Designing for/from the Future

Experiences, Methods, and Debate

Başar Önal
Designing for/from the Future:
Experiences, Method, and Debate

MFA thesis submitted to
Experience Design Group,
Department of Interdisciplinary Studies.
Konstfack University College of
Arts, Crafts and Design
Stockholm, Sweden.
Advisors: Ramia Mazé, Ronald Jones,
Emma Stenström.

Text and book design by Basar Önal
Stockholm 2009 basaronal.com

ISBN 978-1-4457-2555-0

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Introduction
This thesis aims to introduce new methods within the field of experience design, an emergent interdisciplinary design discipline, using these methods as tools for debate and for the communication of new design concepts. Staging experiments and experiences around these proposed methodologies and testing the concepts through workshops will form the core of the proposed design practice.

The first part of the thesis deals with emerging issues in experience design, such as the role of the designer and what it is that experience designers design. In the second part, the area of future studies will be addressed and how methods from a social science and economics oriented discipline could be carried across to a related design practice. Finally issues around biotechnology, the area which some future studies methods are applied to in this thesis, will be explored.

The future of life sciences is pregnant with implications roaming between the fear of genetic manipulation to optimism about longevity. The range of reactions to these issues makes it worthwhile for experience designers to suggest solutions, services and systems around the field. The function of the methods in the thesis will be to provide a two-way process: mediating the communication between designers, design consultants and policy makers in the context of innovation; as well as connecting them to broader public with debates.

Experience design deals with transformation and new modes of design practices. It involves a new breed of designer to take part
in the transition to what is called experience economy. Although
the transition is largely economic, design plays a pivotal role and
revisiting Pine and Gilmore’s *The Experience Economy* helps
designers adapt new methods for the workplace. Pine and Gilmore
suggest a movement from workplace to theater space and their
terminology includes “cast,” “roles,” and “characterization.”
Not only these statements suggest new ways of reconfiguring the
workplace but they also help articulate the role of the designer
in this economic model, which is characterized by “advanced
experience businesses” as opposed to material based production
(products). The authors sanction a transition from commodities
to experiences while engaging customers in a memorable way—
a crucial part of this scenario.
In my thesis I will argue that experience designers not only
design customer experiences to please and aestheticize the
products but they have the power to change people’s (rather than
customers’) opinions, using the same tools the field of marketing
and exhibition design offers them. In this respect, they might be
called “experience stagers” by Pine and Gilmore or “experience
architects” by Tom Kelley.²
Since experience designers need to communicate and create
transferrable knowledge, methods and methodology constitute
a large part of my thesis and contributing to that area (design
methods) is my goal. Methods represent crystalized and
transferrable knowledge that would otherwise be obscure for
others. They are also great tools for learning, since experience
design or many other emerging practices lack the richness of
literature or the historical body of work to base critical studies on.
In this case, well illustrated methods provide modules to guide and
monitor the research, keeping track of the research process.
For these purposes, methods ranging from commercial
innovation based ones to more exploratory and participatory
ones are surveyed. An important part of the methods come from
trendspotting³ practice and future studies methodology, which will
be referred in section two, Design Futures.
The backbone of the final project is a “meta-method” which incorporates common methods surveyed so far: the “for/from” method. The first part of the “for/from” method is about designing prototypes and creating fictional narratives to project current trends into the future, the second part is perhaps less structured, but more ambitious, carrying fictional futures to the daily lives, to test and evaluate the scenarios created.

The “from” part involves the creation of fictional narratives about the future (bordering science fiction) in order to communicate emergent paradigms and engaging in a debate that investigates critical practice in design research. The double structure of the method is also mapped onto the final project, a fictional institute, and are disguised as the two founding departments in the institute.

The area of futures thinking is of special importance, connected to my initial research question of how (experience designers) design speculative and exploratory future experiences, using the tools of communication design and commercial services—which are clearly oriented towards conveying meaningful experiences based on result-oriented design thinking.

Since the domain of futures thinking is not populated by designers, it is of special importance to me as how designers might find a place in such interdisciplinary teams and how the organizational levels of these so-called complex experiential structures could allow designers to participate.

A great deal of futures studies are devoted to the study of technology as well as social and ethical issues surrounding the investigated technologies. My basic premise is that technology induces new sorts of experiences, however designers are not technologists and they operate in different ways, therefore they need new methods in the face of technological innovations.

The area of technology that is investigated through futures studies methods is biotechnology, a discipline that creates an accelerative change in how we view artifacts, processes and ourselves, which in turn creates an experience of how we perceive ourselves. This experience is different from what “user experience”
designers design and will be explained in the section entitled “Experience Design.”

Biotechnology as an area of application is usually covered by artists often in work that is generally perceived as shock tactics by the public. There is a need for designers informing this area in the context of innovation. Major opportunities lie in combination of experience design and science that can contribute to making a hard to grasp field accessible. In the thesis project, I intend to visualize the conditions in which research into the aforementioned areas can contribute to ordinary, “popular” lives and question the case of their validity as plausible design tools for innovation. The artifacts or “touchpoints” that are designed alongside theoretical research are nonetheless unconventional and challenging, but the ultimate goal is looking for ways to adapt them for informing design research.

INHIBIT, The institute of Bio-Informance and Transhumanism is the final outcome of the research. INHIBIT, with its departments and services functions as a framing device for the research. Since a company structure is something the intended audience is familiar with, it is easier to add levels of abstractions on top of that, since I am not dealing with concrete, sensory experiences, but rather vague ones. I will argue that building on existing structures helps the intended participants better understand vague and invisible intentions and make them visible.
Notes


2 Experience Architect is the name of a chapter and a profession in IDEO, see Ten Faces of Innovation (Broadway Business, 2005).

3 “Trendspotting” and “trendwatching” are often used interchangeably, they refer to the process of identifying key changes and evaluating novel approaches in a certain area (or society in general) in order to spot business opportunities, governmental planning or plainly for inspiration.
Experience
Design
1.1 Definitions

Current practices and definition around what can be called experience design is muddled. Popular websites return references from a plethora of disciplines including cognitive psychology, linguistics, ethnography, interaction design. The practice of drawing from distinct disciplines, which can be argued to be the definition of multidisciplinarity, is not enough to define experience design. It can be further argued that what many practices produce is still in the realm of product design or service design, but their focus has shifted towards enhancing the experience of the customer.

In circles where design is seen as a tool for economic growth, experience design is usually linked to a brand experience or corporate experience. In this approach, there is an explicit customer side and a brand side, which need to form meaningful interactions in time thus engaging customers and immersing them in the brand experience.

Not surprisingly this approach resonates with the pioneering book, Experience Economy, that attests the birth of selling experiences. Pine and Gilmore introduce stages and theatrical approaches centered around brand perception. Both of these approaches assume an underlying brand or a company that precedes the designed experience. I will return to this point in the discussion of the final project, design of a fictional institute.

The design and Innovation company IDEO further adds a work description, or a role within a team, postulating an experience architect role. There is less emphasis on the brand experience in
this model, however the role of the designer is that of an auteur, orchestrating events and creating enticing experiences. This last role is somehow less open to collaboration, as there is little room to test— the experience is planned in advance and the audience gets a designed package.

