GUEST EDITORIAL PREFACE

Special Issue on Neogeography: Everything Has a 'Where'

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INTRODUCTION

In the introduction to the book "Geocomputation and urban planning" (Murgante *et al.,* 2009), the authors cite the famous paper by Franklin (1992), who in 1992 quoted that 80% of all organisational information contains some references to geography. After the publication of this book, a lot of discussions started on social networks and blogs on how was it possible that in 1992 80% of information contained a spatial component.

This book was published in 2009 and up to date, after few years, the situation has completely changed: each mobile phone has got a GPS and Google has transformed geographical information from a specialist interest to a mass phenomenon and probably 100% of data have a spatial relation.

This trend has led to 'GIS wikification' (Sui, 2008), where mass collaboration plays a key role in producing spatial information. Open source software has significantly increased spatial data production creating a mass collaboration (Goodchild, 2007).

The term 'neogeography' (Turner, 2006) is often adopted to describe people activities when using and creating their own maps, geo-tagging pictures, movies, websites, etc. (Hudson-Smith et al., 2009). It could be defined as a new approach to geography without a geographer (Goodchild, 2009).

Considering that enthusiasts mainly develop this activity, it is possible to reach good levels of accuracy in the same way that Wikipedia has reached quality levels comparable to Encyclopaedia Britannica (Giles, 2005). The map of Sochi, the place where Winter Olympics Games were held in 2014, is a result of this approach. Wired compared Google maps and OpenStreetMap in the area around Sochi, discovering that OpenStreetMap is more detailed than Google (Miller, 2014). A volunteered approach has been adopted also in important catastrophic events, such as Haiti earthquake, and Yolanda Typhoon. Digital Globe made high-resolution images available and a lot of volunteers all over the world produced maps to support disaster management. More precisely, after January 2010 earthquake in Haiti, 600 vol-

unteers mapped on OpenStreetMap the whole area within three weeks (Zook, 2010; Soden & Palen, 2014). After Yolanda typhoon in Philippines, 1,679 volunteers produced 4,799,290 Map changes in OpenStreetMap, providing useful information for people involved in humanitarian aids (Hern, 2013).

Also during recent Soccer World Cup in Brazil traffic data in Rio de Janeiro have been collected in real-time from drivers using Waze, cyclists using Strava and pedestrians using Moovit (Silva *et al.,* 2013).

SPECIAL ISSUE CONTRIBUTIONS

All articles selected for this special issue considered the spatial dimension included in the analytical phase.

The article "A GIS-MCDA based model for the suitability evaluation of traditional grape varieties: the case-study of 'Mantonico' grape (Calabria, Italy)" deals with a physical land-suitability evaluation model for a historical and traditional grape variety of Southern Italy. The proposed model was based on consolidated GIS-based MCDA (Multi-Criteria Decision Analysis) techniques, allowing to support the planning process through transparent and replicable procedures. In the paper, particular attention is given to the crucial phase dealing with choice and weight of criteria (factors and constraints). The obtained results were validated by comparing the real geographical distribution of the current vine growing to the suitability value with a very positive feedback on the robustness of the implemented model. Considering its adaptive approach, the model for land suitability evaluation of Mantonico grape can be implemented for other niche crops, as well as for different geographical contexts. Regarding the applicability, at the present stage of the research, results can be utilised by government bodies as a reference base in strategic planning actions, as well as in programming new interventions for the valorisation of niche crops.

Caiaffa et al. in the paper "A GIS based methodology in Renewable Energy Sources sustainability" deal with the exploitation of Renewable Energy Sources (RES), which represents a critical issue, especially in an integrated vision of problems concerning energy policies and landscape sustainability. In this framework, the Authors present a methodology to support siting decision, aimed at evaluating which type of RES is the best choice for a specific territory. The work is focused on two specific case-studies: photovoltaic (PV) installations and wind power plants. In the first case, the methodology provides a thematic map of areas potentially suitable for energy production from PV in Abruzzo Region (Italy). In the latter case, the approach allows to assess the compatibility of wind installations within the study area, and to highlight possible perturbations to natural ecosystems. The results confirm how a GIS-based approach plays a fundamental role to analyse the environmental compatibility/ sustainability of RES, as an effective tool to assess the potential interactions between plants installations and natural habitats.

In this special issue some topics related to individual movements' patterns have been analysed using different and original approaches, shedding light on spatial and temporal land uses at urban level.

The article by Paolo Tagliolato, Fabio Manfredini, Paola Pucci tackles the interesting issue of detecting patterns of mobility from the analysis of mobile phone position data. The paper "Discovering regularity patterns of mobility practices through mobile phone data" addresses the issue of analysing and mapping mobility practices by means of geo-located data from mobile phone activity at a very high spatial and temporal resolution. The analysis is based on Milan metropolitan area in Northern Italy, and has the relevant characteristic of examining areas of density of mobile traffic data in different areas and times of the city. Comparing such analysis to official transport statistics helped the researchers to explain urban usage and mobility patterns in understanding the dynamic of temporary populations, elements that are not easily

detected using traditional data and analysis. In such sense the analysis helped in highlighting some areas that can be categorized as spaces of work and residence, spaces of night leisure, shopping and leisure spaces during the weekend and spaces of temporary events.

Another work in line with the analysis of individual movements is the paper by Mark Birkin, Kirk Harland, Nicolas Malleson, Philip Cross and Martin Clarke ("An examination of personal mobility patterns in space and time using Twitter"), which examines messages from Twitter social media platform observing the frequency of use in space and time. In the paper the behaviour of different user groups in small areas in the major conurbation of Leeds (UK) is examined. Such an analysis is coupled with the analysis of demographic structures and of urban land use and fabric, aimed at exploring the basics of urban forms and functions. The research is interesting as it uses unconventional data sources to examine people's behaviour, detecting elements here also not easily detectable – also from a theoretical point of view – using standard tools and data sources.

Bottom up, user generated data are also the starting point for the article "Photo based Volunteered Geographic Information initiatives: a comparative study of their suitability for helping quality control of Corine Land Cover" by Jacinto Estima and Marco Painho. The authors use user generated, geo-located pictures from Flickr platform as "ground control point" for land use and land change detection. Continental Portugal is considered as the study region and Flickr data are used together with CORINE Land Cover database. Time series were used to detect changes intervened in land use, both in terms of land cover data and in terms of geo-located photos. These latter represent an interesting and original data source to examine changes, although one of the problems arising, very common to all Volunteered Geographic Information Sources, is the unevenness of the distribution of location, with geo-tagged photos being shot particularly in some more urbanized/populated places or in tourist locations, therefore leaving blank spaces on a not covered map. A possible solution, as proposed by the authors, is to integrate already available data with other social networks and media photo sources.

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