

The IKEA Catalogue: Design fiction in academic and industrial collaborations

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1. INTRODUCTION

This paper is an introduction to the “Future IKEA Catalogue”, enclosed here as an example of a *design fiction* produced from a long standing industrial-academic collaboration. We introduce the catalogue here by discussing some of our experiences using design fiction with companies and public sector bodies, giving some background to the catalogue and the collaboration which produced it. We have found design fiction to be a useful tool to support collaboration with industrial partners in research projects – it provides a way of thinking and talking about present day concepts, and present day constraints, without being overly concerned with contemporary challenges, or the requirements of academic validation. In particular, there are two main aspects of this we will discuss here, aspects that are visible in the enclosed catalogue itself. The first is the potential of design fiction as a sort of ‘boundary object’ in industry and academic collaboration, and second the role of *critique*. After this introduction to the paper we enclose the output of our collaboration in the form of the catalogue itself.

2. Boundary objects and critique

The research centre where we work brings together ten or so companies (including IKEA), along with three host academic institutions, working together on different technology and interaction related research projects. Research collaborations with industry are something that can face many challenges for both industrial and academic partners. First, there is the question of different expectations over timelines and the sorts of problems research should address. While it is not always the case, broadly academic partners have a much longer focus, whereas industrial partners need focus on much shorter timespans. The lifetime of a company in the fortune 500 is less than fifteen years – one perhaps should think how universities would behave if they only survived for on average fifteen years. In turn, success for industrial partners in a project is often seen through impact on their own company. Careers within companies are made (and not) on internal company impact. For academics – while impact is important, it is mainly through publications and teaching. Research collaborations can hit problems when the ‘output’ is narrowly defined in terms of an academic paper, or what will fit with an academic paper, in contrast to what will have an ‘impact’ within an organisation.

It is here that we have found design fiction ‘surprisingly useful’ [6]. Design fiction offers the possibility for a different genera of communication, a possibility for collaboration that escapes the

limitations of a lengthy academic paper or specific technical prototypes. The fiction acts as a sort of “boundary object” – between academics and practitioners, meaning different things to different groups. As Star and Greisemer put it, boundary objects are: “objects which are both plastic enough to adapt to local needs and constraints of the several parties employing them, yet robust enough to maintain a common identity across sites.” [7].

From an academic viewpoint design fictions that can be seen as a way of experimenting with ideas and issues. Fictions are perhaps not as heavyweight as an academic publication, without the requirements of citation, verification and the like. This allows for more speculative and potentially innovative thinking. Design fictions can thus be used to illustrate and provoke ideas that are in development, particularly where design is part of the ideas in development. For industrial participants, design fiction is in turn a venue where ideas can be experimented with and implications discussed, without being seen necessarily as a comment on current products or practices. Their ambiguity means that participants can speculate without worrying about negative implications being drawn for the present. Figure one is a demonstration of this from the catalogue. On one side it talks to the way in which IKEA has always moved ‘labour’ (such as construction and transpiration) to the purchaser, allowing it to sell products for much cheaper. Yet, on the other side, it also talks to an interest in ‘labour’, maker culture and DIY. How would IKEA interact with those who want to ‘hack’ and build variations on the NYFIKEN bookshelf? What



Figure 1: Bookshelf “levels of service” – something between industrial and academic concerns

if personal fabrication is more widespread, would IKEA simply sell plans and 3D cad models?

A second interesting issue about working together on design fictions is how a design fiction can act as a piece of critique. The relationship between design fiction and the (perhaps better known in HCI) *critical design* illustrates this issue. It is not that design fiction is without critique, and critical design is all about critique – nor is it that organizations (commercial and public) are unable to deal with critique as part of projects they work on. Rather what matters is the form that critique takes, and how it can contribute to a collaboration, rather than seeming as an “academic privileging” that steps outside a specific situation [4].

While it is a broad and perhaps even contested term, *critical design* has at its heart the subversion of status quo through the deployment of irony and satire. In the work by Dunne & Raby [3] that coined the term, there is an attempt to subvert design’s focus on “the product” – the ways in which design usually takes for granted its relationship with commerce, (over-)production, consumption and the like. As Pierce *et al* put it, critical design is an attempt to “question[s] the role of design in shaping our everyday reality.” [5] Yet, as Pierce *et al* also point out, there is increasing diversity in what is described as or subverts “critical design” (Dunne & Raby themselves have moved more on to use the term ‘speculative design’). Critique is still central to the enterprise - in Bardzell & Bardzell’s [1] use of the term, there is an even more explicit connection with humanistic critical theory, and cultural studies.

