech – Polish Borderland Marcin Spyra	921-932
79.	The Creative Side of the Reflective Planner. Updating the Schön's Findings Maria Rosaria Stufano Melone, Giovanni Rabino	933-940



80.	Achieving People Friendly Accessibility. Key Concepts and a Case Study Overview Michela Tiboni, Silvia Rossetti	941-951
81.	Planning Pharmacies: An Operational Method to Find the Best Location Simona Tondelli, Stefano Fatone	953-963
82.	Transportation Infrastructure Impacts Evaluation: The Case of Egnatia Motorway in Greece Athanasios P. Vavatsikos, Maria Giannopoulou	965-975
83.	Designing Mobility in a City in Transition. Challenges from the Case of Palermo Ignazio Vinci, Salvatore Di Dio	977-988
84.	Considerations on the Use of Visual Tools in Planning Processes: A Brazilian Experience Camila Zyngier, Stefano Pensa, Elena Masala	989-998

TeMA Journal of Land Use.

Journal of Land Use, Mobility and Environment

Tema input 2014 Print ISSN 1970-9889, e- ISSN 1970-9870

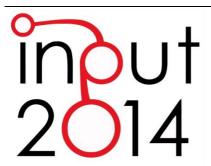
DOI available on the online version

Licensed under the Creative Commons Attribution Non Commercial License 3.0 www.tema.unina.it

SPECIAL ISSUE

Eighth International Conference INPUT Smart City - Planning for Energy, Transportation and Sustainability of the Urban System

Naples, 4-6 June 2014



SMART MEDITERRANEAN LOGICS

OLD - NEW DIMENSIONS AND TRANSFORMATIONS OF TERRITORIES AND CITES-PORTS IN MEDITERRANEAN

EMANUELA NAN

University of Genoa e-mail: nan.emanuela@gmail.com

ABSTRACT

The land coast, with particular emphasis the port-city, are in fact used more and more like a menu in which different users increasingly move freely according to their needs.

The new definition parameters with respect to which the landscapes are recognizable, articulating configurations, immutable, and not concluded, but on the contrary, variables are always open and more leads, not the placement of functions, but the interaction between subjects, and actually pushed social, cultural, political and economic.

The port city now seems more like a miscellany, and a composite variable, the definition of which combine multiple devices and whose understanding and operational management appears to be no longer in the perimeter of registers and formal, but the identification of rules and tactics logical drive and able to predict particular outcomes and the evolution of the different dynamics and vocations.

'Dream City', 'Dream Lands' and 'Dream Country' will constitute the new benchmarks in the definition of geographies based on imagination, perception and use of spaces and scenarios from the sensitivity of each individual and class user, until the size of the global imaginary fantasy, with respect to which space, urbanity and territories are distinguished as 'complementary' or 'complementary' depending on the specific 'action brands' and 'areas of opportunity'.

KEYWORDS

Mediterranean, Desire territories, New logics

1 INTRODUCTION

The territorial geographies are determinate today, more and more, not by spatial and temporal factors but, in fact, by informational and relational ones, in respect to which, the urban maps and territories are perceived as distorted on compressions and expansions.

The new definition parameters, respect to which the landscapes are recognizable, articulating not concluded and immutable but open and variable configurations, are increasingly derivations, not of functions placement, but of the interaction between subjects, social, cultural, political and economic realities and incentives.

Topics and times at the base of territories structure and definition are, in fact, profoundly changed, the processes speed makes long-term planning operations, in fact, useless and misleading, and meanwhile the multitude of demands and requirements impose an ever-increasing interventions transformability and inflection.

The landscape now appears more like a miscellany, composite and variable, defined with multiple devices and whose understanding and operational management appears to be no longer on registers and formal context perimeter, but on logical rules and tactics identification, capable to driving and predicting possible outcomes and dynamic and different vocations evolution.

These processes give rise to scenarios dilatation and global interconnections proliferation for which the landscapes design and management depends no longer today only on the needs of its inhabitants, but also, and in a non-negligible way, on the perspectives and exchange identification and understanding of logics imposed by new needs and feelings of those who have access to and flows in these territories even temporarily.

