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Working with the Ineffable: Toward a process of understanding and communicating qualitative research knowledge and experience through design

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Abstract

The work described in this paper addresses the conference call for "New processes, tools or approaches that facilitate knowledge exchange and collaboration" between academia and creative people. It introduces a research-for-design program that we at the Experience-based Designing Centre in Denmark have been working on and with for the past year. It will present a program of teaching, research and industry collaboration that is essentially a knowledge gathering and information exchange program that is in itself a work-in-progress. We refer to this work as the four pillars of Experience-based Designing (XbD).

The discussion will centre on XbD as we currently practice it with a view to exploring new opportunities for improvement within the whole experience-based designing process. The four pillars involving exploring, understanding, sharing and showing how are staging points for the input of new thinking. All of these stages involve researchers either academic or from practice, trying to communicate ineffable forms of knowledge to others. It is difficult enough to gain access to this knowledge in the first place, then to know what to do with it when you find it or how to communicate what you have found to others. It requires creative thinking and collaborative effort to make the kinds of breakthroughs that we have so far. We would like the opportunity to continue this process at this conference with the help of our peers

Keywords: Experiential understanding, knowledge exchange, qualitative analysis

Introduction

The work described in this paper addresses the conference call for "New processes, tools or approaches that facilitate knowledge exchange and collaboration" between academia and creative people. I will introduce a research-for-design program that we have been working on and with for the past year in Denmark. I will present a program of teaching, research and industry collaboration that we run that is essentially a knowledge gathering and information exchange program that is in itself a work-in-progress. This work is designed to develop and nurture learning about people's lives within a relatively new approach to Experience Design that we refer to as the four pillars of experience-based designing (XbD). These represent a number of new twists on established experience based design practices (EbD) that have gained popularity in the UK and other parts of the world (NHS, 2013; Cain, 1998).

At our engineering research centre we have been applying hermeneutic phenomenological thinking (Van Manen, 1997) to a broad spectrum of projects for understanding everyday human experience. Through our projects, we have experimented with and explored creative ways to 'get into' the lives of participants within the health, pharmaceuticals, education, manufacturing and local government sectors. Some of our ideas are a little unorthodox, some are downright sneaky but we are discovering that they work and can provide powerful insights into the everyday 'natural' worlds of ordinary people. Finding new ways to capture lived experiences (as best we can), understanding hidden 'meaning structures' contained within them at the most primordial level, and communicating these insights experientially are the goals that drive us. This paper cannot fully showcase examples of how we have

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applied design thinking in each stage of each project but we have in every case referred to the first principles of hermeneutic phenomenology (Gadamer, 1975) to inspire new approaches and 'ways-into' the life-world of real people. Our discussion at the conference will centre around what we have experimented with and found so far and how this work might be advanced in creative new ways.

About Experience-based Designing (XbD)

Experience-based designing (XbD) is about firstly understanding a person's natural, everyday experience of their life world (understandably, a man made, artificial world) then secondly, using this understanding to design things (products, services and/or systems) that will (ecologically) enhance their experience of the world. This naming form is an intentionally simplified, activity focussed terminology, designed to keep our attention rooted in a clear process agenda. It is not about establishing yet another 'segment' within the design industry. XbD serves the design field by providing working examples of and practical information about how to apply a fundamentally ethical approach to designing in a holistic, caring way. XbD is a specific approach to designing that acknowledges the primacy of each person's intrinsic humanness and at the same time recognises their unique contribution to the complex technosphere, geosphere and biosphere that we all inhabit.

Experience-based Designing (XbD) - The four pillars

Supported by and intersecting with the four pillars of experience based designing (explore, understand, share and show how) are four streams of activity (see figure 1 below). These streams (pedagogical, research, ecological and collaboration) are the manner in which we apply XbD in our centre. The interplay between the four pillars and the streams of activity provide a matrix of rich research and methodological development opportunities. Our strategy is to explore the opportunities that each of the 'intersections' represent and feed the results back into a continuous improvement loop that builds our proficiency and inspires innovation.

