



Plans and Speculated Actions

Keywords: futures; complexity; speculative design; behaviour change

1. Catalyst Information

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2. Conversation Description

In the last decades, much design research around "future-focused thinking" has come to prominence in relation to changes in human behaviour, at different scales, from the Quantified Self, to visions of smart cities, to Transition Design. The design of products, services, environments and systems plays an important role in affecting what people do, now and in the future: what has become known in recent years as design for behaviour change.

As Greenfield states (2013), everything that is designed in some way "encodes a hypothesis about human behaviour", but planning anything around human action is bound up with assumptions, determinism (Broady, 1966) and reductionism. This does not take into account the diversity of present situations, nor complexities of humanity, culture and society, let alone possible futures. Perhaps too often, technology researchers and designers are adopting a singular, linear vision of 'the' future; despite lessons from history, much of what we see attempts to oversimplify complexity of human action and context, or even simply ignores it: in drafting a normal, everything else is treated as defective.

Although much design is conventionally "trying to pin the future down" (Dunne & Raby, 2013), designers cannot predict and plan human behaviour as if people are engineered components. Thus, we will propose "speculated actions" where prepared speculations by



the catalysts are presented as provocations to instigate a collective deconstruction and surfacing of inscripted assumptions, hypotheses, and world-views.

Our Conversation is motivated by three, interlinked questions: on designers' agency; on sense-making; and on complexity. We will collectively explore considerations of people, and people's behaviour, in design, particularly in the ways visions of futures are drafted. Taking Jenny Holzer's (1983-5) quote "we live the surprise results of old plans" as guidance, we will collectively rethink "old" and perhaps "plans for the future" before they become old, manifested paths.

3. Organizing research question

The proposed conversation is built upon three areas of interest — designers' agency, sensemaking, and complexity:

ON DESIGNERS' AGENCY

How do designers see their role in relation to the people for whom they design? Are we being seduced by, or even sleepwalking into, singular, modernist visions for future human behaviour (Brynjarsdóttir et al., 2012; Scott et al., 1999), predicated on a normative model of 'streamlined' people acting in predictable, specified ways, enabled and fuelled by pervasive quantification?

ON SENSE-MAKING

Are we making the mistake of reifying this quantification of our bodies, our homes, and our interaction with cities, as if these quantified data equated to a full or even sufficient understanding of the human condition (Gould, 1981)?

ON COMPLEXITY

And are we bound up in an anthropocentric view which does not take account of the wider context of humanity's place within the complex systems of nature?

These form the overarching question:

How can we better understand, reflect on, and challenge the assumptions around people, made in visions of futures, through a practical process of speculation?

The aim is that the session will help answer the question through:

- allowing participants first to identify epistemologies (e.g. shaped by corporate visioning), and then to challenge these and assumptions about people
- take various domains as subjects in relation to reductionism (e.g. health, environment, social issues, sustainability, the Quantified Self, perspectives beyond the human)
- break up reductiveness through asking 'better' (in our case multi-faceted) questions
- a conversation that allows participants to identify "problematic anchor points" through conceptual disruption of stable world views

• enabling participants to: surface assumptions, question them, and explore and examine their possible consequences

Design can be at once a proposition and a statement, the 'This?' and 'This!' in Dilnot's (2015) pithy encapsulation. Speculative design approaches, in facilitating a pluralistic treatment of futures, can help to open up, and explore variety and complexity in human behaviour and potentially unanticipated side-effects—the frictions—of design decisions. As such, a designerly method of re-introducing complexity may support designers to examine, critically, their own agency in design processes, and allow for the development of an accessible format for discussion on the emerging paradigm of quantification and reductiveness to a wider public.

Our proposed conversation addresses these aims by collectively exploring questions of existing reductionism and oversimplification in considerations of people, and people's behaviour, in design, particularly in the ways visions of futures are drafted. The session will consist of partly discussions, partly practical activities, leading to a set of questions. These questions will be created by participants and examine critically assumptions, worldviews, power structures and ways that problems are framed when considering people in futures. We aim to analyse these questions post-conference for their focal points and function in dissecting assumptions, as part of developing a method for applied critical engagement in design research and teaching..

4. Set-up of your session

During the conference session the chairs will briefly set the context and highlight the focus on diversity reflected in each Catalyst's position. The Catalysts each have expertise and perspectives around particular aspects of design, behaviour, futures and quantification, including: the human body and health, cities and urbanism, the history of design, cybernetics, architecture and HCI, speculative design, sustainability and the environment, socially engaged design, and design for behaviour change. The Catalysts will introduce their position statements in response to the chair's invited areas of interest (designers' agency, sense-making, and complexity) and will each provide a sample scenario of a technological future that exemplifies, serving as a provocation for the audience participants.