User experience design, often cited as a sub category in experience design, emphasizes the user-centric nature of its practice. Bill Buxton uses the terms of experience design and interaction design interchangeably. To instantiate his points about how experience design is different from interface design, he introduces experience design to add another layer on the usability, as there is an experiential element missing in interface design. However, the definition of experience design, be it an interaction design flavored one, or a brand oriented one, misses the criticality of the design discipline.

The Experience Design Group at Konstfack has established three lenses to help define experience design and navigate the holistic process: Environmental, Persuasive and Humanitarian experience design. This thesis relates to two spheres within experience design: Persuasive and Humanitarian experience design. Essentially, my aim is to persuade participants to think about future, everyday situations and its consequences. Principles from cognitive science and looking into ways of affecting user behavior is integral in the persuasive practice. The second area covered is humanitarian experience, as some of the scenarios will be dealing with risk and fear about future consequences of how art and design uses science. The disciplines or areas that are intended to contribute includes, futures thinking, trendspotting, interaction design, which are themselves interdisciplinary practices.
1.2 Related Issues in Industry

Experience design, as it is practiced in the Experience Design Group at Konstfack is essentially different from user experience design. At EDG, we tend to be critical rather than just solving a usability problem in a functional way, however, one of the three approaches to experience design, persuasive experience design, overlaps with the user experience design approach in terms of influencing behavior.

One claim that is made by B. J. Fogg is that in the future we will be seeing an increasing number of artifacts designed with purpose of persuasion, and this area is growing as a research and development area. His focus is altering people’s attitudes and behaviors through technology. Critical design, which I will discuss in Section Two, Design Futures, typically tends to oppose forwarding industrial agenda, but this doesn’t mean it is not using persuasive tactics. For my purposes, I am borrowing from both critical and more industry-oriented experience design.

Brand experience, not necessarily a (visual) design based field, with its emphasis on touchpoints and triggers can provide experience designers with a valuable resource of tactics, or at least a database of available places or moments that experiences might arise.

Although experience designers might be tackling more existential questions and designing experiences on a wider timescale, this field, also a part of the wider “Experience Economy” should not be overlooked.

As this thesis unfolds in the coming sections and paragraphs, my intentions of creating fictional settings and events will become clearer. Although creating fully functional services is not in the scope of this thesis, I am not positioning myself completely in the science fiction genre. Methods and approaches from both design fiction and service design oriented brand of experience design are appropriated for the final project.
“Science fiction is a form of popular entertainment. The emotional payoff of the science fiction genre is the sense of wonder it conveys. Science fiction “design” therefore demands some whiz-bang, whereas industrial design requires safety, utility, serviceability, cost constraints, appearance, and shelf appeal. To these old school ID virtues nowadays we might add sustainability and a decent interface.”

—Bruce Sterling

Another point I would like to differ is the role of the experience designer. How can we relate situations that can be performed, rather than artifacts that are placed in the context of an exhibition? Can there be other ways that can include experience designers in the process of design consultancy and innovation processes?
I will argue and answer this question by designing experiences for and from the future. The application field, methodology, and the practices emerging from the two forms the basis of discussion. There have been case studies about how to bring future based decision making into the innovation processes with the help of designers. With this thesis I am working towards coming up with a basic methodology that designers can adapt from the field of futures thinking. Futures thinking methodologies are collections of interdisciplinary techniques of creating future choices to inform the research process. One thing to remember is that futures thinking is not ‘future prediction’ or science-fiction. It is used by government agencies, non-governmental agencies as well as multinational companies to help project beneficial or profitable visions. However, this field, being an interdisciplinary one, is prone to failures. The credibility—where persuasive and communicative element comes into play—is very hard to achieve and one of my objectives is to question or demonstrate the plausibility of futures thinking in the context of experience design discipline. This is the playground
in which I will be developing future scenarios about life sciences. A part of my work will also be looking into the futures thinking methods and the current literature shaped around them in order to adapt these political and consultancy oriented methods for designers.

1.3 The Experience Economy

Experience Economy, the seminal book from 1999, is one of the important references in the experience design literature. Although the ideas presented in the book might be controversial, it is a plausible starting point to witness the emergence of concepts such as selling experiences, and the shaping of a market willing to pay for exclusive experiences.

Experiences, rather than products are offered by advanced experience businesses. Pine and Gilmore\textsuperscript{16} offer new ways of referring to the design process while sanctioning the movement from workplace to theatre space. Experience design deals with the transformation that the experience economy is centered around. This new model is a theatrical. Looking further into how self acclaimed experience designers (in my perspective, more like brand-experience designers or customer-experience managers) and how they appropriate tactics from classical genre, such as show business or theme parks, can contribute greatly to the initial stages of an experience design project, in terms of staging. Scripting, staging, and performing the experience, is a sequential model they suggest, however today’s design problems are more complex (transdisciplinary in nature) and require different methods for testing, experimenting and experiencing before jumping into scripting them.

Without doubt, the emphasis in the Experience Economy is on selling. To change, influence behaviors, critique values, one has to look somewhere else—like critical design. Experience economy assumes there’s a brand, a company, some brand
values that underlie the experience and that needs to be marketed immediately. So, to utilize the premises of this approach, and to apply critical design tactics, I chose to structure this practice around a fictional organization that has a brand identity, a physical presence and uses the exhibition space to relate to its customers.

1.4 Experiment: Play

Experience designers deal with not so tangible and subjective phenomena, and these are usually represented on an abstract level. Experience prototyping, the main methodology used at the Experience Design Group at Konstfack comes in to play at this stage, as it practically illustrates how it feels to use a product/service or to be present in a particular situation. Since the subject of the brief presented here is highly subjective to start with, it is essential that the transdisciplinary team members also communicate in practical ways to enable collaboration. I will illustrate what I mean by experience prototyping and using methods with a project we did as a group at the Experience Design Group around “triggering play.” The approach was based around provoking the play instinct and trying for ourselves. The outcome was a series of method cards, not unlike IDEO method cards, which we presented in a boardroom setting, that enabled us to talk about a subjective and complex subject in a clear and tangible way. These cards crystallized our findings and turned them into a form of transferable knowledge for other students, designers, and stakeholders.

The idea behind these is that these methods can be used for other design-based projects for successful outcomes, so these are aimed to be adaptable to different settings and disciplines. These are guidelines for creatively experimenting with the act of playing. These suggest a way from thinking to acting. Not only experimenting on thinking level, but encouraging thinking in action.
Crossbreed

Sources
Biology (crossbreeding of species)

Description
Crossbreeding as a method is about choosing two artifacts and creating a third by applying a prominent quality (color, shape, functionality, etc) from the initial objects. Tactics can be modifying, adapting, mutating or simply straightforwardly assigning the feature to create the new hybrid object. This artifact then can be used for testing how the chosen characteristics contribute to the perception of the object.

