Introduction to the Second International Symposium on Platial Information Science

– Editorial –

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Place is a naturally diverse subject. It requires an interdisciplinary approach and must be addressed from different angles in order to fully reflect both the concept and specific places that shape people's everyday geographies. The diversity of available and required approaches to the study of places is well reflected in the first published articles in Transactions in GIS, which were recently published in response to a special collection in connection with the First International Symposium on Platial Information Science (Westerholt et al., 2018) last year. These articles include cartographic (Iosifescu Enescu et al., 2020), linguistic (Lai et al., 2020), socio-theoretical (Acedo and Johnson, 2020), and geo-demographic approaches (Ballatore and De Sabbata, 2020), and more articles are soon to follow. The contributions contained in this present volume for PLATIAL'19 also reflect a variety of fields and approaches of place research. These include linguistics, geography, semantics, psychology, politics, routing, and demography, truly filling this year's symposium motto with life!

An important aspect in connection with the concept of place is language and the way in which people express their mental models of lived spaces in linguistic expressions. Thora Tenbrink has delivered an inspiring and visionary keynote to the symposium, showing possible future ways to systematically explore the way people encode representations of place linguistically (Tenbrink, 2020). While much is known about spatial language, place is still a relatively unexplored field in terms of linguistic expressions of sensory-motor experiences and emotional attachments. The visions that Thora has shared with the audience point to possible ways of filling this gap, and have sparked many exciting discussions in Coventry last September.

Closely related to verbal statements of place are discursive practices, such as how people literally ask questions about places. With a view to possible future place-based GIS operations, Clare Davies presented a number of such questions and types of platial knowledge that people make use of in everyday life (Davies, 2020). Her research shows that most of these questions are not spatial and crisp (as in traditional GIS), but semantic and vague in nature. Clare also points out the importance of finding ways to formalize the questions listed in her paper in order to make a leap forward towards place-based GIS.

In order to talk about places and represent them meaningfully in the form of map or formal symbols, people must find a common ground – a shared understanding of what a place means. Maren Mayer, Daniel W Heck, and Franz-Benjamin Mocnik present a psychological contemplation of the complex negotiation processes connected with the search for shared mental models of places (Mayer et al., 2020). The paper uses the collaborative mapping project OpenStreetMap as an example to trace and visualize idiosyncratic concepts of places and their convergence to a common understanding of geographical entities. The presented research is an excellent contribution to a better understanding of shared, user-generated datasets.

Place is not only of importance in GIScience and linguistics, but has been an outstanding topic in human geography for decades. Daniel Wagner, Rene Westerholt, and Alexander Zipf establish a link between GIScience and human geography by investigating how GIScience scholars make use of human-geographic place concepts (Wagner et al., 2020). The results reveal interesting patterns, including the frequent use of social media data in platial research and frequent references to Yi-Fu Tuan's work on place. These and other findings are an important impetus to gaining a better understanding of the theoretical foundations of research on place conducted in GIScience. The contribution presented here is thus a step towards a more informed debate on place.

Space and place are not independent concepts, but closely intertwined. Using Twitter data from the 2012 US Presidential Election and the 2014 Scottish Independence Referendum campaigns, Adrian Tear examines how the patterns of space and place in microblogging data vary (Tear, 2020). The results show that people geotagging with spatial coordinates are much less likely to use verbal toponymic references to named locations. Similarly, the same users link more non-platial extrinsic content in their tweets than non-geotagging users. These results indicate that the ways in which people conceptually grasp place and space are not independent, but at least interact in online communication. The presented results thus provide promising novel insights into how people use and represent places in digital tools like microblogging.

Social media are an important source of platial information that can be used for a number of applications. Madalina Gugulica and Dirk Burghardt present an approach to use the affective perceptions of urban environments extracted from social media to improve pedestrian routing applications (Gugulica and Burghardt, 2020). Typically, routing applications are designed to focus on optimizing travel time or distance. The approach presented here allows to add a human dimension to this rather technical view by also considering the way people react to geographical places. The innovative approach presented is a useful contribution to the future development of place-based human–machine interfaces and to the development of place-based technologies that will facilitate the daily life of many people.