In contrast, *design fiction* is less clearly a critical enterprise. It has a lineage is perhaps less in design (or even critical theory), but rather in *science fiction*. As Bruce Sterling describes it, design fiction is “when science fiction thinking opens itself to design thinking” [8]. If good science fiction tells us not about the future but about the present, then design fiction itself also reveals our fears and problems in current time. Bleecker’s design fiction work includes ‘catalogues’ of concepts that are simultaneously uncomfortable, but at times also reassuring – concepts that paint a story of a particular future, playing on our hopes and fears of the present [2]. Critique is sublimated within other engagements, humour; spectacle; aspiration; technological desire. This is not to say that design fiction is without critique – as with science fiction much of the work is clearly critical in intent. Yet it can go further - design fictions can be possible but interesting, unusual but also upsetting. Design fiction without critique is neutered – falling into corporate publicity. Yet design fiction perhaps has more diverse goals than critical design.

When working on design fiction with large, privately funded companies and large, publically funded government organisations, one question that we encountered is *how critical do you want to be?* Or more specifically, what is the useful role of critique in such collaborations: of technology, of futures, of contradictions in the present, or – indeed – of the role of the company that is participating in the project? In rethinking technology, it is hard to avoid being critical to some extent. Thinking about different futures involve looking for contradictions in current systems or practices, or trends that may be benign or merely frustrating (such as incompatibilities), but with benign potential. Yet being critical might cause all sorts of problems in collaborations and even in interaction. The first can come in working with those who might be uncomfortable, or hostile, to this sort of critical thinking. An inescapable part of corporate culture in nearly every organisation is to avoid direct explicit public critique of that organisation itself. This can conflict with a more critical intent.

Perhaps, more insidiously, there is also the question of how we might end up (in advance) censoring our work so as to avoid a perceived conflict. As we respond to ideas, and concepts the work might simply never be guided in a critical direction, simply replicating the worldviews of participants. Or there are times when a direct critique might simply fail to gain purchase. One of the very points of working with large non-academic organisations is that they have power and influence. That power can come through explicit legislation and policy (when working through public sector bodies) or through an influence on what is made and sold, or even just on the transmission of ideas that takes place in forums outside academia. Collaborations offer the possibility of a positive *influence* – but at some level this is reliant on communication and personal relationships. Critique – if it takes the wrong form, if it is clumsy or too brazen – can seem indulgent or simply irrelevant. We might say that a specific comment or investigation about an issue might lead to engagement and reflection, whereas a broader critique could be summarily rejected. Perhaps academic work should have little concern for these issues. But research in conjunction with industry has the potential to have a positive influence through and with different organizations and public bodies. An important purpose of industrial collaboration is to rejuvenate academic work by patching it together with industrial concerns, and to rejuvenate industrial work with new ideas and arguments.

One way we have sought to deal with this is by the use of *equivocality* in our designs. Equivocality in design fiction involves ideas that incorporate concepts that make the reader uncomfortable. There is the aim of visualizing ideas that have multiple meanings, that are presented in a straightforward way but that leave room for different readings. Working with equivocality lets us explore subversions that rather than acting as leaden criticism, are more playful and open to different engagements. This is a little like the use of homophonic puns in mandarin as a way of subverting Internet censorship.

3. The catalogue

Moving onto our specific output - the catalogue enclosed here was produced as a group effort bringing together collaborators from public sector bodies, academic institutes, and major organisations - including Stockholm City, IKEA and Ericsson. We worked together over different concepts trying to establish possible futures that highlighted the sorts of tensions that we though were interesting to investigate, as well as productive in terms of design.

Throughout the catalogue we attempted to mix the sort of wholesome scenes that one encountered in a contemporary catalogue, with possible subversions. So, on the first page we see a typical gendered family scene - father away, while mother plays with child. Yet the scene entails two subversions: the sofa is



Figure 2: How do we feel about IKEA selling living organisms? What about a pricing model work where we need to pay 9.99 per month for a lifetime subscription only?

watching what unfolds, collecting memories, and the father is wearing a VR headset. This makes the scene perhaps a little bit more shocking, the father is not merely attending to a different activity, but they are in a different space – their vision glanced by a memory recording sofa. Similarly, on pages 5 and 6, we see one ongoing concern of IKEA play out in an unusual way. Here, we have a storage cabinet, but one that mixes digital recommendations, delivered by drones. What we see is a play between a concern for storage in a digital world, with the rather intrusive “analysis [of daily activities] for an accurate subscription offer”.

At first glance, the catalogue then offers a rather cozy futuristic vision, but if one looks at the copy instead one can read a more equivocal vision: IKEA as not only the provider of the home, but as a data collection entity. How would we feel about IKEA replacing Google as the repository of our memories?

4. Conclusion

We only are at the beginning of experimenting with design fiction and the role it can play in these collaborations. The enclosed catalogue helped us start to explore new ways of collaborating with industry, but has also been adopted for use in teaching by our colleagues, as well as encouraging our industrial partners to pick up the ideas and run their own design fiction events. Clearly, it conveys research in different ways and lets us reach out. In the enclosed catalogue you can see examples of the equivocality, critique, and boundary objects in particular designs. Yet more broadly, the opportunity here comes from the possibilities of working with a new form for academic research – not just as a new way of communicating research outcomes, but as a new forum for communication and collaboration with a variety of partners.

