RTD2015

21ST CENTURY MAKERS AND MATERIALITIES

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Data Tourism

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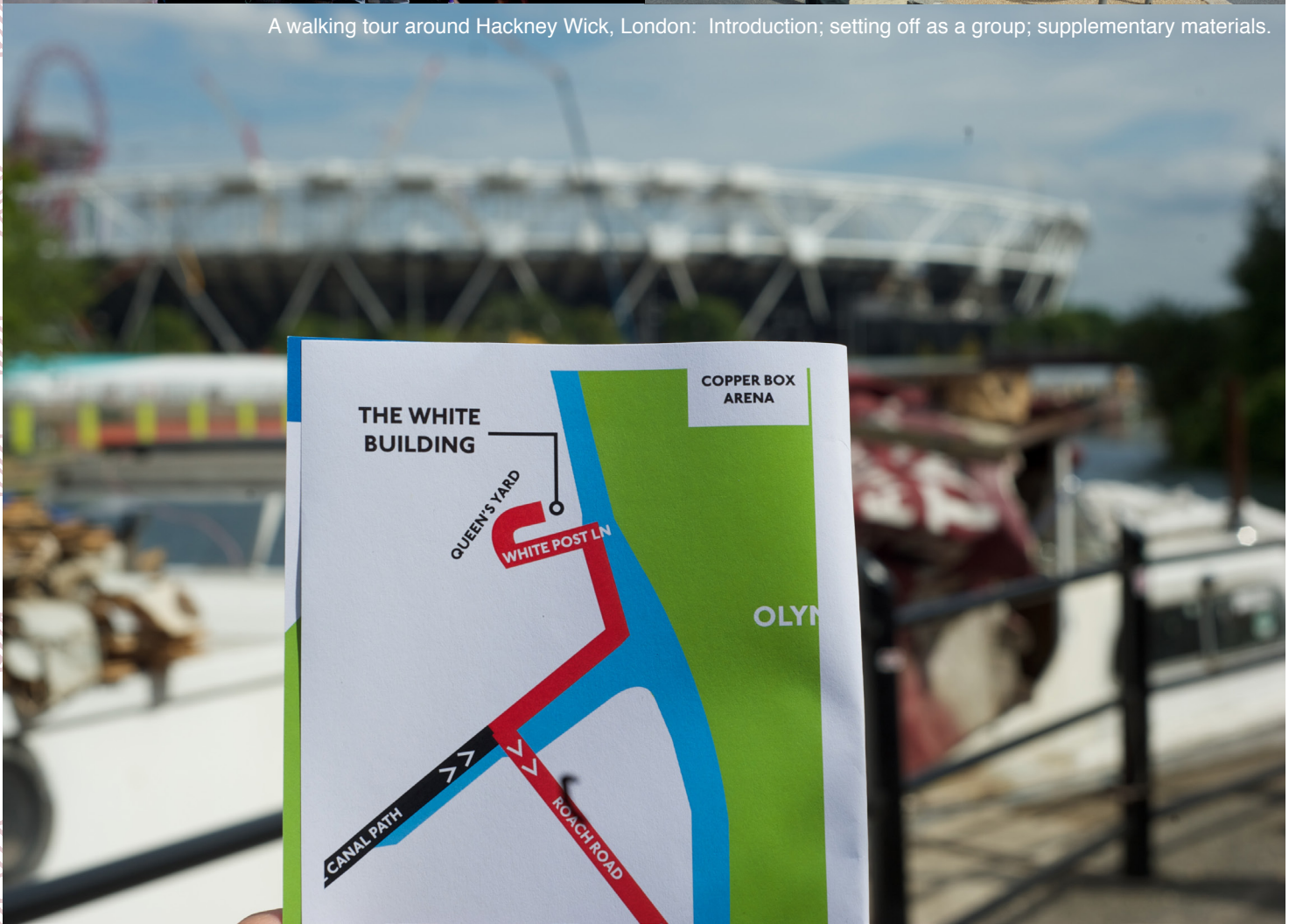
Abstract: We invite the visitors to RTD 2015 to come on a walking tour with us. Our 'tourists' will be given a recent research device developed by our studio, and asked to try it out together. The 'artefact' at stake here is not the device, but the walking tour itself. We suggest that, by trying our devices live and in situ, the tour will supplement other means of dissemination such as publications or exhibitions. This will both allow participants to better understand our field trial methodology, and to experience for themselves a design they might otherwise only encounter in a conference presentation, article, or exhibition.

Keywords: Dissemination practices; Field trials; Designing deployment; Location based data; Ludic design.

A walking tour around Hackney Wick, London: Introduction; setting off as a group; supplementary materials.



ABSTRACT

We invite the visitors to RTD 2015 to come on a walking tour with us. Our 'tourists' will be given a recent research device developed by our studio, and asked to try it out together. The 'artefact' at stake here is not the device, but the walking tour itself. We suggest that, by trying our devices live and in situ, the tour will supplement other means of dissemination such as publications or exhibitions. This will both allow participants to better understand our field trial methodology, and to experience for themselves a design they might otherwise only encounter in a conference presentation, article, or exhibition.