RE-CREATE

Sources
‘Experience prototyping’, theatre

Description
‘Re-create’ is a method that involves the physical creation of the process in order to understand its mechanics. It is inspired by the concept of ‘experience prototyping’, where an experience is created or performed by using simple tools and props at hand, in a ‘dirty’ fashion. The theatrical component comes from group and involves participants performing and building together). By using resources, limited time/people this method encourages people to build and then experience an event together, hence isolating moments in order to analyze later.
Play project method cards examples

Play is an Experience Design course project
Course leader: Jenny Althoff
Additional tutors: Rolf Hughes, Ramia Mazé
Photo and video: Michelle Gratacos, Koji Wakayama
Text and Design: Basar Önal
Course sponsored partly by BRIO, http://www.brio.net
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<td>7</td>
<td>See <a href="http://www.ideo.com/">http://www.ideo.com/</a></td>
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<td>8</td>
<td>See Buxton Sketching User Experiences (San Francisco: Morgan Kauffman Publishers, 2007)</td>
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<td>9</td>
<td>Explanations of these three areas can be found at <a href="http://www.designtime.se">http://www.designtime.se</a></td>
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<td>10</td>
<td>User experience design deals with evaluating a user’s behavior pertaining to a product, service or interface. It makes use of quantitative methods and is often used in the context of human computer interaction.</td>
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<td>11</td>
<td>Fogg coined the term captology (computers as persuasive technologies). It is typically applied in software interface design. See Fogg (2003)</td>
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<td>12</td>
<td>Gilmore &amp; Pine (1999)</td>
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<td>13</td>
<td>Sterling (2009) <a href="http://interactions.acm.org/content/?p=1244">http://interactions.acm.org/content/?p=1244</a></td>
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<td>14</td>
<td>Forecasting is making speculations about the future through trendspotting (observing current behaviors and situations). Backcasting is about using the values and assumptions of future in order to plan strategies for today.</td>
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<td>16</td>
<td>Gilmore &amp; Pine (1999)</td>
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<td>17</td>
<td>Experience Prototyping is a form of prototyping that enables design team members, users and clients to gain first-hand appreciation of existing or future conditions through active engagement with prototypes. See Buchenau &amp; Suri (2000)</td>
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<td>18</td>
<td>IDEO developed a stack of 51 cards to help designers understand who they are designing for, and participate, through as set of practical methods organized under four suits — asking, looking, learning and trying. <a href="http://www.ideo.com/work/item/method-cards">http://www.ideo.com/work/item/method-cards</a></td>
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<td>19</td>
<td>The project was presented to a senior manager at BRIO, a major Swedish toy company looking to deepen their research about play.</td>
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Design Futures
2.1 Introduction

I was first introduced to Future Studies by a workshop about trendspotting India. Until then, my idea about trendspotting was little more than trying to predict the fashionable color of the coming year. That was perhaps a projection of how designers are viewed from outside—fads as their subject matter. Although functional, intelligent design that serves the community is a deeply established value within design, I am not interested in already identified and tried solutions and I wanted to look into how designers could identify new and fruitful developments outside their field, work with them in an interdisciplinary context, and relate to them critically.

One approach to work with trendspotting is working with methods, specifically with a subset of methods referred to as future methods. Methods and methodology in design research and its education are the topics of a long discussion in various disciplines, especially industrial design and engineering design.\footnote{21}

I believe that methods are useful for learning about a new field and communicating new knowledge in the ideation phase and they provide the participant with a set of tools to work with. In the case of spotting consumer trends in India, it proved to be a good starting point before diving into a complex and unfamiliar urban jungle and trying to make sense out of it. The methods, which I will refer to shortly are starting points and tools for inquiry rather than strict formulations of knowledge.
2.2 Learning from Future Studies

As an experience designer in the make, I am interested in futures as to what kind of (new) human experiences it will induce. A typical application and outcome of futures research is to create an impact on decision makers and initiate implementation. I believe futures research methodology, and trendspotting, a contemporary counterpart, is a natural prelude to designing experiences, because in order to tell engaging stories, one needs to be aware of ongoing trends and patterns of behavior. From that point onwards one can, with the help of methods, extrapolate those findings into plausible and engaging scenarios. There are a number of future methods and tools but many of them are business and social sciences oriented and in most cases arts and design has little to do with them.

In my case, it was a part of my practice to adapt these tools for my designer-purposes, and that is where my interpretation of interdisciplinarity comes in. Experience designers should be able to interpret abstract methods for their own practices and purposes. From the collection of futures research methods, I make most use of the Delphi method, which is roughly structured debate, and participatory methods, which has its own versions in participatory design.

I position the final project, INHIBIT as a design fiction, a more specific approach within design for examining the effects of new technologies by materializing alternative futures using design. One argument that underlies my work is that fictions has the power to persuade and that aligns well with the persuasive aspect of the thesis. Alternative futures, illustrated with Energy Futures case study at the end of the section, are placed in an everyday life context thus they are close to my approach of an “experience architect”—constructing and envisioning sequences in a timeline. Throughout the ideation process of creating alternative futures, we have designed “timelines” and “transitions.” In order to think like an “orchestrator” a way of notation is needed, and parallel timelines
provide the basis for the sequencing of events. The individual events provide the transition from one state (today) to another (near/far future). In this approach, time is stretched from seconds (which user-experience designers deal with) to years, projecting into a speculative futures. Experience design, as I see it, deals with long term consequences and shaping values. Therefore it can fulfill the need for a discipline to address time on this scale.

Brainstorming for alternative timelines from Energy Futures project.
2.3 Futures Research Methods

Futures research methods have provided an initial inspiration because, how the futurists work is not unlike what designers do. Being an amalgam of management techniques, global policy making, and general social sciences, they speculate about an uncertain future, to inspire and inform participants and/or stakeholders. Future studies include research, strategic foresight, futurology and other names, and it is the the practice of postulating “possible, probable and preferable futures” and the worldviews that underlie them.\(^{24}\)

“To the value is less in forecasting accuracy than in usefulness in planning and opening minds to consider new possibilities.”

—Jerome Glenn

To enable the strategic exploration, creation and testing futures, methods and models from many disciplines are gathered, making futures studies an interdisciplinary field of study. Delphi method\(^{25}\) could be the archetypal futures method, in a sense it’s controlled debate. Takes its name from the famous Delphi oracle, it is mostly used to test and collect about an extreme opinion. First, the reasons for extreme opinions are made explicit and the expert groups are expected to come up with a consensus, and if they fail to do so, the polarization is then fed back to the report. Like many other methods, Delphi panels, or Delphis are not expected to bring statistically significant results, as the respondent group is a small one\(^{26}\) and in no way representative of a larger population. Delphi process explores forecasts on the occurrence of an event (a parameter), the desirability of a future state and/or the means of achieving or avoiding it. Delphis can also be seen as a systematic investigation method. The participants are also
chosen by preliminary Delphis, using various advertising strategies. After the first contacts and confirmations comes the formulation of questions, with a focus on sharpness and that they are answerable. Normative forecasting provides an alternative approach to exploratory forecasting. Exploratory methods move forward into the future by forming a continuation from the present, clearly identifying forces at play and how they will yield alternative futures. Normative forecast identifies an end-point that might seem partly incongruous given the contemporary trends, and then forecasters aim to construct necessary steps and implementations that could yield the envisaged result. This approach provided the second half of my for/from method, which will be explained in detail in a separate section.

Futures Wheel is a simple and visual method that is useful for working in groups and I see this method as a more structured way of brainstorming and a quick ideation technique. The wheel, or web, works with “consequences,” secondary and tertiary, which help identify the causal relations in a trend. Starting from the center that represents a certain area, one moves on by adding primary impacts and forms an additional ring of secondary consequences. Repeating the steps stimulate emergence of clear trends about the area in question.

Causal Layered Analysis is a complex and sophisticated model, attempting to relate future studies to a poststructural view. Pushing forward a certain trend, and excluding others is common practice, but more importantly “how an issue has been classified as a trend in the first place and the paradigm it belongs to is privileged over the others.”

