Introduction to the PLATIAL'18 Workshop on Platial Analysis

– Editorial –

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The concept of "place" is about to become one of the major research themes in the discipline of geographical information science (GIScience), as well as in adjoining fields. Briefly put, while locations provide objective references (e. g., point coordinates), places are the units utilized by humans to approach the geographic world (Goodchild, 2015). On the one hand, the current "platial turn" in GIScience is caused by the plethora of oftentimes user-generated and particularly urban geographic datasets, which have become available in the last years (e. g., geosocial media feeds). These so-called ambient geospatial datasets (Stefanidis et al., 2013) mirror digitally small and limited glimpses of the everyday lives of people, and how they approach and experience the geographic world. Ambient geographic datasets may thus be understood as something deeper than just mere "attributes referenced over point locations", which is why they have recently been conjectured to be of platial rather than of spatial nature (Quesnot and Roche, 2015). "Platial" can hereby be understood as the place-based counterpart to the space-based adjective "spatial".

Understanding these either individual or collective, digitally collected experiences requires taking account of social, cultural, behavioural, and cognitive aspects. This endeavour therefore opens up a delicate opportunity for interdisciplinary collaboration, transcending disciplinary boundaries. Alongside this, researchers have become recently aware of the limitations of a purely spatial notion of GIS. Despite its undoubted success over the last decades, what spatial GIS effectively does when investigating human data is facilitating complex affairs into rather simplistic geometric primitives like points, lines, and polygons. These units might be convenient to work with, but they are not fully sufficient for addressing deeply human-geographic and social-scientific questions. For these reasons, researchers have recently called for a paradigm change towards a platial counterpart to the established spatial notion of GIS and quantitative analysis (Goodchild, 2011, 2015; Stedman, 2003), allowing to represent and analyse platial information by computing machinery. This will ultimately allow geographical, sociological, and other related scholars to support their studies by more realistic quantitative inferences.

The PLATIAL'18 workshop makes a significant contribution towards these developments and is meant to be the starting point for a series of future events. What sets this workshop apart from others dealing with the concept of place is that the focus is decisively on its quantitative investigation and conceptual formalization. Nevertheless, PLATIAL'18 accommodates a wide range of aspects all of which in one or another way are related to the two outlined core foci. This is well reflected by the various topical sessions into which the workshop has been organized. These include "Conceptual Anatomy of Place", "Disclosing Places from Human Discourse", "Bridging Space and Place", and "Exploratory and Visual Analytics of Place". This topical variety, on the one hand, reflects the breadth of the concept of place, but, on the other hand, also the early stage at which we still are from a GIScience point of view. The sessions also demonstrate the success of the workshop in bringing together scholars from a range of different disciplines to work together towards a platial notion of analysis. The following

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paragraphs are indicative for this success. They summarize the above mentioned sessions and give brief summaries of the contributions accepted for oral presentation.

The content sessions were concomitantly inspired by two keynote talks. One talk was given by Alexis Comber (University of Leeds), who reported about platial heterogeneity and linking various place concepts (Comber et al., 2018). A second talk emphasizing a cognitive perspective of place (Davies, 2018) was delivered by Clare Davies (University of Winchester). Both of these talks touch upon very important and fundamental aspects of place-based analysis. Alexis highlighted the importance of the distinction we have to make between "space" and "place" when it comes to quantitative analysis. In his talk, he utilized the example of denigrated places (people assigning the term "shithole"; Butler et al. 2018), for which almost no easily interpretable spatial pattern is found. The results presented, however, demonstrate that insightful patterns can be found when taking a platial perspective instead. This shows that the spatial framework is limited when it comes to subjective platial information, confirming empirically experimental results from the literature (e. g., Westerholt et al. 2016). Denigrating places is also largely related to human cognition. Indeed, cognition is of particular importance to user-generated datasets like geosocial media or the mapping project OpenStreetMap, the latter of which is based on a folksonomy heavily influenced by mental conceptualizations of people (Mocnik et al., 2017). In her talk, Clare emphasized the importance of human cognition as an integral part of GIScience (Montello and Mark, 2018), which is particularly important to the study of places. She reported about the role places have for categorizing related locations, and how the concept of place might thus be understood as a classification heuristic. Both keynote talks have been highly inspirational and stimulated discussions throughout the workshop.