INTRODUCTION

For more than a decade, our research studio has been pursuing a Research through Design approach to investigating new possibilities for technology and the way these can illuminate peoples' ways of engaging with the world. Most of our projects follow a similar trajectory. We choose domains for design based on how likely we feel they are to inspire innovative designs and to shed light on topical issues. We then do background research on those domains and issues, often involving design-led research with volunteers, and explore a wide range of design possibilities using collections of simple design proposals and related materials. Finally, we settle on one or a few proposals to develop and spend significant time refining the product and electronic design to produce highly finished research devices.

The computational devices we make are a key output from our studio, but equally important are the field trials we conduct of the products in use. We lend our designs to volunteers to try in their everyday lives, and document their reports and activities over the course of their ownership. Often these field trials are quite lengthy, with volunteers trying the things we make for periods ranging from a month or so to several years. Their experiences are crucial in helping us understand the potential of the things we make, which are usually designed purposely to avoid strongly determining how they

are to be used or what they are for. Equally, the ways people engage with our designs are revealing of their values and attitudes towards the issues we address.

Communicating Practice-Based Research

A critical element of our practice is the dissemination of our work, both because this is how our designs make their impact and because publications are crucial for the studio's sustainability in an academic environment. Our work is sometimes shown in exihibitions, the popular press or in publicly available videos produced by documentary filmmakers whom we hire to help us understand volunteers' experiences. Core to the Studio's practice, however, is the academic reports we publish in various conferences and journals. These reports typically describe our design process as a way of explaining the thinking behind our designs, and report on the field trials using a variety of data gathered from volunteers.

Academic publications are effective in allowing our practice-based research to circulate widely, yet they have several drawbacks. For instance, text can be a difficult medium in trying to convey detailed design decisions and activities, and thus we have recently experimented with a variety of 'visual essays' (Cameron et al., 2014 , Jarvis et al., 2012) and 'annotated portfolios' (Gaver & Bowers, 2012). Nonetheless, as Pierce (2014) has pointed out, most people – including practitioners, researchers, students and others – only come in contact with practice-based work such as ours through papers and associated images. Not only does this mean that they may cite our work without first-hand experience of our designs, but they must trust our accounts of volunteers' experiences without access either to the volunteers or designs.

A WALKING TOUR

Both to address the constraints of print publications in communicating the experience of our design products, and to help participants understand what it is like to be a volunteer in one of our field trials, we propose to provide hands-on experience with a recently created research product during a walking tour of the area near the RTD2015 conference.

Participants gather to discuss local data during the Hackney Wick tour.

The 40-minute route will be selected around Cambridge, starting and ending at RTD before heading back for moderated round-table discussions. It is based on a similar tour we conducted in London, in which participants engaged with experience prototypes of the emerging design. Originally conceived as a way of disseminating our work, it quickly became clear that the experience was valuable to us in serving as a kind of low-fi field trial of the design, and to our participants in allowing them to experience first-hand the ideas we were developing.

For this tour, we want to simulate the experience of being a volunteer in one of our field trials, as well as the experience of living with our research product. Thus we will present the product as we do to our volunteers. This will include the way we frame the research and describe the product, the ways we work with them to capture their experiences, and how we describe the ethical issues that are raised by the study and ask for their consent to participate. It also includes the way we present our products in terms of their packaging, instructions for use, and other materials. In this way, participants will gain insight into our methodology in a way that might benefit their future work, and allow them to better understand ours.

At the same time, our tour will allow participants to have first-hand experience with one of our studio's most recent designs. During the round-table discussions, we will discuss the process and motivations behind the device, how we developed its final form, hardware and software considerations, and the challenges and difficulties we faced in developing it. This will give participants, treated now as colleagues, greater insight into the methods and approaches we use.