Causal Layered Analysis has four levels of analysis. The first level covers quantitative trends, fads and problems also attested by popular media. At this level, trends lack a continuum. Second level works like an interpretation of the first one, using social, cultural and historical factors. Information presented is questioned here, but the language is still within the limits of the paradigm that the trend is a part of. The third level, consequently is about the context
that the trend is situated in, “the discourse that legitimates it.” The aim here is to dig deeper and find deeper connections, the discourses that form the issue itself rather than propagating it. The fourth and ultimate level is the level of myths and metaphors, even deeper, collective stories, or archetypes revealing civilizational bases. Using these levels, Causal Layered Analysis claims different ways of knowing and going beyond the conventional futures studies.

Causal Layered Analysis method can be used in a critical research setting as well as a method in a futures workshop while combining it with other methods. The latter generally starts out by the workshop facilitator framing the issue using the four levels, facilitating scenario development in each level. There are also additional levels for scenarios to enable depth in scenario content. Multiple perspectives model at its core, is not that different from what researchers in design disciplines call personas. It is a dialectic approach that incorporates different views (also mirroring the current trends and behaviors) to make ell rounded decisions and adding depth to the scenarios.

This method has been used extensively in the Energy Futures project, which will be presented next in greater detail. These methods are needed for a systematic exploration and testing of speculated future states, make the unknown known so as to openly declare objectives, build consensus and priorities and criticize power relations or policies and act as a stimulus to change the present.
2.4 Design Fictions

Future methods discussed above have their roots in economics, engineering and social sciences, are by no doubt used for forecasting in those fields. The question here is, how can we (designers; experience designers) use them and incorporate them into our practices? One answer to that is by looking into design fictions, where alternative futures are represented, embodied and situated in a design scenario. These scenarios are not necessarily the end results of methods based thinking, they can be research methods in and of themselves.

Fictions are by definition based on imagined events and they ought to captivate their audience. Speculative fiction, a genre of fiction, is where new worlds are imagined and that is not far from science fiction (sometimes used synonymously with science fiction). My claim is that future studies, rather than publishing reports for institutes and corporations could feed them into design for the creation of alternative futures and fictions for a broader public participation and awareness. In addition, designers could use design fictions to situate design objects, services and for the embodiment of an implicit worldview. Classical examples of these would be fictional works that provoke and inspire.

I am concerned with fictions, non-existent worlds, alternative realities/futures because they have the power to persuade and, as experience designers, we might tap into those resources for the exact purposes.

Many designers are also working with speculative futures on a critical level, rather than creating aspirational awe-inspiring slick looking design. Anthony Dunne and Fiona Raby have published critical design fictions, alternative “nows,” that speculate about the role of technology and the values that are embodied in suggested alternative technologies. The alternative part comes from alternative values and needs that they make explicit.
2.5 Energy Futures — Case Study

Energy Futures is a part of the Switch! project at the Design Research Unit in the Interactive Institute, where I joined the project as an intern. Our part of the project investigated concepts and methods around the future of energy consumption with an emphasis on public participation.

Energy Futures is a project that centers around design fictions, or superfictions, that account for the future of energy consumption on a neighborhood scale. At the trendspotting stage, scenarios and timelines were devised after analyzing and synthesizing the findings from initial research and using marketing based “values modes” (based on personas) and futures studies methods. Later artifacts, that are specifically designed to persuade (and represent transitions) are placed on the timeline.

“Are we approaching a future eco-horror, or will a wondrous technological development lead the way to eco-wonderland?”

from the Energy Futures booklet

The project draws its initial research material from futures studies methods, but steers away from extreme scenarios and speculations, placing the scenarios and outcomes “somewhere between the present and future,” an ambiguous transitional space. The already exiting trends were extrapolated into fictional events and physical artifacts that are used as props. These artifacts are later presented to participants, as if they exist in reality and as if the Energy Futures team simply found out about them as a part of their research. The provocative artifacts—such as “socket bombing kits”—were both plausible and questionable, in order to facilitate a debate around energy consumption and associated behaviors.
List of artifacts presented at the Energy Futures workshop:

**THEME: SOCKET BOMBING**

1 Black Socket Bomb
2 Light Bomb
3 White Socket Bomb
4 Double Plug
5 Laptop showing a website and Wikipedia entry
THEME: FUTURE TRADITION
6 Photos of wrapped objects
7 Wrapped toaster
8 Red smoke flare
9 Photos of the “ceremony” and a red sky over houses

THEME: ENERGY FORECAST
10 “DC-Solar / Grid” double electrical socket
11 Laptop showing a Japanese video with English subtitles
Energy Futures participatory event
Photos: Jacek Smolicki

Participants: Jenny Althoff, Martin Avila, Sara Backlund, Jenny Bergström, Loove Broms, Brendon Clark, Karin Ehrnberger, Ramia Mazé, Christina Zetterlund, Christina Öhman and Pontus Öhman.

Energy Futures is part of Switch!, a design research program at the Interactive Institute sponsored by the Swedish Energy Agency. http://www.tii.se/switch

Energy Futures Project leader: Ramia Mazé
Designers: Aude Messager, Thomas Thwaites and Basar Önal
Notes


21 Jones (1970) Design Methods

22 Glenn & Gordon (1999)

23 Muller (2008) Participatory design


25 ibid.

26 Most studies use panels of 15 to 35 people.

27 ibid.

28 ibid.

29 Inayatullah (2003)

30 ibid. p.5.

31 Archetypes are primitive mental images in the Jungian brand of psychoanalysis, deep patterns in human psyche that are associated with universal phenomena.

32 Linstone The Multiple Perspective Concept in Glenn & Gordon (2003).

33 Personas are common in human-computer interaction (HCI) design. They can be seen as “character sketches”, and include information about a character’s attitude, demographics and goals, in order to guide the design process especially when imagining how certain people interact with the software/interface that HCI team is designing. In Fugaz (2006) Bring your Personas to Life! at http://boxesandarrows.com/view/bring_your_personas

34 See Glenn & Gordon (2003).


36 See Dunne & Raby (2001)


38 Switch! project website can be found under: http://www.tii.se/designresearchunit/switch/

39 Superfictions are artistic devices that represent fictitious organizations or people. Peter Hill first used the concept, creating the The Museum of Contemporary Ideas http://www.superfictions.com

40 Participants included professional designers, architects, engineers, educators and a design anthropologist from the Interactive Institute and Konstfack, making up ten people.
For/From Method
3.1 The Emergence

The for/from method is the core of the final project and the main outcome/contribution of this thesis. This method, named very straightforwardly, is the combination of two main methods in futures studies research and represents two different and sometimes opposing streams in this field.

As a part of my research, I have analyzed various methods, some of which are listed in the design futures section. At the end, although I learned a great deal from forecasting methods, such as listing driving forces, making a grid, thinking with personas, and similar analytical tools, I did not want to let go of a more imaginative and artistic approach to imagining possible futures. As a result, the for/from method, which aspires to fuse two options is born.

An early formulation of the for/from method.
The two parts, for and from roughly correspond to the forecasting and backcasting approaches in the futures research. It is claimed that to combine these tools causes operational problems, as these are mutually incompatible. I would have agreed with this statement, were we to apply the forecasting and backcasting methods in an uncompromising and dogmatic way. Dealing with transdisciplinary areas, one hardly finds the certainty to do so. There are no prescriptions and designers often resist formulations of this nature. However, I still want to keep these methods apart, yet connected.