2 LOGICAL GEOGRAPHY OF DESIRE TERRITORIES

So the landscape are configured today under an energy field action determined by habits, vocations, aspirations and wills, imposed and proposed, whether by individuals, groups, than by communities.



Fig. 1 Crumpled City

The multiplicity of instances, in the globalization era, might suggest a landscapes saturation with a degenerating process leading at specific identities dissolution. In reality this dynamic don't degrade the landscape, but rather enriches and strengthens the landscapes. The landscapes are so active subjects of a territorial dimension moving from rigid definition in areas and facilities to the soft definition in devices and connections.

We are assisting to the transition from:

Logic of Stress > Logic of Empathies.

The return to nature desire inevitably introduces changes in the relationship between solids and voids turning the "green" from being just a urban complement, infiltrated and often almost accidental, in an important and articulated organization and space-time modulation device able to modulate it, to interact and interface with weight and percentage surface to the built.

The strengthened natural system not only becomes a potential alternative to the infrastructure system in favour of a pedestrian mobility, bicycle or any other alternative to the car, but in a way even more interesting, it assumes the role of a reliever and a diaphragm replacing limits and tensions for empathy and exchange between the parties.

The urban limit, however, is dissolving completely and permanently in the landscape and in the same way the boundary between public space and building, in terms of area and permeability, tends to dissolve.

Hybridization, in this view, seems to impose itself strongly as a new way of resolving spatial and formal disputes, mingling and overlapping, prefiguring urban realities made of multi-purpose convertible and usable spaces and systems, at the same time in a different way, and objects as buildings, infrastructure, social spaces and energy sources.

Logic of Agreements > Logic of Resonances

The revaluation of each single reality enriches the territory defining it as a set of independent and, at the same time, consistent and concurrent specificities in the definition of the set.

This constitutes an important shift in territory design and action because it inserts and gives role also to minor realities, while the already worthy recognized areas are, in this way, unmarked, freed by an excessive pressure, which redistributes itself in adjacent areas, recovering breath and quality.

Constantly changing, the logical dynamics clarification and understanding involve the choice and the proposition of directions able to determine and drive the renewal and the interface between different territory's devices, outlining new configurations, prepositions, evolving and alternatives geographies of landscape.

In this logical context, the landscape takes shape, therefore, in new geographies no longer tied to the traditional categories of natural and artificial or urban and agricultural. In the new dimension, the territory, in fact, founds these natures mixed and overwritten and, as a generator and, at the same time, scenario of forces acting on different levels distances and times, distinguishes and organizes itself, however, respect to their valences:

- Propulsive, as a generator of new arrangements, configurations;
- Potential, as reinforcement of situations and processes already in place;
- Connective, as an articulating binder not only at physical level, but also cognitive;
- Suspensive, as a pause or a buffer.

While the oscillation of these values respect to different planes, distances and times of investigation in which the landscapes are defined in their complexity, reveals a certain relativity of the modern territories, at least in their definition, this does not match a contingent or contradictory character, in fact, the modern

landscapes are assuming different geographies compared to the operating interpretation, but all different propositions are summarized in the overall configuration of each landscape.

A striking example of all these changes is provided, undoubtedly, by the Mediterranean coastal system: here the landscape has always had a determinant role, taking always shape as a factor in the territory's definition; according to Braudel, in fact, extending between the mountains and the sea, vines and olive trees mark its boundaries, and it is perhaps for this reason that here more than anywhere else, undoubtedly, it shows the logic change effects.

At first sight, the basin looks like, in fact, a kaleidoscopic, complex and articulate scenarios system with undefined contours where geographies mingle, overlap and fade to the point that define them appears difficult, if not misleading, here more than anywhere else detects Gausa:

"ancient geographical borders, aimed at curbing the new emerging city, gave way, almost suddenly, in front of various scales of a new actions field, much more complex, elusive and vital, in which latent nucleus and consolidated nodes, uncertain margins and friction areas, consolidated fabrics and unfinished textures are living together, announcing the new hybrid and gradually ambivalent condition (between natural and artificial) of a new urban landscape planning" (Gausa 2010).

New scenarios result in new propositions, and then the new logics become the projects, researches and visions engine as Multi-Hiper Barcelona-Catalunya, Picity, Città Adriatico, ... where the landscape, as active element, territorial converter, defines the set in

"a complex array of 'point' and 'counterpoint' - of intertwined fingers – reported to basic, flexible and intermittent standards, open to possible changes but always aware of the tactic disposition of the development and relation spaces" (Gausa 2010).

