

## Chapter 3

# Social Media Geographic Information: The Community Perspective in Planning Knowledge

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### **ABSTRACT**

*Since last decade, advances in the Information and Communication Technology (ICT) are increasingly enabling the voluntary sharing of user generated contents. Among different emerging digital resources, georeferenced multimedia data publicly shared through social media platforms, or Social Media Geographic Information is starting to stand out in quantity and value as data resource. In spatial planning, where the majority of information required to support analysis, design, and decision-making is inherently spatial in nature, SMGI may foster notable innovations in methodologies and practices, allowing the integration of both experiential and professional knowledge on places, events and ambient. However, this hypothesis should be carefully tested. With the above premises, this chapter more specifically concerns the concept of Social Media Geographic Information, arguing that it may represent an unprecedented resource for expressing pluralism in such domains as spatial planning where it may convey the community collective preferences contributing to enrich knowledge for decision-making.*

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## **INTRODUCTION**

An unprecedented wealth of digital Geographic Information (GI) is made available nowadays to spatial planners for supporting analysis, design, and decision-making. This trend may foster important innovations in urban and regional planning practices, for the information used in supporting analysis, design and decision-making is inherently spatial in nature.

Since the early 1960s, Geographic Information Systems (GIS) started to be introduced as support in spatial government and planning, replacing more traditional analogue data and maps. Recent approaches to spatial planning introduce the concept of Geodesign, emphasizing the importance of carrying on design and decision-making processes informed by the knowledge of the local territorial context. As argued by Steinitz (2012), there is no such profession as the Geodesigner, rather a Geodesign process is carried out through collaboration among different experts coming from the Geographic (Information) Sciences and from the design disciplines, together with stakeholders and other actors from the local communities, or the people of the place. Hence, considering stakeholders' involvement, coupled with the possibility to elicit local communities' knowledge in supporting planning processes, may represent a significant implication for future research in the field of spatial planning. In the era of Information and Communication Technology (ICT), such an approach is currently enabled thanks to development both in authoritative and volunteered sources of geographic information.

On the one hand, the implementation and the widespread diffusion of Spatial Data Infrastructures (SDIs) are starting to offer planners the access to a wealth of digital official large scale spatial data layers, produced and maintained by public or private organizations for a variety of institutional or business purposes. This process is enabling the evolution from analogue cartographic analysis to digital geoprocessing in the representation and analysis of territorial dynamics, as well as, in the assessment of environmental impacts of design alternatives. This phenomenon is remarkably notable in Europe, where the implementation of the Directive 2007/02/CE, establishing a shared INfrastructure for SPatial InfoRmation (INSPIRE), fostered the development of SDIs in Member States and regions, enabling the public access and reuse of available Authoritative Geographic Information (A-GI) according to common data, technology, and policy standards. Hence, SDIs may provide positive impacts for public administrations, developers and planning practitioners, and they are slowly bringing innovation into the planning practices (Campagna and Craglia, 2012).

On the other hand, advances in connectivity, geobrowsers and widespread diffusion of GPS-equipped handheld devices enabled citizens acting as sensors (Goodchild, 2007) to provide Volunteered Geographic Information (VGI). Open Street Map is one successful example of crowdsourced creation of a comprehensive open spatial dataset as a high quality alternative to more traditional official or commercial sources. However, only a fraction of available VGI is purposefully produced and contributed, while an even larger share is made available often as unaware results of the use of social media on web and mobile apps. Indeed, among different emerging digital resources, georeferenced multimedia data publicly shared through social media platforms (Sui and Goodchild, 2011), or Social Media Geographic Information (SMGI) (Campagna, 2014), for the impetuous modes of production, is starting to stand out in quantity, featuring a Big Data nature. The mutual integration of these information sources may substantially improve the understanding of environmental and social ecosystems, and of people perceptions, insights, and needs.

In the light of these considerations, the authors present a critical review of their research findings on the integrated use of A-GI, VGI and SMGI in the domain of spatial planning. In the next section, an

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