Besides, future methods, if any gain from a designer's point of view is expected, should be exploratory rather than aspiring to rigid scientific models. As in the example of Energy Futures, exemplified at end of the second section, futures methods might offer more in investigating transitions to an imagined future. The transition state before a desired (or avoided) future, or a highly controversial but still possible future state, is ultimately more interesting for me to design experiences for.

### 3.2 For and From

The broad definition of the forecasting activity, which the for part represents, is the extrapolation process, that is extending the currently observed trends into near future. This method is applied to create touchpoints and services for the first department of the fictional institute, department of Bio-Informance, which aptly provides forecasting services for its customers. These services are in accordance with the trends that are observed today, and they are extended a little further to the future timeline (not too much further, as not to interfere with the second department). The services include teaching and demonstrating D.I.Y biotechnology; Saliva Divination, which is a future alternative version of informing participants about their (genetic) future, and a surveillance system to monitor health related risks constantly.
The from part resembles the backcasting process less. Typical backcasting provides necessary steps, a causal procedure, to yield to a future state that is envisaged. The transition entries, or touchpoints for the future state (which is the state of transhumanism in my case) are not pragmatic and formulaic in my version of the backcasting, they are rather intended to be “things to be tried out” and debated. This second section, thus maps onto the Department of Transhumanism, which tests the public opinion and prepares them for the future (which they believe is going to be). For this section I do not wish to use the tools of the science fiction genre, that has been successful in creating visions of the future—from the past. The basic premise here is that design shapes values.

### 3.3 Examples

This meta-method could be useful when it’s duplicated with a fictional company/institute and be a part of a larger setting. The method is flexible enough to be used for any future-related subject but that could also be the weak point, the ambiguity. However, providing a fictional institute adds a dramatic dimension to this; a narrative that makes the content easier to communicate can be structured around this setting.

**Notes**

41 See Dortmans (2005) Design Research
Diagram showing For and From methods placed in a timeline.
Formulation of methods.
Projects and their relation to the meta-method
INHIBIT
4.1 Biotechnology Futures

After exploring the basics of experience design and designing around a timeline, methods of looking into the future, it is time to apply the findings to a specific field. When I was identifying opportunity areas, some trends I encountered involved how people perceive themselves and their self knowledge. This relates to huge industries of self development, as well as self enhancement through exercise, weight loss and effective habit change. An upcoming trend in psychology is the research of happiness and cultivation of it. Connected to trends that are less obvious, and part of a farther future trajectory are the Posthumanism and Transhumanism trends, which involve longevity and enhancement beyond natural human capacities via unconventional methods, such as augmentation with subcutaneous chips or brain implants. Non-prescription performance enhancing pills or prosthetics today are not far from the envisaged future of Transhumanity.

When it comes to user experience design, existing and upcoming technologies targeted are based around mobile communication technologies, social interaction, monitoring and visualizing data using mobile phone applications, with iPhone applications being the most popular and eye catching. However, my interest as an experience designer doesn’t lie there.

Biotechnology is not an area that designers traditionally deal with. It is especially not within the reach of user experience designers because the time aspect of the experience is not short enough to design and much more subtle. Biotechnology provides a good interface between disciplines, something we aim for at the
department of Interdisciplinary Studies at Konstfack.
Unlike user experience design, which deals mostly with time based on seconds and efficacy, an experience design practice that is about speculated technologies such as Transhumanism extends the notion of time and treats it at a larger scale. For example, a user experience designer or specifically an interface designer for mobile phones has to design experiences that are addressed in terms of seconds or minutes. A human-computer interaction specialist has to design a precise sequence of user interactions when designing a GPS interface for automobiles. The type of “time aspect” I am using relates to slower and subtler transitions to a future reference point.

4.2 Issues in Biotechnology

Speculative Futurist James Canton refers to biotechnology as one of the four power tools. Together with the remaining tools; computers, networks and nanotechnology, biotechnology transforms the innovation economy. Unlike computers, coding and digital media, biotechnology hasn’t been a popular medium in art and design so far. There is an emerging artistic research community around biotechnology pioneered by the Critical Art Ensemble, Symbiotica group, Brazilian artist Eduardo Kac, as of writing this text. Although the methods of representation (using live tissues) and tactics (shock, awe and disgust) differ from what designers usually employ, the basic premise, that “contemporary biotechnology can enhance public awareness of traditional biotechnology” prevails.

Roots of biotechnology as an inspiration source goes further back in science fiction literature. This specific genre not only draws its subject matter from (bio)technology but also has the power to influence science and technology in return. Concepts such as genetic discrimination are thoroughly used in classic dystopia science fiction like Brave New World, or more recently movies like Gattaca, where humans, under a system of genetic enhancement,
are part of a genetically stratified society where nature—not nurture matters. Members of the society who aren’t born with the right DNA are doomed to serve enhanced humans. With real-world business startups like 23andme offering services for pregnant women, we might just be taping into a huge area where dystopia visions need to be taken into account.

It is understandable that new genomic technologies and the biotechnology revolution induce anxiety for many people. Francis Fukuyama, the famous futurologist, argues that manipulation of the DNA will cause the current political structure to collapse. He and many others worry that contemporary biotechnology can significantly alter humanity and change forever what it means to be a human. This argument follows that human nature will be so different from how we know it, that it would be needless to talk about human rights and human dignity. Thus all morality and ethics will be lost. However, with regulation and political control over biotechnology, a saner future is possible for Fukuyama. Fears, justified or not, are an important part of the future forecasting scenarios and are very likely avenues for idea generation.

An area of ethics, bioethics aims to answer ethical questions in rise of rapid and unsettling developments in the field, in the case of parents’ control over an unborn baby’s genetic make-up—so called designer babies, or how genetic information should be made public. Complex problems, such as the story of an eight way kidney swap need to be addressed in an interdisciplinary context. Within this context, we will be seeing new services and designed experiences to cater for these startups. Art has already begun being a part of this greater framework. Designers need rigorous methods and visions to design something more than an interface or a delivery service for the biotechnological services and join the discussion around the ethical issues which it needs to deal critically. I won’t be covering all the possible popular issues around biotechnology.
I believe there is too much hype surrounding some of them, such as human cloning, so these trends are left out in my survey. A prominent trend that is also a continuation of the open source movement and the do-it-yourself culture is biohacking\textsuperscript{51} and DIY biotechnology, genetic tests increasingly offered by professional laboratories performed in a garage, which echoes the early days of computer hackers. Biohacking kits are available online,\textsuperscript{52} experimenting and sharing the findings online are more commonplace.

Commercial personal genomics is a growing industry parallel to these developments. I have personally tried the 23andme service, one of the services that offer a genetic testing and connecting their customers with a social network, not unlike today’s web 2.0 services, so that the users can compare their data with their new contacts and have further relations with their new cousins thanks to the ancestral component of the test offered at 23andme labs in California. All that the customer needs to do is spit in the test tube designed for the service and send it to the labs. Spit parties\textsuperscript{53} as a marketing tool were popularized for the launch of the personal genomics service.