3 MEDITERRANEAN TERRITORY AND CITY-PORT

The Mediterranean coasts possess an accumulation of exceptional urban places that are uniquely rich, layered and complex, and whose physical and geographical features have enabled them to play a fundamental role in the development of civilisations. The port cities around the Mediterranean are highly sophisticated artefacts of major heritage value and are the outcome of a process dating back to the beginning of time but also expressing the varied, many-sided present day as well as looking forward to the future.

But the complex connotations of this urban fabric cannot simply be explained as a consequence or a product of the interaction between the morphology of the Mediterranean territory, the evolution of a single civilisation, or the result of applying different rules. More interestingly, they are the end product of contaminations and cross-fertilisations that were mainly spontaneous and peaceful and that came about thanks to the contacts, exchanges and interchanges between the various populations and cultures of the basin. Because of these processes, which took place over time and across cultures, each Mediterranean port city developed its own identity and each one is completely different from the others, whilst at the same time being undeniably and indissolubly connected to them as an inextricable part of a whole system. For centuries the relationships between these various urban agglomerations have been defined by describing the differences and analogies between their particular features and stylistic elements. But in the face of today's ongoing, rapid transformations, we may now need to think about this from a different perspective, in terms of a more complex dimension that refers to the propositions and rules that currently define this contemporary urban fabric, whether internally – dealing with its own dynamics and needs – or externally, insofar as it is latently an interconnected whole even though its parts are unique and particular.

These implicit, immanent interconnections between the coastal urban fabrics of the Mediterranean, as they are commonly perceived and recognised, cannot be explained by or limited exclusively to the recurrence of typological or formal models (which are also found in non-Mediterranean areas) nor can they be given a simple geographic explanation. Instead, they seem to imply and be the expression of a much more significant rationale that continues to exist, even in the face of the distortions that are being generated by current processes.

This intensification of the networks of physical, economic and cultural exchange have gradually led to a reduction of distances; maps and domains are increasingly being defined in terms of compression and saturation. Since it is the aim of these dynamics to restructure and define the whole world as a single global network, it might have been expected that the Mediterranean and its coastal urban structures would have lost their role as Europe's centre of gravity, and become peripheral. But on the contrary, thanks to the systemic reality that defines and regulates the Mediterranean basin as a unique whole and – at the same time – as a multiple corollary of particular individual features, it has reconfirmed its position and has indeed strengthened it, and has become the most important basin for receiving the inward flows of all the migratory currents that relate to tourism, new residence, immigration, and work.

The land coast, with particular emphasis the Mediterranean port-city, are used more and more like a menu in which different users increasingly move freely according to their needs.

The new definition parameters with respect to which the landscapes are recognizable, articulating configurations, immutable, and not concluded, but on the contrary, variables are always open and more leads, not the placement of functions, but the interaction between subjects, and actually pushed social, cultural, political and economic.

The port city now seems more like a miscellany, and a composite variable, the definition of which combine multiple devices and whose understanding and operational management appears to be no longer in the perimeter of registers and formal, but the identification of rules and tactics logical drive and able to predict particular outcomes and the evolution of the different dynamics and vocations.

'Dream City', 'Dream Lands' and 'Dream Country' will constitute the new benchmarks in the definition of geographies based on imagination, perception and use of spaces and scenarios from the sensitivity of each individual and class user, until the size of the global imaginary fantasy, with respect to which space, urbanity and territories are distinguished as 'complementary' or 'complementary' depending on the specific 'action brands' and 'areas of opportunity'.

The concepts of limit and shape related to the determination of urban systems have lost their meaning and sense in the face of current processes.

Topics and times at the base of the structure and definition of the territories are, in fact, profoundly changed the speed of the process makes it, in fact, useless and misleading operations of long-term planning, while the multitude of demands and pressures require ever-increasing convertibility and variability interventions.

