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Bødker, Mads; Meinhardt, Nina Dam

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Walking and Sensing Mobile Lives

Mads Bødker

Dept. of IT Management
Copenhagen Business School
Howitzvej 60, 2.
2000 Frederiksberg
Denmark
mb.itm@cbs.dk

Nina Dam Meinhardt

Dept. of IT Management
Copenhagen Business School
Howitzvej 60, 2.
2000 Frederiksberg
Denmark

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Abstract

In this position paper, we discuss how mindful walking with people allow us to explore sensory aspects of mobile lives that are typically absent from research. We present an app that aids researchers collect impressions from a walk.

Author Keywords

Walking, sensory research, design, experience, place

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

Introduction

Anthropologist Tim Ingold has argued that life proceeds along 'lines'. That life is, essentially, linear [1]. The primacy of existence is movement and change, rather than dwelling and fixity. As researchers we are so used to the idea that we must somehow 'freeze' reality in order to grasp it. Movement must be turned into stillness when we interview people: lines and moving bodies are turned into points, disjointed from energetic flows of path-making that is the basic fact of life: that we move about. How do we 'mobilize' research tactics, and how can we enable new insights into, and deriving inspiration from, conditions of living with increasingly mobile, intimate, and embodied digital technologies.

We present a prototype app developed to aid in carrying out and analyzing 'walking research'.

Walking

Walking with research participants is a simple way of capturing research participant subjectivities as they move about. Walking entails being led on by their interests and curiosity rather than following strict research protocols. Thus, serendipitous encounters with features of the landscape, a continuous shifting of senses, as well as new 'researchable entities' [2] begin to appear. Walking together thus creates new possibilities for extending the zone of contact between researcher and research participants, to allow new modalities and a more nuanced sensory awareness to emerge from field research.

Think of 'walking' as an essential enactment of places, senses, and socialities: Everyday walking is a performance of being, belonging, or being a stranger in place, of bodily comportment and capabilities, of gender, various forms of capital and cultural dispositions. Yet what and how might we learn by walking along with people? By attempting to record and represent walking, researchers can come closer to making sense of people's performance of places. Seated interviews, however, are still the dominant qualitative method in social research [3], and experiences of place are not easy to express in traditional interview settings. As Thrift argues, interviews cannot capture or make sense of the affective and sensually diverse engagements as they 'take place' [4]. In the following we present a simple tool that we have developed with the aim of helping researchers capture those crucial aspects of 'walking along' with a smartphone. We suggest that the tool can

be harnessed to create evocative artefacts about place performances and that these can inform and inspire early stage design of mobile technologies.

iMaCam: I Am a Camera.

We asked ourselves what would happen if we turned our bodies into cameras and sound recorders? Not unlike the now defunct Microsoft SenseCam (but with added functionality such as audio and a GPS), our approach was to make a simple smartphone app that could record images and sound (as well as GPS coordinates) in an unobtrusive way that did not require user attention or direct interaction.

For the purpose of studying walking as a way of 'making sense' and 'place-making' we developed the smartphone (Android and iOS) application iMaCam (short for 'I am a Camera'). Drawing on previous experiences from our work on video ethnography, the iMaCam app is an application that allows researchers to assemble different kinds of data. The iMaCam app is intended to run on a smartphone carried on a lanyard hanging from the neck of the informant. It records an image at intervals between 5 and 20 seconds; continuous audio; and GPS information. After a walk, the images, audio, and GPS trail are accessible via a dedicated web-service (see fig. 1) that allows the researcher to navigate an overlaid Google map constructed from the walk. Clicking on nodes enables the images and sounds recorded at a particular place to be replayed. The entire walk can also be replayed as a slideshow, with the images and the locations synced to the audio.