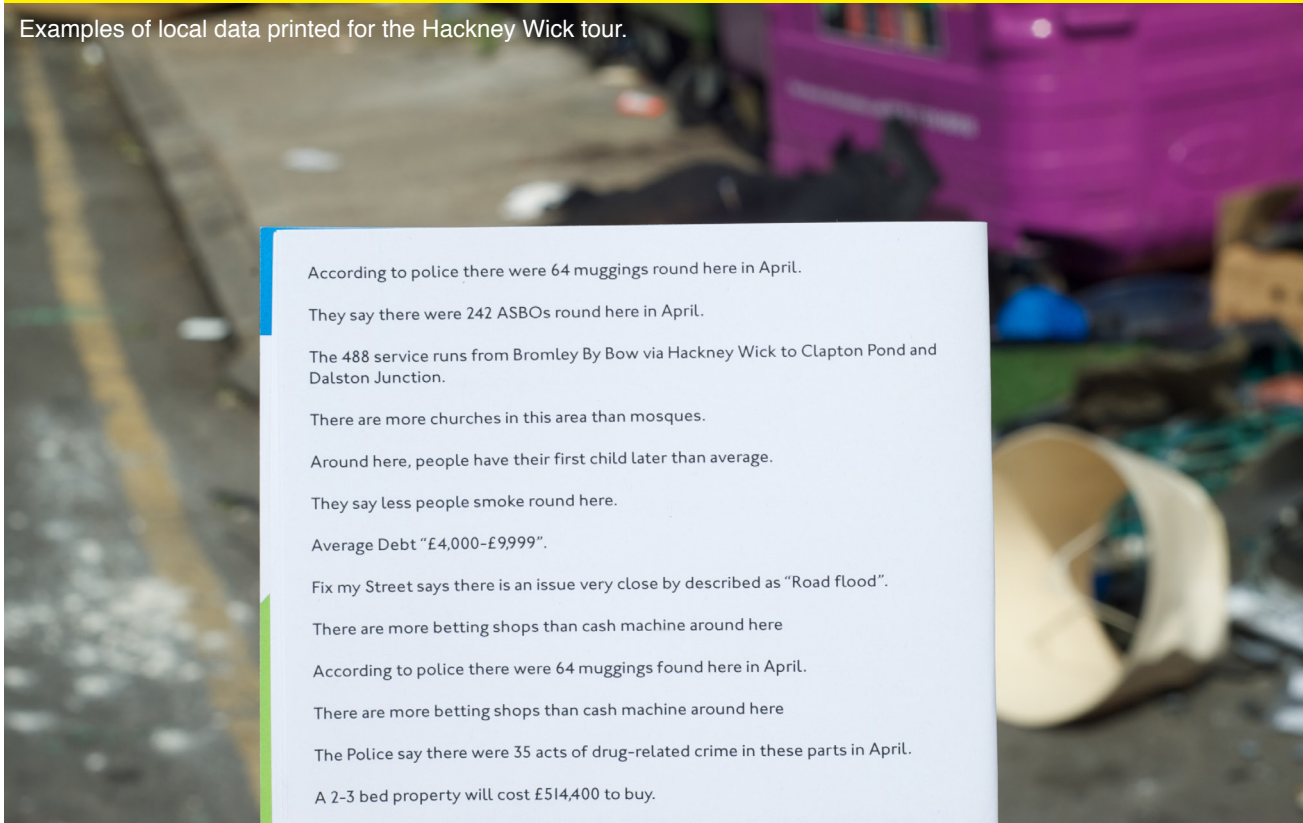
To be clear, the 'artefact' that we are presenting here is not the research product, but the walking tour itself. That is, we believe the product to be of interest, but the value of the tour does not depend on the success of the product. Instead, participants will be invited to 'discover' it much as our volunteers do, though our presentation and framing on the day, and to decide for themselves how they might engage with it and in what ways it might be considered a success or failure.

ABOUT THE PROTOTYPE

We are purposely withholding a detailed description of the research devices that we will use in the walking tour. The most fundamental reason for this is that we want to place centre stage the idea of a hands-on, situated experience as a way of disseminating practice based research, and describing our design here would divert this focus towards consideration of the device itself.

To give a broad indication of the kind of experience participants can expect, however, we will say that the device gives access to local data from a broad variety of publicly available sources. This is presented in a way that allows group as well as individual engagement. Thus during the tour, participants may learn about local crime rates, how much people earn, what newspapers people read, and the number of hip replacements there have been. In addition, they will be able to influence the data pool with their own opinions, contributing to what others will see in the future.

Saying no more here will allow participants to get an idea of what being in our studies is like. We seldom tell volunteers much about what they'll be receiving before we actually deliver a prototype, and we'd like participants to share that experience. We expect the prototype we have built to raise many issues – about the sources of data, the power relations they expose, the trust we might have in them, and their implications for privacy. Rather than address those issues here, however, we'd like to leave them to emerge on the day, through interactions with the prototypes themselves.



Examples of local data printed for the Hackney Wick tour.

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REFERENCES

Gaver, B., & Bowers, J. (2012). Annotated Portfolios. Interactions, 19(4), 40-49.

Jarvis, N., Cameron, D., & Boucher, A. (2012, October). Attention to detail: annotations of a design process. In Proceedings of the 7th Nordic Conference on Human-Computer Interaction: Making Sense Through Design (pp. 11-20). ACM.

Cameron, D., Jarvis, N., & Boucher, A. (2014, June) Designing Deployment: a visual paper of the batch deployment of research prototypes. In Proceedings of Design Research Society 2014 (pp. 899-909).

Pierce, J. (2014, June). On the presentation and production of design research artifacts in HCI. In Proceedings of the 2014 conference on Designing interactive systems (pp. 735-744). ACM.

"(The data) made me ask – what's the story of this place?"

"I was struck by the boat people… I would like to know more about them"

"20% doesn't mean anything, but 11,021 people is more manageable… it makes me think".

"How can people afford these one million pound houses" (after reading messages about the house prices and a message describing 'young couples' as typical residents)

Participants gathered after the tour to reflect on their experiences.