The session that deals with the core of the concept of place is entitled "Conceptual Anatomy of Place". The contribution made by Blaschke and Piralilou (2018) forms part of this and deals with the inherent complexity of place. According to Simon (1977, Chapter 4.4), all viable systems are (near-)decomposable into their constituent parts, no matter whether they are of social, technical, or physical nature. For this reason, Blaschke and Piralilou (2018) hypothesize that this might also be the case with places. In order to cope with complexity, and also with scaling issues, they further propose transferring concepts from object-based image analysis to the analysis of places. A second paper allocated to this session explores ways to formalize the relations between places experienced in dreams, with those experienced consciously while awake. Iosifescu Enescu and Hurni (2018) propose the concept of a layered so-called "place cookie" for this purpose, which can be used to classify places with respect to their familiarity to a dreamer. The place cookie concept also allows to combine spatial with platial notions distance through linking the cookie back to geographical space. Overall, this session tackles two different but related topics, covering very fundamental aspects of the nature of place and their investigation.

Verbalization is a key factor to the investigation of places (Goodchild, 2011; Winter and Freksa, 2012). The way we have access to places is mostly through considering verbalized expressions made by people. For this reason, our second session is dedicated to the extraction of place-based information from human discourse. One approach to this is presented by Calafiore et al. (2018), who work on the case of food consumption in Turin, Italy. They extract shared notions of place related to how people experience the "foodscape" of the city by investigating crowdsourced TripAdvisor data. Using clustering techniques and by applying social practice theory, the case study reveals links between socially-defined groups and jointly experienced places. In a related yet slightly different manner, Heikinheimo et al. (2018) investigate how well different geosocial media feeds are actually suited to be used for disclosing place-based digital imaginations. Adopting a Finnish national park use case, the authors compare information from Flickr, Instagram, and Twitter. Thereby, they review these with respect to their information content, originality of locational information, and further factors. This session largely reflects the empirical exploration of places, which is a very important cornerstone on the way towards evidence-based platial research.

Place has frequently been described as space infused with meaning (Tuan, 1977). Based on this notion, our fourth session aims to link the two universes of "space" and "place". Assuming an inherent link between space and place, Papadakis et al. (2018) present a philosophical contribution towards bridging these two paradigms. They present first approaches to an interface that, in a reciprocal manner, allows to convert between space and place by utilizing different kinds of intermediary spaces as introduced by Couclelis (1992). Another approach is followed by Vardag and Lautenbach (2018), who investigate the relationships between the geometric length of detours (spatial) and the associated

additional personal values experienced through considering these instead of shortest paths (platial). For this purpose, they utilize (semi-)automated methods to extract semantic links from georeferenced assessments of peoples' moods collected in an in situ manner.

The fourth session of the workshop is devoted to exploratory and visual analytics of place. The contribution made by Gröbe and Burghardt (2018) proposes the cartographic technique of micro-diagrams to be used for visualizing the diversity attached to places. In essence, this technique entails the generation of mapped diagrams enabling to represent the thematic (or any related kind of) diversity of places. In contrast to this cartographic approach, Putrenko et al. (2018) make use of space-time cubes, established by time geography, to explore the relations between social phenomena and locations. This way, and by additionally applying spatial-statistical measures, it is possible to indicate place-related events from social networks.

The workshop conducted this year portrays an impressive breadth, reflecting the diversity that is inherent to the concept of place. It also, however, unveils the lack of clarity in how geospatial and related scholars refer to and deal with the notion of place. The PLATIAL'18 workshop contributes to the consolidation of this latent and widespread vagueness. In this vein, the workshop is in line with other events carried out in 2018, for instance, a session dedicated to "place" organized at the GIScience conference held in Melbourne, Australia. It will be interesting to see in which directions the platial turn in GIScience will develop in the upcoming years. We are looking forward to forming part in this exciting endeavour through continuing the PLATIAL series with another fruitful PLATIAL'19 event to be held next year.

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