67 Comparing landscape value patterns between participatory mapping and social media content across Europe.

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Visitor monitoring and mapping techniques are rapidly evolving fueled by open georeferenced data and social media opportunities. Knowledge on how visitors use and value landscapes is increasingly elucidated by social media data or user-generated data passively contributed by online communities. Examples of this is the use of data from social media such as Flickr, where users share and store geocoded images in an online platform. Here images, locations and associated tags is opportunistic crowdsourced by researchers and planners to conceptually and spatially elicit landscape values such as cultural ecosystem services and relational values.

At the same time, integrated landscape planning and management has increasingly focus on planning ideals of deliberative processes, co-creation and inclusion of diverse values. Examples of this is participatory mapping techniques aimed to support the inclusion of diverse values held by residents and visitors into integrated landscape management. By the use of online public participation GIS (PPGIS), participants are actively recruited to purposely map socio-cultural values about specific landscapes.

The values data collated using active participatory mapping techniques and passive user generated data is rarely compared. In this study, we bring PPGIS and Flickr together in an exploration and discussion of the similarities and differences. In contrast to previous comparative studies focused on single study site, we expand the analyses from a

single site to cross-site analyses of 19 landscapes across Europe (in 11 countries). We argue that in order for planners to harness the qualities of both we need to place a spotlight on strengths and shortcomings of each method and core opportunities for complementary use. We do this by a direct comparison of the spatial distribution, intensity and type of landscape values elicited using PPGIS and Flickr data. Moreover, we relate similarities or differences to specific landscape characteristics and types of landscape values.

We find great variety in volume, types and spatial pattern of landscape values elicited from PPGIS mapping and Flickr across study sites in Europe. The most agreement in spatial patterns is in the most densely populated landscapes, but for most of our study sites, we only find low spatial overlap and poor or no spatial relationship to landscape variables known to relate to landscape values. This indicate that using Flickr and PPGIS data to designate particularly valued parts of a landscape might result in significant different spatial results, particularly in less populated landscapes.

In order to elicit landscape values from Flickr, we coded tags according to basic landscape forms, practices and relationships. This resulted in different distribution of values between study sites as revealed by Flickr tags. We compared and discussed this result according to frequency of landscape values mapped by PPGIS participants. Although, the values used in the PPGIS investigation mirrored basic landscape forms, practices and relationships, we found poor or no direct relationship between frequencies of values elicited by the two approaches. We conclude that PPGIS and Flickr is two fundamental different systems of collecting landscape value data rooted in different ontologies and epistemologies that are hard to compare and might result in contrasting results. We recommend a complementary use that potentially might increase the inclusiveness of different people involved in landscape value assessments.