In the following sections, I will explain a service based around these tests and argue that they are mimicking the traditional fortune-telling techniques and exploiting the desire to know about the future (and the past) while enjoying the storytelling aspect of the service. As a part of the unknown future, these services are never fully understood by the public and the reliability could be disputed in many cases, as the publicly legible data of health risks are represented in charts and percentages (the ancestry part, however interesting, is not a part of this thesis). This interpretation is fairly different from what medical professionals do, not to mention the risk of customer DNA being sold without consent.\textsuperscript{54}

Next in the cycle, completing the movement of DIY biohacking and consumer genetic tests is the self quantifiers. This is a movement that uses the tools of personal genomics, health monitoring devices/gadgets and using the numerical data for their self-
tracking, which leads to a behavior change in the desired direction
or just for pure enjoyment. This movement, not yet penetrated into
the mainstream (with the exclusion of Nike+™ service which
connects a motion tracker to a smart mobile phone to keep track of
the calories spent and the movement) is particularly important, as
it enables people to experiment with time, attempting to structure it
for their own purposes, which is not unlike our take on experience
design at Konstfack.

4.3 Transhumanism

In the light of these arguments, some technology or design
practices are not easy to position. What transhumanism represents
can range from a continuation of life prolongation trend, or a
critique of what it means to be human. As of writing of this text,
transhumanity was added to the Oxford English Dictionary.56 There
are certain aspects in transhumanism that interest me to work with,
rather than scary looking body augmentations, it makes sense to
deal with social aspects, such as the public response to genetic
enhancement and testing, genetic prognosis techniques, bioethics
and bio-activism, all represented as services at INHIBIT, the fictional
institute that is presented in the last section of this thesis.

One of the questions I tried to answer analyzing the trends in the
biotechnology and health area is, whether the result of applying
futures thinking methods would end up in transhumanism.

Proponents of transhumanism and singularity57 a technological
convergence and revolution following superintelligence, such as
Ray Kurzweil assure us of this key trend. My question evolved
into how it is affecting our lives and values today, rather than if
it will come into being. The transhumanist approach may not be
answering critical questions of today, like sustainable development
and ecological thinking, and it might seem too narcissistic, but
I believe it will be a valuable means to discuss societal changes
that are about to happen. Undoubtedly, artists and designers will
be a part of the ethical shift. “Recently, I’ve begun to explore ways to bring the works of artists and novelists directly into the policy-making process,” puts Lori Andrews, co-founder of the Institute of Biotechnology and the Human Future at IIT including arts (not just visual, but also literary) as a part of the institute. She states that beyond an aesthetic value of the artistic work, they (artists who are influenced by biological sciences) can help the public to confront and understand the limitations of hyped biotechnologies. Arguments against the transhumanity movement could be disguised in different forms, ranging from luddite opinions to serious concerns about the end of liberal democracy. A religious concern would be the accusation of playing god or finding eternal youth. Genetic divide or discrimination is a theme that is used extensively in dystopia construction, with Brave New World as a classic example. The main questions asked by transhumanists are: “Are we good enough? If not, how may we improve ourselves? Must we restrict ourselves to traditional methods like study and training? Or should we also use science to enhance some of our mental and physical capacities more directly?” In this debate, I situate myself closer to Bostrom, arguing that enhancement is a right and necessity, but I also want to reveal the narcissistic dimensions of this thought.

4.4 Fictional Institutes

In the design part of this thesis, I bring together the findings of the research so far, devising an encompassing structure where I relate the views on experience design, futures studies research and the issues in biotechnology, represented in the form of a fictional institute. Around this institute, this section discusses how to create experiential structures using fictions, and why fictional institutes are relevant models for communication and persuasion. This is then followed by the description and documentation of the institute. The final project includes the design and activities of a fictional
institute. In the case of INHIBIT, the corporate look and feeling of the institute is a parody of corporations and it provides a theatrical context for the experience. Putting it in another way, I argue that the institute model is a research methodology and it reframes the findings, mirroring the **for/from** method I presented in the previous section.

Although not well-represented, fictional institutes have had a place in design, specifically critical design. The Dunne & Raby brand of critical design and research represents a branch of employing fictional institutes in their practice, in their project **Bioland**, they re-fashion the shopping mall into a biotechnology themed existential institute where they use the shopping mall as a medium for debate, where they can infiltrate hypothetical “products” into people’s everyday life. Natalie Jeremijenko, in her Environmental Health Clinic, creates a semi-fictional organization where she can situate projects related to human health’s vulnerability and its interdependence to “external local environments.” In my view, coordinating diverse projects and artifacts has something to do with the institutes approach. Critical design is involved in criticizing industry’s or governments’ agendas, and in these examples, it might go further to create fictional narratives to persuade people about the alternative realities, which is hard to accomplish.
INHIBIT
INSTITUTE OF BIO-INFORMANCE AND TRANSHUMANITY

DEPARTMENT OF BIO-INFORMANCE
FORECASTING SERVICES
SALIVA DIVINATION
REALITY AUGMENTATION
YOU: IN A SAFE

DEPARTMENT OF TRANSHUMANITY
TRANSITION SERVICES
SLEEP-LESS CLUB
KIDNEY SWAPPERS
SELF QUANTIFIERS
INHIBIT, Institute of Bio-Informance and Transhumanity, is an organization that creates experiences around the future of human existence. There are two sister departments: The Department of Bio-Informance and The Department of Transhumanity, whose activities map onto the for/from method in the form of the institute. The Department of Bio-Informance represents the for part, meaning the design and communication of experiences and services that stem from contemporary trends and projected onto future. According to the narrative, it provides forecasting services. The Department of Transhumanity, corresponds to the from part, taking a highly disputed and speculated future, and creating transitions to those future events.

The Department of Bio-Informance offers services that connect experts and producers to clients and the Transhumanity department has more emphasis on the users’ experience, critiquing the consumer culture. The fictional services act as touchpoints in the whole experience, connecting the participant to a narrative experience over a longer span of time. For example, The Sleep-Less Club helps people with services and techniques using binaural brainwaves to induce sleep at optimal intervals, reducing sleeping time to minimum: up to three hours a day. This method has been around (called polyphasic sleep) and has a following among bloggers and self-experimenters. I have used this technique in the service to provide a transition to a future human that doesn’t need sleep any more. The service is decidedly lacking subtlety in the way it mimics the desires of industrial production, that is, a self-induced enforcement of a sleeping regime. People, when presented with transhumanist ideas, such as the idea of an übermensch who doesn’t need any sleep, don’t take it seriously, as it is testified by some workshop participants (see Discussions section). However, the service as an entry-point (with readily available, even nostalgic technologies or attempts) for the preparation and transition to a fictitious future proves to be disturbing.
Screenshots from the information video

Below is the transcript from the Information video of the Bio-Informance Department, placed in the exhibition space.

At the Department of Bio-Informance, we operate by Do-It-Yourself DNA analysis and its education. Because, at the Department of Bio-Informance, we believe your future is about co-creation. We encourage our clients to gain a better understanding of Do-It-Yourself biotechnology, which will help dissipate your fears in the age of bio-terrorism and epidemics.

At the Department of Bio-Informance, we provide a new informance experience: Saliva Divination. Forget about trying to read your genetic future from charts and graphs. Why not experience your past, present and future with our interdisciplinary team?

Facing your genetic future requires a new type of personhood, but you don’t have to carry this burden with you. At the Department of Bio-Informance, you, are the one from whom the information is protected. With our experience-products, your body knows when you are ready for the moment of revelation.

At the Department of Bio-Informance, for those who are comfortable with their future health, we offer you Reality Augmentation.

