

Introduction

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This Special Issue of PLURIMONDI journal titled "*e-agorà | e-ayogá for the transition toward resilient communities*", proposes a deepening of topics that came after from the International Conference on Innovation in Urban and Regional Planning held (INPUT 2016), held in Turin in September 2016. In fact, here we have the pleasure of hosting and publishing selected and extended papers version of the works presented in the 9th International Conference on Innovation in Urban and Regional Planning.

INPUT 2016 aimed at raising a comprehensive spectrum of new and interdependent problems showing a multidisciplinary character and extends the horizon over which the city growth strategies and regional development strategies are defined. The Conference represented an opportunity to provide innovative and original contribution to the on-going debate on the Innovation and the use of information and communication technology (ICT) in planning, management and evaluation issues, as well as to improve the process of knowledge acquisition, by means of the development of new techniques and methods. The file rouge that joins these contributions is about the strenuous search for analysis tools, knowledge and decision support that apply to the reading of the territory, to its interpretation and to the decision-making processes for the organization and the territorial environmental planning able to offer the possibility of understanding and managing increasingly

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better what is in the environment entrusted to us. All these knowledge and technological tools are intended to look toward a shared perspective, i.e., the transition toward resilient communities. By reading these papers the need for a deep understanding of the events in the natural and anthropic environment system clearly arises, at the same time revealing the need to make all the analysis data available and to be able to weave them together, so as to achieve integrated and conscious planning and management choices. Let's now have some closer look at the papers included in the present Plurimondi issue.

The use of data sources in spatial planning, design, and decision making, focusing in particular on recent advanced user-generated contents and enabling technologies is applied to geodesign case study (see Campagna *et al.*). He describes in detail how these technology approach can support complex design processes at the metropolitan city scale.

In Cutini *et al.*, we read the proposal for a relational notion of resilience, regarding it as depending on the relationships connecting each element of the observed spatial system to all the others by analysing its measure and diachronic transformation by means of a configurational approach, using the space syntax techniques. This research method is applied then to the case studies of Florence and Milan.

Another way to interlace ICT for a fruitful management of knowledge is proposed by Dorvach, by focusing on participatory mapping and the integration of this method and social process with Geographic Information Systems. She proposes a method whose reflection addresses the complexity issue, aiming to reach a knowledge co-production and concerted decision-making for more effective territorial planning and natural resource management.

The subsequent paper (Leone *et al.*) deals with the support that a disciplined and intelligent use of ICT can offer to

planning and design decisions affects different levels of granularity of the environmental, ecological and urban system. In fact, thanks to the studies about urban heat island (UHI) and heat waves (HWs), it is possible to implement a strategy to climate changes for the whole urban context by acting on Urban Green Infrastructure (UGI) planning. This method refers to a modeling approach based on *Envi-met* management model to analyze summer air temperatures and thermal comfort related to a green, nature-based case study in Bari.

In a larger scale, following a more theoretical approach about geographical places as complex spatial environments Stufano *et alii*'s research exploration is based on ontological analysis. The authors aim to integrate a cognitive stand within the traditional analytical and organizational views of complex spatial environments, focusing on decision-support processes. The introduction of ontological levels is considered useful for organizing the modelling of complex systems, under the idea that the understanding of space cannot lack the contextual perspective of every single place and of any single individual.

Closing this brief introduction to the volume we can draw out some final considerations. All the research efforts and results we can read here look at methods and practises based on a new generation of planning-oriented technological tools. They help to manage the knowledge for effective planning and designing choices in decisional processes whose effects can be starting point for virtuous effects toward an approach for resilient interventions in our environments and communities.

In the paper contributions that follow, we can read very different ways to deal with these topics. Nonetheless they always share a similar perspective about reaching clearness and resilience in dialogues, decisions and choices for a

shared consciousness about managing and living our cities,
our sites, our places.