

Innovative methods and new technology in urban research - an interdisciplinary reflection on the 'action camera'-approach

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Abstract

Research designs in all disciplines are currently undergoing a tremendous change due to the rapid digitalization of research tools and equipment. In less than a few decades, our research designs changed from analogue to digital, leaving many in confusion. A new generation of researchers now implements new tools into their established research designs, which is both an opportunity for new ways of data finding and a challenge. Many of the new tools and equipment have not been used before, making it difficult to set up a research design with them; moreover, they may pose new, often ethical, implications.

As young researchers working in a cross-disciplinary environment, the authors would like to engage in a discussion on the action camera, a tool that could reinvent and enrich the research design of all fields which make use of video material, and perhaps make a case for those fields who usually refrain from video footage to include this new piece of equipment.

Being educated and trained in the disciplines of architecture and urban design, as well as area studies, anthropology and sociology, the authors' research focus lies in analyzing the complexity of East Asian urban agglomerations (in China and Japan). It is argued that in order to be better equipped to conduct research on the increasing complexity of rapidly growing global cities, it is not only necessary to find new ways of inter-, multi-, and cross-disciplinary research collaborations but also to incorporate new technological devices that enable researchers to capture aspects and facets of today's cities.

The goal is to analyze the use of the action camera from the perspective of two fields, architecture and ethnography, and discuss in what ways the tool reinvents earlier forms of visual data gathering, while keeping in mind the new issues that video data gathered by the action camera raises.

This research paper is based on the authors' own fieldwork experiences in China and Japan working with action cameras. Both authors pioneered in their fields making use of this method. The approach is looked at critically in order to understand its limitations, challenges, and ethical difficulties the use of an action camera poses in the context of today's urban research. Further final evaluation also includes technical details and practical matters that influence the choice of action cameras in urban research projects.

At a time when researchers have to modernize their toolbox, evaluations for new and creative tools are a necessity to broaden the perspective of urban studies and academic approaches generally. This account of the action camera looked at from multiple disciplines will be a valuable addition in the struggle to reinvent visual data gathering in the digital age for all fields.

Broadening the horizon of research methods used in urban studies provides the opportunity to acquire different sets of data as well as new insights, provided the data is properly read and viewed in its appropriate context. Only then is it able to open up new ways of understanding cities. The action camera as a tool to capture information from a complex system, such as the city, is discussed and evaluated critically in this paper in order to create the opportunity for urban researchers and even city builders to add a new facet to existing research approaches.

Keywords – Urban Data, Innovative Research Approach, Urban Studies, Action Camera