At our Department of Transhumanity, we help you to prepare for your future—A future where Humans transcend biological restrictions. We create points of entries, or touch-points for your transition into the Transhuman future.

At INHIBIT, we are interested in Cognitive Enhancement and Life prolonging techniques.

Here are some examples of our clubs:
Sleep-Less Club,
Kidney-Swappers,
Self Quantifiers.
4.6 Content Design

In this part, I discuss the rationale and ideation behind the institute, the graphic as well as theoretical roots of the services it offer. The Department of Bio-Informance was conceived as a result of the research into bio-hacking and do-it-yourself biotechnology phenomena, a trend that is well attested today in the media. Given the rise of personal genomic services offered by certain labs, this department aims to inform its customers/participants by sharing the knowledge through its services.

Saliva Divination, one of the services, is a play on how today’s genetic tests deliver their results (with a web 2.0 profile, not unlike Facebook™). Commercial services, like 23andme, are not unlike fortune telling, they both exploit the idea of starting with ones personal, family history and extrapolating it into the future. As a result, one needs a different kind of perception to relate to this data, which looks like an equation, numbers that represent a fatal disease. Saliva divination offers a comforting ritual and soft data for people who do not want to face the numeric data that represent their life. It follows a coffee cup (or teac cup) fortune telling logic, making the information that is alarmingly transparent for some, blurrier and more comforting—assuming in the future everyone will have to face their genetic data.

Services offered by the Transhumanity department are less defined and their function is more likely to open up discussion. Design and art referring to transhumanism often stays the realm of science fiction, and not surprisingly is slick and shiny in its appearance, or a cyber-punk aesthetic prevails. However, in the case of Department of Transhumanity, the services are not unlikely, they are likely to exist (and some of them do) and prepare the customer/participant, help them for the transition to a transhuman future, where humans are altered by radical means.

As genomic services offer a comparison of immune system compatibility among their customers, communities that involve optimization of finding organ donors are highly likely to emerge.
Productivity is one of the things that transhumanism has in its agenda and there will be likely developments in overcoming natural sleeping habits and Sleep-Less Club service prepares people for that alternative future. This department represents the “from” part of the “for/from” method; taking from what belongs to the future and situating it in relation to everyday lives now, using existing technologies.

The presentation of the institute, at the exhibition context is done in a trade-show fashion, but with unfamiliar details. For example, a futuristic video of a young woman presenting the institute points through a door where the participants who wish to participate in a co-creation and debate workshop find a van that belongs to a branch of the company. A van with the institute logo was placed outside the exhibition space, providing a separate space for workshops and information sessions to take place.
Notes


43 http://www.critical-art.net/

44 http://www.symbiotica.uwa.edu.au

45 http://www.ekac.org


47 http://www.23andme.com

48 See Fukuyama (2002).

49 World Business Council for Sustainable Development Scenario Unit.

50 http://www.washingtonpost.com/wp-dyn/content/story/2009/01/12/ST2009011203259.html?sid=ST2009011203259

51 Manipulating DNA on an amateur or hobbyist level is an upcoming theme http://singularityhub.com/2009/04/28/do-it-yourself-biohacking/

52 http://biohack.sourceforge.net


56 http://www.oed.com

57 Kurzweil (2005)

58 http://www.thehumanfuture.org/themes/arts/


60 Nick Bostrom, the director of The Future of Humanity Institute at Oxford University. http://www.nickbostrom.com

61 http://www.dunneandraby.co.uk/content/projects/403/0

62 http://www.nyu.edu/projects/kdesign

63 http://polyphasicsleep.info
Discussion
In this final section, I discuss my contribution through analysis of two workshops I staged, and I draw some general conclusions from these. Before moving on to the workshops, it is important to revisit my research goal: the adaptation of new methods from other disciplines, in order to think about human experience in the face of new developments in technology. The main contribution of my thesis is methodological, bridging a gap between experience design thinking (experience prototyping, quick & dirty prototyping, transdisciplinary knowledge and practice beyond disciplines) with futures thinking through methods that both areas can draw from. I might emphasize that I am not claiming to be a technologist, nor a futurist—my focus is using methods and fictional design services to structure debate.

The reason for choosing biotechnology was to show that these meta-methods can be applied to any new, speculative or hyped technology: nanotechnology, super-computers, artificial life and distributed intelligence, amongst others. Many of these hybrid disciplines offer designers new materials to work with, and more importantly new experiences to be designed or co-created. Therefore creating interfaces between those and more familiar disciplines to design (such as information technology) through methods—in order to learn, communicate and experiment is especially important.

The workshops were prepared in the months following the staging of the INHIBIT project, and they provide a larger perspective about both experience design and the future human experiences which
INHIBIT explores. The workshops provide an additional basis for the methodological points laid out in the institute and a framework for further experimentation—at the meta level of the methods.

**Workshop: Experience Design Futures**

The first workshop explored the question of how to future-proof or create new avenues for experience design careers. As this workshop was planned to mirror the first department of INHIBIT, which offers forecasting services, I executed a forecasting session with the students from Experience Design Group at Konstfack. The reasoning behind the session was adding a scenario dimension to a familiar forecasting method, and more importantly doing this management-oriented thinking with and for experience designers. I used this workshop to gather new ideas about the future of human experience through facilitating a career-oriented thinking, evaluating the validity and relevance of this for experience designers.

The forecasting part is taken from the Delphi method, futures wheel, together with personas. Together with the participants, we added themes from experience design to facilitate a discussion. My hope was to discuss themes such as **materiality** and **experiential knowledge**, which haven’t yet been discussed in the area of futures studies research.

The workshop started by identifying some key forces and organizing them in a list. There were natural overlaps between the categories, such as **authorship** or **global warming**, covering many spheres at once. Having listed these trends, the list was further divided to certainties and uncertainties, with a focus on the latter.

In the final phase, before exploring relevant scenarios, the top two items from this inventory of driving forces were identified. The next stage was placing the top two driving forces as parameters in a two-by-two matrix, a way of organizing ideas familiar in business management. This matrix was the starting
point for clearly distinguished alternative version of situations and contexts that experience designers are likely to deal with or exploit in the future.

One of the extreme scenarios was positioned in the “less motivated” and “less experiential knowledge” quadrant of the matrix, which characterizes the hypothetical societal factors for the alternative future vision. In this quadrant, a highly stratified, designed and ultimately high-tech society was imagined, in which a bleak vision of predestination and fatalism prevail. Experience designers, as multidisciplinary problem-solvers, were positioned as designing prepackaged, complete, near-perfect and escapist artificial experiences for a society whose members would not be interested in challenging worldviews.

The second scenario was elaborated in the opposite quadrant, where “more motivated” and “more experiential knowledge” factors were at work. It was agreed to position these conditions after a disruption in society, whether a global environmental catastrophe, war, or case of serious scarcity regarding natural resources. The result was a society whose members are highly motivated to survive, teach and collaborate in the face of adversity and eager to pass on important knowledge gained through lifetime experience. In this version, experience design way of thinking would be of use to teach and learn experientially, for survival.

The two scenarios developed during this workshops were not unlike scenarios that I had previously stumbled upon or created myself. The first scenario is actually a partial description of the Brave New World scenario, not to mention the subject matter of sci-fi flicks like The Matrix. It is also what certain futurists fear—loss of individualism as a result of extreme convergence—a point I discussed under the Issues in Biotechnology subsection. The second scenario, an apocalyptic one, is also mirrored in some work done around sustainability and ecological trends, which are partly covered at the Energy Futures project, especially in the research phase. These findings from the forecasting workshop were more commonsensical than provocative—a side-effect I have previously
observed in workshops based on negotiating and a premise of consensus.

