## The Value of Design Approaches in the Future of Memory. How digital artefacts can improve methodologies and tools for activating collective memories in urban environments

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## Discussion

The topic of cultural memory and its relation to spaces, places and environments (Halbwachs, 1950; Nora, 1984; Gallagher & Greenblatt, 2000; Ricoeur, 2004) is undergoing a cultural transformation in connection with the use of new technologies. A vast body of publications has recently reflected upon the opportunities offered by "digital memories"; the intangible dimension of "memory"; the possible effects of the "computer bomb" (Flusser, 1990; Bisogno, 1995; Virilio, 1998; Rossi, 2001; Bagnara, 2006). In his essay *Memory and Knowledge*, Tomás Maldonado supports the need to open new directions in research on the relationship between memory and digital media, between neuroscience and technological avant-garde, starting from the assumption that "if it is true [...] that the advent of *Homo scribens* contributed in many respects to change the memory of *Homo oralis*, it is more than legitimate to conjecture that, with the advent of *Homo digitalis*, the same can happen to the memory of *Homo scribens*" (Maldonado, 2005, p. 10).

The social function of collective memory is therefore more relevant than ever in design processes (Branzi, 2006; Bannon, 2006; Celaschi, 2016; Zannoni, 2018).

At the same time, a new understanding of the relationships between temporalities and people, in an age infused with memory and past, has been central to a number of studies (Kemp & Adam, 2019). As Arjun Appadurai has suggested "culture is a dialogue between aspirations and sedimented traditions"; a statement that implies an, often, difficult intertwinement between past, present and future or, in other words, between culture and development. "By bridging the future back in, by looking at aspirations as cultural capacities, we are surely in a better position to understand how people actually navigate their social spaces" (Appadurai, 2013, p. 195). It is thus evident that one of the key challenges of our time is understanding how to study and create futures we truly care about and which are more social (Adam & Groves, 2007; Urry, 2016).

Again, design processes can play an active role in this context. The anticipatory function of design, today, is represented by a prevalently ethical function, linked to the form of processes rather than to the form of products (Celi & Morrison, 2017). As Flaviano Celaschi writes, design "can contribute to problem-finding, taking action when people are no longer able to ask questions before seeking answers (Augé 2012). While science still tries to represent the world as it is, design can describe how the world could be

(Ratti and Claudel 2016), a sort of 'what if?' that is typical for anticipators" (Celaschi et al., 2017, p. 5).

## Abstract and synthesis of the main contents of the paper

Starting from these assumptions, the article illustrates how digital data could generate cultural, social and economic values for territories and their inhabitants and give shape to possible forms of collective memories.

The growing trend of mobile devices equipped with GPS has triggered an immense proliferation of geo-referenced data, digitally connected to the places and spaces of our real lives. This multitude of geolocalized data shared by people is forming a new layer of digital information: it represents an invisible reality, but at the same time is strongly related to the places where we live. This data has progressively become a substrate of connections, a representation of recursive behaviours that can allow a predictive reading of people's behaviour in urban spaces (Ashbrook & Starner, 2003; Manovich, 2009; Hochman & Schwartz, 2012). The first studies by Carlo Ratti on the analysis of GSM cells in urban spaces (2006) and the experiments of Lev Manovich in the 2013 "Phototrails" project, show how the territory can be observed and listened to in different ways. It is possible to argue that this abundance of information is progressively becoming part of our real world (Zannoni, 2018).

What is the space for design in this process? Can it play an anticipatory role in the development of our urban environments? Is "geo-media" (Hochman & Manovich, 2013) the new field of study for the future of memory?

In order to answer to this question, the paper synthetises three possible approaches (generative, aggregative, informative) as expressions of a growing sensibility towards design-driven forms, processes and tools, that can activate the collective memory of places. These approaches emerge from in-depth field research about cases of international experimentations based on new design scenarios that explore the possibilities offered by the digital dimension of spatial information. Independently of whether the results of these projects are physical or digital interfaces, the designers need to consider how people could really use this information and how this data can become of value to the growth and development of territories.

In their conclusions, the authors will reflect upon the possible impact of these approaches. The historical-critical, sociological, philosophical and anthropological studies on collective memory and thus on the future of our past, can benefit, on the one hand, from the value of computer data to build new relationships, and, on the other hand, from understanding a series of design experiments which can demonstrate the potential of design to generate new cultural values. By aggregating knowledge, mediating between material and immaterial aspects, interfacing with users, designers will be asked to anticipate digital artefacts that allow the stratification of collective memory as a fundamental component of our collective future.

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