The area, if some time is taken on the meaning of the integrated system, now looks more like a mixture, composite and variable definitions which contribute to a variety of devices and whose understanding and operational management appears to be no longer in the scope of records and formal, but the identification of logical rules and tactics to guide and predict the outcome and development of the different dynamics and vocations

The urban face of these dynamics, can and must, therefore, still play a key role in the structuring and establishment of territories in general and urban areas in particular, but not with more radical actions and bakery additives, as with the renewal of propositions, concepts and applications.

If the whole country is today under the action of an energy field which is constantly changing, the planner's action, can no longer be in control with a static, fixed design, but which includes the development and understanding of logical dynamics of choice and the proposition becomes the addresses of those to be determined, driving, the renewal of the various interface devices spatial convertible new geographies and emerging alternatives, in which the response to the problems of sustainability is not a limit, but as resource capable of providing answers to the needs of daily living.

The landscape, in that sense, it seems, in fact, become more and more potential and power to influence the definition of plans and strategies. The growing attention to ecology, the willingness to give up resources and polluting the turning tourism and economic interests, in general, in contexts in which natural and artificial environments are showing more and more comprehensive, extensive and branched, is that if the past have been the settlements, with their development, to lead the transformation of the territories, today, are without doubt the landscape.

Branching and infiltrating the settlements and increasingly taking the role of the devices themselves, while over land and in the system, such as connection networks, like infrastructure, and as structural factors and structuring, the landscapes become, today, in the articulation of green, private and public, wild, agricultural and urban water, river or sea and also built, which is full of gaps, the new ordering element and link the different contexts and realities.

Today's dynamics and processes and as compared to other more technologically evolved or more structurally functional systems and scenarios, each of these Mediterranean port-cities seems to be maintaining its peculiarities and upholding the importance of its particular role in relation to the wider world geography, whilst identifying an 'increased' complexity that is the consequence of a genetic, intrinsic and permanent predisposition to embrace an 'open', flexible, but always dynamically coherent evolution.

Clementi looks like the coasts of the Mediterranean connote, in this context, logic, peculiarly for the fact that "for hundreds of kilometers, rooted and nomadic populations intersect at different times of the day, week, seasons, places that do not are designed for those who live there, but to pander to the processes of a market, a tourist economy more competitive" (Clementi 1995) .

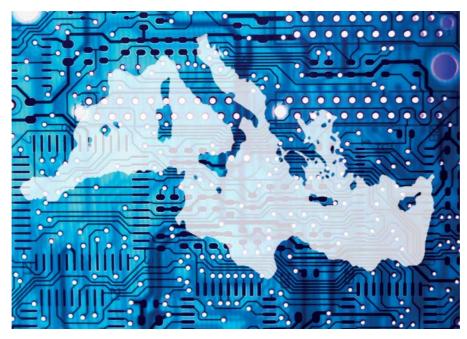


Fig. 2 Mediterranean area as network

It 'clear that today in the design and management of the different scenarios that define the Mediterranean coast are not only important from the needs and desires of the population stable, which also have less and less, but also and increasingly, identification and understanding of perspectives and logical changes that are imposed by new needs and sensitivities of who joins and uses only temporarily and partially this space.

Tourism, in this context, although it always plays an important role, it has acquired and is acquiring an ever more decisive, revealing values and meanings increasingly varied and complex, well beyond the limited and traditional view of seasonal-related practices for bathing.

The economic importance coated, for the temporary Mediterranean coastal areas and variety of users is the fact that a major if not the first goals of the actions of transformation today is undoubtedly increase of palatability, by creating expectations and ease of enjoyment for an ever increasing number of subjects.

If the Mediterranean was once a system of relational devices and is now a system of trans-devices and other devices (devices of/between/among/with/in devices), today more than ever it presents itself as the theatre of excesses: an intricate system of correspondences in which each port-city, within itself, exhibits the variations of relational logics that engage and connect all scales, the whole basin, and the global system, in terms of its non-spatial, but international, proximity or distance from the others.

The Mediterranean port cities, which are linked not merely by formal similarities (or by their similarities of form), but with respect to a number of key concepts (their interactions, exchanges, dependencies) in a more underlying, intrinsic way, can be identified and defined using a logical analogy according to which as the system of the Mediterranean basin they are something like a biological organism. In this different perspective they reveal themselves to be perfect space-systemic workshops whose greater or lesser complexity of interconnectedness defines the Mediterranean itself as a relational phenomenological model that embodies, in summary form, the logics and relationships of the global network as a whole.