One way to take this kind of workshop further would be to negotiate within a structure as a game format, where participants compete in a way that encourages them to come up with challenging and provocative ideas.

Materiality is also a dimension to account for: in this workshop setting, in which small scale representations of imaginary worlds were created, there is a further need to create or express at least some ideas with materials (for example, from a palette of photographs, collages, design materials, even scrap materials) to capture a certain mood and usage. This is a reflection on experience prototyping and the usual way of doing it. Experience prototyping works well with usability problems that pertain to here and now. As experience designers speculating about the future and designing a timeline (or designing time), we can end up with abstract reasoning and imagination filling in the gaps between unidentified portions of the future timeline. This challenge constitutes the main problem I have been dealing with in my research and which needs further development in future work.
Notes
1. Why do we want to deal with uncertainties. If we really want to future proof?
Workshop: Self-Quantifiers

The second workshop was designed to be a part of the Department of Transhumanity at INHIBIT, the transitions services. Earlier in the process, I had come up with a business idea that provides a mild transition to a state of hypothetical transhumanism, exploiting an opportunity area within mobile services, specifically web 2.0 in the health sector. Although the workshop/seminar aimed to surprise in order to test reactions, the content was clearly materialized as a business plan and “designed”—thereby positioning the work apart from artwork.

The workshop presented the concept of self-tracking—one of the services offered by the department of Transhumanism. Before introducing the participants to the contested and somewhat scary idea of transhumanism, the aim was to prepare them for a mental transition with self tracking, which is often used to enhance health/physical well-being and facilitate longevity. I use business planning as a method to inquire about deeper issues.

The idea that formed the impetus for the fictional business was self tracking, which is a way of quantifying the human experience. Self-Quantifiers is a movement devoted to making change through working with self-knowledge. The belief is that if something cannot be measured, it cannot be improved, and the design of personal quantitative measurement tools are of the utmost important because they assist a specific kind of self-knowledge. This approach is highly questionable—although for the proponents themselves, every tool to help in understanding their existence is valuable. Lifelogging, personal genome sequencing, location tracking, digitizing body info, sharing health records and medical self-diagnostics are some activity categories that self-quantifiers suggest, and those I selected for the workshop.

The workshop started as more of an inquiry session involving two students from a leading school of economics. The idea was to get their feedback, as if I were on my way to realizing the project as a real business in the future. I started the discussion with an
introduction of Do-It-Yourself culture and exemplified with mobile technologies such as smart phones, narrating how they attest to the birth of the so-called self-quantifiers or self-trackers. Products such as Nike+™ already exist to track one’s own physical exercise indicators, thus motivating people to exercise more. At this point, both of the interviewees agreed on the positive influence of seeing themselves as statistics. We discussed that these applications could be used for personal tracking, however connecting them to web 2.0 services⁶⁸ can empower people and open up new areas for ethical and health related discussions about the future of healthcare and participation. The service that I presented to them, on top of the functionality to monitor heart-rate, movement, and anxiety/stress levels—aggregates this data at a web interface, further sending them to popular social networking and micro-blogging sites.

The next step was to discuss that business model, on another level, as paralleled in genomic research communities. The data in this case would not be live, however, it would be ready to post on discussion groups for examination. The monitoring service that I proposed would send the data automatically. The interviewees had reservations about this issue of automatic tracking and not being able to filter which data to share. They were, however, open to the idea of elderly using the system to connect, and perhaps the medical world gaining from the open source revolution, but they were hesitant when the same sharing options went further to include contacts likely to be possible mutual organ donors.

Since the interview started out by presenting a business idea, the interviewees’ attitude was geared towards problem solving. When ramifications seemed to arise, such as the idea of a company “owning” certain health data by storing it, the respondents were uncomfortable. However, the final thoughts were around already existing monitoring, in which case most information is irrelevant from a personal point of view. In this workshop, I successfully learned how to change the focus of a discussion by using alternating fiction and reality. Regardless of the participants, the
method was used to test the effect of drawing participants into the discussion—from fiction, speculation to reality and back—in order to get more personal views on a given issue.
Conclusion

In the research process of this thesis, I have learned to play many roles as an experience designer. Indeed, when a project that aspires to be multidisciplinary as its premise, one needs not only experience designer roles such as an events orchestrator—but also a debate organizer, workshop facilitator, trend-analyzer, etc. Throughout the process, I revisited the idea that design is, in itself, a kind of fiction, a speculation about the future. Therefore, it should have organic ties with futures thinking and business models.

My hope is to provide a connection between experience design and these areas, through materializing services, organizations, artifacts for and from alternative futures. It is my belief that this(large scales of time) way of referring to time in the larger context of experience design—not just user experience design—will be used for design and research in other application areas related to the concept of singularity: artificial intelligence, acceleration of physical and mental capacity, longevity and productivity, among others. My future vision is to develop methods using materials directly used by researchers in these areas.

Experience design need not be complex systems design, as there is specialized expertise dealing with the creation of objects. Experience design is more about making the inaccessible accessible, adding value and taking knowledge that might already exist to another, experiential level. Parts of systems design, as I have set out to design, for example in INHIBIT, require extensive knowledge around a certain field of study which I, as an experience designer, can only approach from outside. Trying to close the gap by only making literature research is extremely time consuming. Complexity in terms of definitions and materiality arises one way or another as the research process develops, so experience designers like myself can benefit from starting with a simple goal related to basic but complicated human experiences conditioned by technology and everyday life.
The material of experience design is time, as I have discussed in events orchestrator. In this thesis, I have aimed to suggest a different way addressing time that can be unique to experience design. From user experience design, to exhibition design, time is tackled within a spectrum from seconds to hours. Experience design can extend the design of time from seconds to years and help materialize the missing link between futures-oriented thinking and design.
Notes

64 http://www.kk.org/quantifiedself

65 Stockholm School of Economics

66 For example http://twitter.com
Bibliography


Acknowledgments
I would like to thank my advisors;
Ramia Mazé, for the invaluable experience at the Interactive Institute. I am grateful for her patience, insight, and support on every conceivable level throughout the process of this thesis;
Ronald Jones, for introducing me to trendspotting in India, and to Experience Design,
Emma Stenström for the exceptional inspiration she provides about art/design and business.
Play project is a part of the Experience Design course at Konstfack, I am thankful to all Experience Design students and faculty: Jenny Althoff, Ronald Jones, and Rolf Hughes for introducing the project to a wider audience.
Energy Futures is a collaborative project, with Aude Messager, and Thomas Thwaites, led by Ramia Mazé, with valuable feedback and help from the members of Switch! and the Interactive Institute.
INHIBIT exhibition is made possible with the help of Beatrice Brovia, Yuta Sakane, Kristoffer Agdahl, and Sacharias Mellander.
Azusa Itagaki provided her kind help by modeling for the video.
For the workshops I would like to thank Brett Ascarelli, Eray Çaylı, Niklas Karlsson, Sofia Kocken, Ami Izaki, Carin Skoghagen, and Willow Tyrer.
My final gratitude to my family: Atilla, Deniz, and Selma Önal, for their endless support and love.