These scenarios are intended to serve as prompts for the second part: participants will, in groups, explore and critically deconstruct them, identifying assumptions these visions imply, and then reconstructing alternative "endings" or "pathways" that these could take. This will give both material for informed discussion, but also highlight critical aspects of reductionism through a practical activity. Participants' drawings, notes and ideas will be used throughout the session to exemplify concepts and enable discussion (as well as contributing to social media out- and input during the session and after, e.g. using Storify and Twitter) — the specific aim is that everyone who comes along is a participant in the collective thought process, not solely a spectator.

The Catalysts will remain available throughout the session and help coordinating and facilitating the groups. The chairs will conclude with a critical summation that leads back to the central questions, inviting all participants to reflect on the session's journey. Aside from the narrative booklet (details below), one intended 'output' of this conversation is a set of questions, created by our participants, which we will analyse postconference for their focal points and function in dissecting assumptions. We're intending that this first testbed will lead towards developing a method for applied critical engagement in design research and teaching.

5. Type of space and equipment required

We will need a breakout-type room suitable for up to 20 people including the catalysts and participants. We will provide drawing materials and templates for the initial stages of deconstructing the scenarios. One piece of equipment which would be particularly useful is an overhead projector with visualiser / document camera, so that full justice can be given to participants' sketches and ideas during the session, and they can be shown to the whole room to enable discussion and reaction. We will also require a projector for the presentations.

6. Dissemination strategy

Our Conversation will already start prior to the conference, through seeding provocations and questions on social media with the hashtag #SpeculatedActions, to which conference delegates and the wider design, technology and futures research communities can respond in advance. During DRS 2016 we will project the collected Tweets and their replies to one of the walls, so as to invite further responses. The materials created by the Conversation participants, along with the catalysts' scenarios and the final set of questions — which we will analyse after the conference — will be compiled into an illustrated narrative booklet, in a conversational 'metalogue' format (Bateson, 1972) representing the structure of the session, enabling the discussion, debate and pluralistic visions to be explained in context; the collected Tweets will be added. The booklet can be featured on the DRS 2016 website following the conference. The catalysts are all active disseminators of work via social media and other outlets, with wide networks of practitioner and academic followers, thus increasing the impact of the session beyond the conference. Our aim is, in the longer term, for this session to lead towards the development and testing of a method for applied critical engagement in design research and teaching.

7. References

Bateson, M.C. (1972). Our Own Metaphor. New York: Alfred A. Knopf.

Broady, M. (1966). Social Theory in Architectural Design, In Gutman, R (ed.) (1972), *People and Buildings*. New York: Basic Books.

Brynjarsdóttir, H., Håkansson, M., Pierce, J., Baumer, E.P.S., DiSalvo, C., and Sengers, P. (2012). Sustainably unpersuaded: How persuasion narrows our vision of sustainability. *Proceedings of CHI 2012*, Austin, Texas.

Dilnot, C. (2015). History, Design, Futures: Contending with what we have made. In: Fry, T., Dilnot, C & Stewart, S.C., *Design and the Question of History*. London: Bloomsbury.

Dunne, A. & Raby, F. (2013). Speculative Everything. Cambridge: MIT Press.

Gould, S.J. (1981). The Mismeasure of Man. New York: W.W. Norton.

Greenfield, A. (2013). Against the Smart City. Do Projects, London.

Holzer, J. (1983-5). *Survival* series. Text details available at, e.g. http://www.arthistorysalon.com/?p=452

Scott, J. C. (1999). Seeing Like A State: How Certain Schemes to Improve the Human Condition Have Failed. New Haven: Yale University Press.

About the Catalysts:

Veronica Ranner is a designer, artist, and researcher interested in networked cycles, emerging bio-technologies and bio-fabrication, systems design, and new roles for designers. She is currently pursuing an AHRC funded PhD at the Royal College of Art, examining the burgeoning domain of the bio-digital — a converging knowledge space where computational thinking meets biological matter.

Dan Lockton is interested in human behaviour, understanding and sustainability. He is author of *Design with Intent* (O'Reilly, 2016), based on his PhD at Brunel University, and is currently a visiting research tutor at the RCA. From September 2016 he will be assistant professor at the Carnegie Mellon School of Design.

Molly Wright Steenson is an associate professor at the Carnegie Mellon School of Design. She is completing a book on architecture, design and artificial intelligence titled *Architecting Interactivity* and holds a PhD in Architecture from Princeton University.

Gyorgyi Galik is a design researcher at Future Cities Catapult and a PhD candidate in Innovation Design Engineering at the RCA. Her practice focuses on voluntary social change, and transforming our collective relationship towards the environmental commons, responding to contemporary social and environmental challenges.

Tobie Kerridge is committed to taking a collaborative and speculative approach to design, and in providing empirical and analytical accounts of practice. He has worked as a design researcher since 2003, with the Interaction Research Studio and as a Helen Hamlyn Research Associate, and is a Lecturer in Design at Goldsmiths.