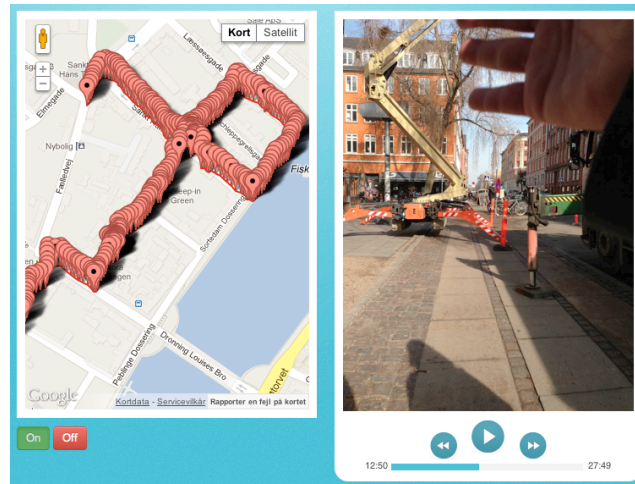


Figure 1. The browser based 'back-end' of the iMaCam tool. The left side map shows the route (with map-nodes showing where images were captured), while the right side shows the 'slide show' of images. The map is navigable by clicking on the red map nodes.



Figure 2. Three sample images from an early iMaCam field study in Copenhagen.

Currently, about an hour of walking can be captured in the prototype app. In our own research, we have used it as a tool to inspire the innovation of mobile technologies for tourism and heritage. We have found it to be fairly unobtrusive in use. As the capturing device is carried around the neck, movement of the body occasionally imparts the images with rolling shutter distortion (i.e. 'wobble' or 'smear' type distortion), but we have found these images to be simply indicative of movement, and distortion may even benefit the subsequent use of images from a walk since the distorted images evoke a strong and immediate sense of the moving body behind the camera.

Discussion

Mobilizing research methods, in our case simply walking-along with people to listen the stories they tell, compelled by the shifting landscapes around them, and to learn how they sense their worlds, are not simple methodological 'tricks'. They suggest a profound shift in the way we approach the field. Mobilization has important implications for what can be considered 'present' and what is typically absent in research. When applying the method, we have seen how the field – the space, the context – is a continuous and yet ephemeral force that attracts or repels attention. The landscape we move about in seems to scatter our attention. However, walking along, sharing a pace and a rhythm aligns the researcher and the participant in a transient yet shared field of attention. Often, after having shared a walking pace for a while, both parties become aware of the same things, attracted and repelled by the same 'lines' (streets, paths, flows, sounds) in the landscape.

Capturing images along the way, as we walk with research participants, can be a conscious and directed

activity that can be telling in and of itself. Walking with iMaCam, the *body* is performed as a mobile audio-visual probe/sensor, freeing participants from having to consciously document their activities. This tends to make for a less stressful and more pleasurable walk.

Rather than opting for full video (i.e. 24/25 frames/sec), iMaCam is designed to reproduce the walk in a more transient 'slide-show' format. This has a distinct advantage. To be beneficial as a lightweight method, the slideshow is much less demanding to review as there is simply less data to cope with. Rather than having to review full video sequences, we have found that the app creates more fleeting and ambiguous representations of the field, and avoids the 'documentation' style that would arguably have been the result of full video. Hence, we do not consider the data collected in a walk as 'hard data', but as a possible design material [5]. We propose that the iMaCam app can be a useful addition to the arsenal of lightweight methods and tools for design inspiration, and suggest that it fills an important gap in researching mobile lives.

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Perhaps it can help us craft new and more nuanced questions about what it feels like to engage in that most pedestrian activity of walking. How do we, whilst moving about in our everyday lives, continuously connect and disconnect from digital infrastructures, encounters, possibilities, and sociabilities? There are countless 'virtual doorways' [6] and mobilities in urban as well as rural landscapes are increasingly augmented with data infrastructures, but how do we engage mindfully in designing the futures of mobility? One aspect that has been particularly prominent in many walks with iMaCam is the way in which the senses are used in a multitude of often surprising ways as we walk. Walking is not merely a practice of (practical) movement, but importantly also a practice of sensing. Following people also means sharing their sensory experiences, the relentlessly shifting moods, tempi, rhythms, and sensory 'micro-events' that are often gone before we consciously register them. When we actively try to participate in sensory worlds, and try to document our fleeting awareness of them through a tool like iMaCam, we hope that many new questions beyond practical utility of new mobile devices may arise.

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