4 CONCLUSION

In the simultaneous concomitances and competitive links of different territorial/urban situations and their demands, their rapid variation over time, and faced with the now obvious need for sustainability that the economic crisis has rendered mandatory, today's contradictory, de-structured and changeable circumstances are bringing about an ever-increasing, ever-faster flexibility and transformability of paradigms that can no longer be regarded as models for rupturing ancient equilibriums, structures, and organizations in a logical perspective markedly different from the past, but as a re-structuring of their coherence, interconnectedness and continuity, in and between the various urbanized settings and landscapes.

In the Mediterranean regions is evident, therefore, perhaps more than elsewhere, what we remember Ricci as emphasizing "Landscape and Environment Society are the great themes of ethical confrontation, economic and political crisis after. The culture of the development plan can't remain insensitive or to pretend that these problems do not overwhelm forcing her to profound changes.

In few years the global crisis has brought forth a different sense of social values and economic changes that the objectives of the change. A new geography of desire is changing so fast development processes that produces the crisis itself in the economic and cultural aggregates or more resistant to the forces of change, making them suddenly old, out of time.

The direct relationship between activities and places is no longer a necessary condition. Cities tend to lose a physical connotation defined to assume the size of the fluid fields of relationships. Reduces the need of land, intended as a space to move and communicate, increases the demand for "security" than the size of environmental risk and significantly increases the need for landscapes in which to live and identify with.

The recent economic and energy crisis is changing decisively the way of thinking about the future and its forms" (Ricci 2012) .

The different geographies of desire show, so, the articulation of different territories according to speed and capable of activating cycles and inter-turn, according to specific purposes and contexts, spaces, links and devices, thus defining new tactics choice of actions in the interface and interpolation processing with respect to the different proposals and demands imposed on the culture and lifestyle needs.

If the new size of the landscape is therefore on the scale today, one switch, the plurality of complexity and geographies through which it defines, in this sense, are nothing but the expression of the complexity of the interactions, not only within the unfolding of each particular scenario, but especially in the dialogue between local and global.

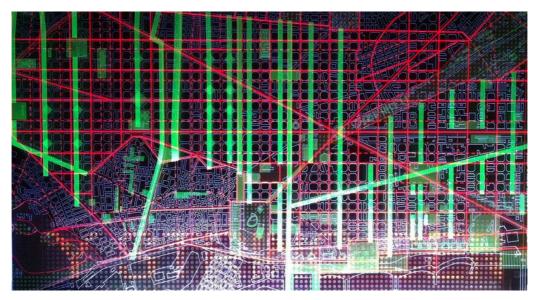


Fig. 3 Barcelona - Multi-string City (project by Gausa-Raveau Arcquitecture and GicLab UNIGE)

An increased size, which makes the territory similar to a network, a network, in which the vertical and transverse connections have assumed much more strength and valence of the horizontal ones, so that, today affects more timely a transformation on the whole system that the contrary.

The micro-scale and large-scale rediscover and reacquire thus their centrality in the triumph of localism and the landscape is strengthened and enriched by new instances of self-feeding it into a virtuous circle.

The rapidly evolving urban dynamics increasingly require us to rethink real, perceived, and lived spaces in the awareness that representing the environment on the basis of subjective perceptions is not only a way of organizing behavior in a territory but that in the same sense, territories themselves become platforms for personal decisions by users who according to their own needs, interests, and desires are in ever more independent ways defining new geographies and systematic.

The Mediterranean port cities, which are linked not merely by formal similarities (or by their similarities of form), but with respect to a number of key concepts (their interactions, exchanges, dependencies) in a more underlying, intrinsic way, can be identified and defined using a logical analogy according to which as the system of the Mediterranean basin they are something like a biological organism. In this different perspective they reveal themselves to be perfect space-systemic workshops whose greater or lesser complexity of interconnectedness defines the Mediterranean itself as a relational phenomenological model that embodies, in summary form, the logics and relationships of the global network as a whole.