5. ACKNOWLEDGMENTS

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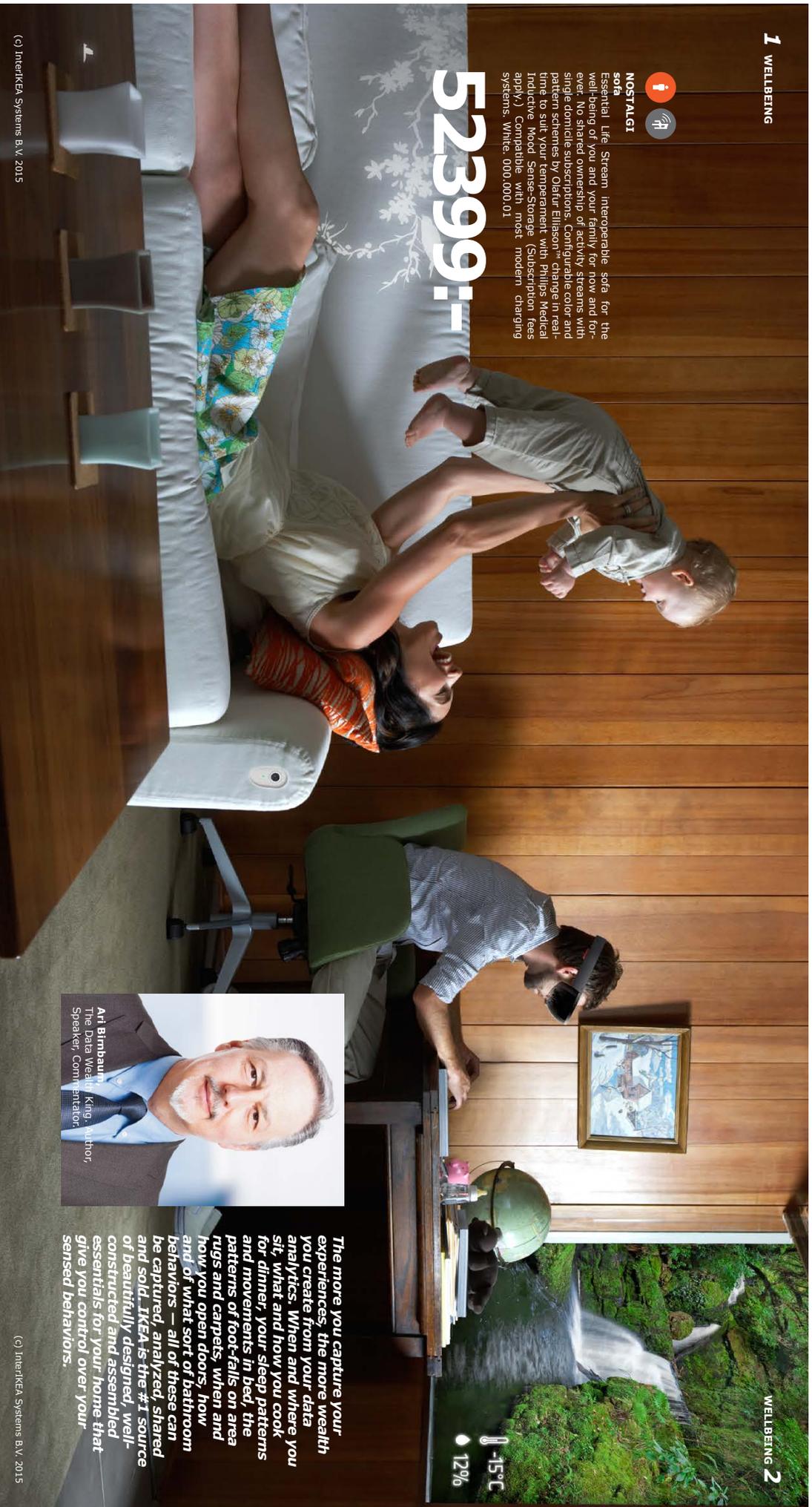
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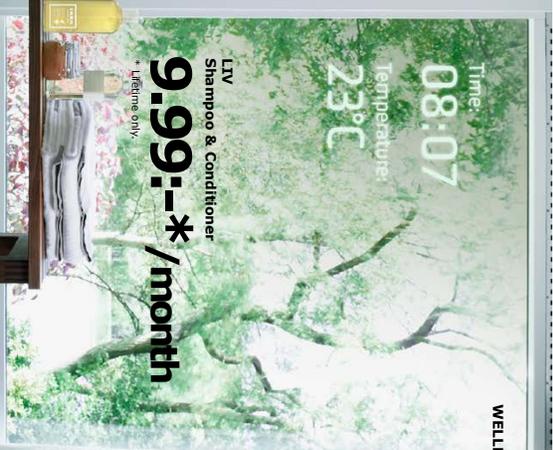
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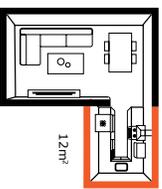
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