The way we express ourselves verbally varies geographically. Justin van Dijk and Paul A Longley use this feature of local linguistic variation to trace the historical distribution of surnames in Great Britain (van Dijk and Longley, 2020). Using historical censuses and contemporary population registers, the study presented in this volume allows the characterization of places in terms of geodemographic characteristics. A total of 59,218 surnames have been studied and a hierarchy of places has been identified, with larger conurbations being more closely linked to other parts of Great Britain than smaller towns and rural areas. This provides an opportunity to introduce a further aspect of places into the current GIScience discourse and to link the topic to areas such as genealogy and the historical sciences.

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References

Acedo, Albert and Johnson, Peter A: *Home range and habitat: using platial characteristics to define urban areas from the bottom up*. Transactions in GIS, 2020. doi: 10.1111/tgis.12597

Ballatore, Andrea and De Sabbata, Stefano: *Los Angeles as a digital place: the geographies of user-generated content*. Transactions in GIS, 2020. doi: 10.1111/tgis.12600

Davies, Clare: *Place-based knowledge systems: human and machine*. In: Mocnik, Franz-Benjamin and Westerholt, René (eds.), *Proceedings of the 2nd International Symposium on Platial Information Science (PLATIAL'19)*. 2020, 33–41. doi: 10.5281/zenodo.3628865

van Dijk, Justin and Longley, Paul A: *Platial geo-temporal demographics using family names*. In: Mocnik, Franz-Benjamin and Westerholt, René (eds.), *Proceedings of the 2nd International Symposium on Platial Information Science (PLATIAL'19)*. 2020, 23–31. doi: 10.5281/zenodo.3628863

Gugulica, Madalina and Burghardt, Dirk: *Affective route planning based on information extracted from location-based social media*. In: Mocnik, Franz-Benjamin and Westerholt, René (eds.), *Proceedings of the 2nd International Symposium on Platial Information Science (PLATIAL'19)*. 2020, 51–60. doi: 10.5281/zenodo.3628877

Iosifescu Enescu, Cristina M; Bär, Hans-Rudolf; Beilstein, Matthias; and Hurni, Lorenz: *Place cookies and setting spiders in dream cartography*. Transactions in GIS, 2020. doi: 10.1111/tgis.12604

Lai, Juntao; Lansley, Guy; Haworth, James; and Cheng, Tao: *A name-led approach to profile urban places based on geotagged Twitter data*. Transactions in GIS, 2020. doi: 10.1111/tgis.12599

Mayer, Maren; Heck, Daniel W; and Mocnik, Franz-Benjamin: *Shared mental models as a psychological explanation for converging mental representations of place – the example of OpenStreetMap*. In: Mocnik, Franz-Benjamin and Westerholt, René (eds.), *Proceedings of the 2nd International Symposium on Platial Information Science (PLATIAL'19)*. 2020, 43–50. doi: 10.5281/zenodo.3628871

Tear, Adrian: *Geotagging matters? The interplay of space and place in politicized online social media networks*. In: Mocnik, Franz-Benjamin and Westerholt, René (eds.), *Proceedings of the 2nd International Symposium on Platial Information Science (PLATIAL'19)*. 2020, 61–72. doi: 10.5281/zenodo.3628879

Tenbrink, Thora: *The language of place: towards an agenda for linguistic platial cognition research*. In: Mocnik, Franz-Benjamin and Westerholt, René (eds.), *Proceedings of the 2nd International Symposium on Platial Information Science (PLATIAL'19)*. 2020, 5–12. doi: 10.5281/zenodo.3628849

Wagner, Daniel; Zipf, Alexander; and Westerholt, Rene: *Place in the GIScience community – an indicative and preliminary systematic literature review*. In: Mocnik, Franz-Benjamin and Westerholt, René (eds.), *Proceedings of the 2nd International Symposium on Platial Information Science (PLATIAL'19)*. 2020, 13–22. doi: 10.5281/zenodo.3628855

Westerholt, Rene; Mocnik, Franz-Benjamin; and Zipf, Alexander: *On the way to platial analysis: can geosocial media provide the necessary impetus? Proceedings of the First Workshop on Platial Analysis*. 2018. doi: 10.5281/zenodo.1475269