On the one hand because of their structural complexity, their internal mixed, and their strong interactivity within (and with respect to) the basin as a system, and on the other because of their strong desire to affirm themselves and be protagonists within (and with respect to) the global level, the Mediterranean territories show that without any loss of meaning they can fully intercept and absorb the various logical and use-related modifications imposed by today's dynamics and equally, in this process, can reveal that in response to the new demands and stresses they are able to suggest, develop, and propose paradigmatic scenarios and tactics that are expressed in the conjunction, conversion, harmonization and completion of the existing, whether or not it has heritage value.

REFERENCES

AAVV. (1995), Città Mediterranee, in Mediterraneo. Città, territorio, economie alle soglie del XXI secolo, Cresme, Roma.

Carta, M. (1999), L'armatura culturale del territorio : il patrimonio culturale come matrice di identità e strumento di sviluppo, Franco Angeli edizioni, Milano.

Ciorra, P. (2012), "Mediterraneità adriatica", in Gausa M., Ricci M., Canessa N., Marengo M., Nan E. (eds.), *Med.Net.IT REP01*, Trento/Barcellona.

Febvre, L. (1949), La Terre et l'evolution humain. Introduction geographique à l'histoire, Albin Miche, Parigi.

Gausa Navarro, M. (2012), "Operazioni di induzione", in Mont in Coast, Corso Internazionale, Montpellier.

Gausa Navarro, M. (2010), Open. Espacio Tiempo Información, ACTAR, Barcellona.

Gausa Navarro, M. (2009), Multi-Barcelona. Hiper-Catalunya, List, Trento/Barcellona.

Gasparrini, C. (2011), "Città da riconoscere e reti eco-paesaggistiche", PPC, 25/26.

Lopez, R.S. (2002), Una società Mediterranea, Bompiani, Milano.

Pace, G. (1995), "The Metropolitan Cities Within Mediterranean Area", relazione al Seminario Scientifico Napoli-Istanbul: *A Comparative Research* presso la Yildiz Technical University, Istanbul.

Ricci, M. (2012), New Paradigm, LIST, Trento/Barcellona.

Violi, P. Lo Russo, A.M. (2011), Effetto Med. Immagini discorsi, luoghi, Fausto Lupetti, Milano.

IMAGES SOURCES

Fig. 1: Crumpled City

Fig. 2: Mediterranean area as network

Fig. 3: Barcelona - Multi-string City (project by Gausa-Raveau Arcquitecture and GicLab UNIGE)

AUTHOR PROFILE

Emanuela Nan

She graduated in 2006 from the Faculty of Architecture in Genoa, she was PhD with European qualification in 2012 with thesis: "Megalomaninteligent. Mediterranean cities between ancient genomes and new paradigms" part of Med.Net research funded by the Company of San Paolo of Turin. She developed part of this research work in Barcelona collaborating with Inteligent Coast. She has been working in the Polytechnic School of Genoa in several research

projects and teaching in different courses on urban planning and architecture. She has been collaborating with IAAC of Barcelona to presentation and development of European research. She has been participating and/or collaborating many conferences, events and congress. She is author of different articles in books and journals.

The most important and recent articles to remember in this relation are:

Nan Emanuela (2013), "Megalomaninteligenti: le città mediterranee tra antichi genomi e nuovi paradigmi", in di Gausa Navarro M., Ricci M. e Scaglione P., a cura di Nan E. e Canessa N. V. e Marengo M., *AUM01 Atlante Urbano Mediterraneo 01*, Trento/Barcellona.

Nan Emanuela (2013), "Nuovi processi nuova programmazione. Eterotopie ed eterocronie nelle dinamiche del mutamento degli odierni territori urbani mediterranei", in di Gausa Navarro M., Ricci M. e Scaglione P., a cura di Nan E. e Canessa N. V. e Marengo M., *AUM01 Atlante Urbano Mediterraneo 01*, Trento/Barcellona.

Nan Emanuela (2013), Rinaturactivazione urbana nel Mediterraneo: nuove strategie da antichi genomi / Urban rinaturactivation in Mediterranean: new strategy from ancian genome, n2, Vol6, TRIA, Napoli.

Nan Emanuela (2013), "La rinaturactivazione energetica della nuova green dimension dei territori mediterranei / Energy renturactivation of the mediterra£nean region new green dimension", *Monograph.research R.E.D.S Rome Ecological Design Symposium*, Vol 5, List Editore, Trento.