THE FOUR PILLARS* OF EXPERIENCE BASED DESIGNING (XbD)
HUMAN CENTRED RESEARCH INTO MEANINGFUL MAKING

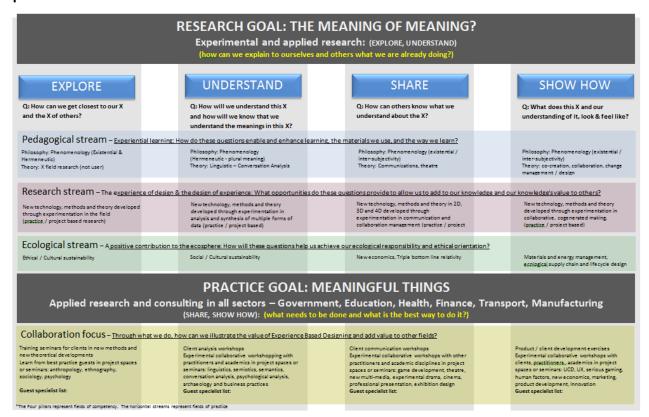


Figure 1: The four pillars of our Experience-based Designing process

Building knowledge in the field

By specialising in uncovering deep phenomenological understandings of peoples everyday lives (both philosophical and methodological) and bringing these understandings into the designing process, the XbD Centre is able to develop advanced competencies in both of these fields. With an open-disciplinary view the centre can selectively access knowledge from other fields which can contribute to new technologies and ways of thinking to further strengthen the four pillars of XbD; that is to EXPLORE, UNDERSTAND, SHARE AND SHOW HOW. The competencies we have developed within these pillars enable products, services and systems as well as the processes of designing them to be made genuinely 'meaningful' to the people they serve. The methodology for explicating meaning and making it available for designing meaning-filled products is the centre's main philosophical and strategic advantage.

What are the Four Pillars?

1. Exploring

These are activities involved with conducting deeply personal (phenomenal) field research that gets as close to the moment or event of an *others* experience; as it happens and as it appears naturally. This means designing ways to get as close as possible to an unmediated, non-instrumental research outcome. As a starting point the XbD approach requires researchers to wherever possible and to the deepest degree achievable, to 'embody' the experience that is, to submerge themselves in it so as to deeply understand the experience for themselves and to 'learn the language' of the experience. This embodiment stage employs the Taxonomy of Experience¹ (*ToE*) as a tool for making the exploration as deep and comprehensive as possible.

2. Understanding

Understanding is primarily about using empathic interpretive techniques (supported by the embodiment exercise in pillar 1) such as conversational (linguistic) analysis, hermeneutic interpretation, software based data processing and best practice from associated fields such as semiotics, semantics and philology. Field research data is at first inductively expanded to develop a much wider universe of meaning data (Ricoeur 1978). These meanings are then refined (reduced) using deductive processes. The search for meaning in things and in everyday life events is considered by XbD to be the 'holy grail' of design research. This stage employs and continually evolves the SEEing ² approach to data analysis which has at its core a process for explication and distillation of meaning. Sharing that meaning with others and incorporating that meaning into new designing by intention and not by accident is the second 'holy grail' of the XbD process. This is achieved in the Share and Show How stages.

3. Sharing

Experiential understanding is not a quantifiable concept. The qualitative understandings (meanings) uncovered in the EXPLORE and UNDERSTAND stages need to be shared with an audience of stakeholders including the research participants from which they came. This needs to be done carefully in an inclusive, experiential way such that the power of the findings is not lost in translating them for a non-research audience. This process of collaboration and form of communicating is an emerging field of study and practice (Erwin, 2012) with many new and exciting development possibilities - one that is crucial to the practical success of the research outcomes. At the XbDC we are exploring new 2D, 3D and 4D communication technologies, forms and media in order to achieve what we describe as 'experiential presentations'. That is turning the understanding that we have developed of the experience into a presentation that enables an audience to have an 'experience of understanding' (Gadamer, 1997) – this is understandably not the same experience and not one that can be said to be designed *for* the audience (design is present), but one that is constructed by them from what is presented. I know it gets confusing.

¹ The *ToE* is a proprietary framework for structuring the exploration of an experience

² SEEing is a proprietary process of qualitative data analysis

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4. Showing how

This stage is about taking the findings and recommendations from field research into the boardroom – it begins the product, service or system development cycle. It can involve collaboration between various stakeholders such as original research participants, fellow researchers or external collaborators in workshop or other generative interactions. These should be 'designed' to bring experiential understandings to life in new forms. The nature and success of these interactions is always strongly influenced by the meaning structures derived in the first three stages (EXPLORE, UNDERSTAND, SHARE).

This pillar is designed with a focus on productively linking the research capabilities of the centre with industry, government or other academic institutions so that products, services or systems can be properly realised for the benefit of the people 'explored' in the very first stage of the XbD process.

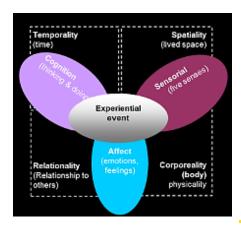
Looking backward

Over the last seventy years, the product, services and systems design industry has evolved its interest from ergonomics to usability to user – and in more recent times to 'experiencers'. In broad terms the industry approach to experience has largely stalled at 'user' experience and what can be 'given' to a user of designed artefacts. This evolution (Fig. 2) is now moving forward so as to encapsulate the perspectives of people before they become 'users' that is, while they are still undesigned-for people. This is the approach that the XbD Centre takes in understanding experience in its natural setting before taking this understanding into a design cycle.



Figure 2: An evolutionary view of experiential understanding in design

In our research we can claim a small measure of uniqueness in that globally, there are relatively few groups who specialise in the new fields of experience design, design for experience, user experience, customer experience etc. The XbD centres clear difference lies in our unequivocal focus on everyday individual experience; the explication of real meaning; and the ways in which this can be used in the process of experience-based designing. In order to do these things, a number of methods (The *ToE* and *SEEing* methods - Fig 3 and 4) have been developed which also give the group a 'technological' advantage in this field.



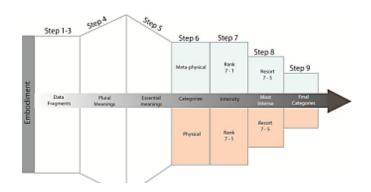


Figure 4: The 9 step SEEing process of qualitative analysis

Figure 3: A condensed view of the ToE – structure of experience

Looking forward

The Experience-based Design Research Centre (XbDC) is in the business of value adding to the skills that future design engineers will need to operate in an uncertain economic future. The only certainty about their future is that the organisations they will work for or in will be increasingly reliant on their understanding of, or ability to understand the people for whom they exist to serve; their customers their employees, their shareholders... all of them, ordinary people. The Experience-based Designing Centre uses a unique set of tools based within the four pillars of XbD, that enable a clearer understanding of people to be obtained and utilised in designing products, services or systems. The XbD Centre provides a hub for the research, teaching and economic goals of local university, industry and government bodies through the performance of unifying, cross-disciplinary research and development projects. These projects are conducted using student, staff and specialist researchers who in turn feed the research learning's back into the system in a continual improvement loop

Conclusion

The proposal for discussion at this conference is to present XbD as we currently practice it but then to explore new opportunities for improvement within the whole experience-based designing process. The four pillars involving exploring, understanding, sharing and showing how are staging points for input from a multitude of different thinking. All of these stages involve researchers either academic or from practice, trying to communicate ineffable forms of knowledge to others. It is difficult enough to gain access to this knowledge in the first place, then to know what to do with it when you find it or how to communicate what you have found to others. This is at the grass roots of what we as designers are constantly trying to do. It requires creative thinking and collaborative effort to make the kinds of breakthroughs that we have so far. We would like the opportunity to continue this process at this conference with the help of our peers.

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