Design Research
Through Practice
FROM THE LAB, FIELD, AND SHOWROOM

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Funky design space  Nutrire Milano  Multimedia prototypes
Rich interface camera  Co-design  Co-creation
Intuitive interaction  Co-creation  Co-experience
Interaction frogger  Collective action  Vila Rosário
Rich interaction  Design for Self
Resonant interaction  Product ecology
Alarm clock  Design for Debate
Frogger  Critical design
Ecological psychology  Placebo project
Ethnomethodology  Critical theory
Designs  Radical design
Frameworks  Fly-eating robots
Theories  Home Health Horoscope
Relational aesthetics  Situationism
Symbiots  Critical theory
Phenomenology  Psychoanalysis
Marxism  Pragmatism
Sartrean  Existentialism
Dada  Design
S suingala
Critical design  Placebo project
Design for Debate  Fly-eating robots
Symbiots  Home Health Horoscope

MK
Morgan Kaufmann
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FIELD: HOW TO FOLLOW DESIGN THROUGH SOCIETY

Many design researchers have borrowed their methods from interpretive social science rather than experimental research. If there is one keyword to describe the field approach to design, it must be “context.” Field researchers work with context in an opposite way from researchers in a lab. Rather than bringing things of interest into the lab for experimental studies, field researchers go after these things in natural settings, that is, in a place where some part of a design is supposed to be used. Researchers follow what happens to design in that context. They are interested in how people and communities understand things around designs, make sense of them, talk about them, and live with them. The lab decontextualizes; the field contextualizes.

Field researchers believe that to study humans and their use of design they need to understand their system of meanings. Studying humans and studying nature differ in a crucial way because of these meanings. Simply, people make sense of things and their meaning and act accordingly. An apple falling from the tree does not care about the concept of gravity and cannot choose what to do. When the president declares war, he certainly knows what he is doing with his words and knows he has alternatives. Even when people do something out of habit, they are selecting from alternatives and may always change their ways. If researchers see society in these terms, they also think that searching laws that could explain human activity and society is misguided. Instead, they take even the goofiest ideas seriously if they shape human activities.

Design ethnography differs from corporate ethnography, an heir of studies in organizational culture, which focused on issues like management and how symbols integrate organizations. Design ethnography works with product design and is a way to handle cultural risks in industry. Sometimes it is a separate front-end activity, and sometimes it is closely integrated into product development. Design ethnographers typically work in teams and use...
prototypes during fieldwork to create dialog with the people in the study. They communicate through formats accessible to engineers, and their fieldwork is measured in days or weeks, not months. For them, first-hand experience of context is typically more important than fact finding or even careful theoretically informed interpretation. In this chapter, we use “design ethnography” and “field work” interchangeably.

### 5.1 Vila Rosário: Reframing Public Health in a Favela

Vila Rosário is a design project in a former village that is now a part of the vast metropolis of Rio de Janeiro. It is located about 15 kilometers north of the famous towns Corcovado, Ipanema, and Copacabana. Even though it is not among the poorest of Rio’s areas, Vila Rosário is still a world apart from the glory of these famous neighborhoods (Figure 5.1). Its illiteracy rate is around 50%, sanitation is poor, and the poverty level is high. It suffers from high infant mortality and a high incidence of diarrhea, tuberculosis, and many tropical diseases, including yellow fever.

This was the playing field of two designers, Marcelo and Andrea Júdice, who set out to study the neighborhood and create

![Figure 5.1 Views from Vila Rosário: (a) a health agent with one family, (b) the backyard of a poor home, (c) the clinic, and (d) the street in front of the clinic. (Photographers: Leila Deolinda, Figures (a) and (b), and Ilpo Koskinen, Figures (c) and (d).)
designs that would improve the town’s public health. Initially, they were to introduce information technology into the village to improve the general living conditions of the inhabitants. However, after the first field studies, it became clear that it would not be a solution without considerable rethinking of the context. How could information technology help people who cannot read in a place where it is common to steal electricity?

The study began with cultural probes consisting of cameras, letters, diaries, and several tasks for volunteer health agents working in Vila Rosário. After seeing the probe returns, the researchers realized that any attempt to make sense of Vila Rosário without visiting it would compromise a study aimed at improving health. So the researchers went to the village to do fieldwork and conduct a series of workshops with the locals to make sure they understood the probe results.

The study results identified hygiene and early diagnosis of tuberculosis as the main targets of design. Since it was beyond the means of the project to improve hygiene, the Júdices focused on improving awareness about the significance of hygiene, especially among children. The design hypothesis that evolved was based on this result. It became a combination of an IT-based information system and a low-tech approach. The aims were to raise awareness of how health and behavior are linked and to induce behavioral change among children and teenagers.

Design was started by creating a telenovela-like make-believe world with characters recognizable to the inhabitants in Vila Rosário. It was thought that these characters and their actions would stay in the minds of people better than mere health-related information. This world of characters had various types of individuals and families. Also, it had various types of professionals significant in terms of health, including doctors, nurses, nuns, and health agents. It did not, however, have characters like politicians, police, and gang leaders. The world reflected everyday life in Vila Rosário rather than its institutions, which locals did not trust (except the church and doctors).

Computers were pushed into the background. Essentially, IT became a Web connection helping nuns and local health agents (who are like paramedics, with some training in health care) to contact medical experts. Computers were placed in a local health clinic, Institute Vila Rosário, run by the church, which became the hub of the study.

The main effort was to put low-tech designs like comics describing safe ways to use water and cooking utensils (Figure 5.2). Other designs were posters pointing out key facts about hygiene, such as the importance of cleaning fingernails and kitchen knives, and there were also stories for children. The characters in these stories showed what happens to people who do not practice
proper hygiene and do not see a doctor when they have symptoms of illnesses like tuberculosis. In addition, researchers created an identity for the program consisting of a series of accessories and company gift-like designs, such as folders, bags, and T-shirts. These were created to make the design program easy to identify and remember.

All these designs were cheap, colorful, relatively easy to produce, and did not produce anything valuable that could be stolen and sold on the black market. Furthermore, these designs fit into the social structure and cultural understandings of Vila Rosário. They were based on the probe returns as well as on ethnographic

**Figure 5.2** (a) A tuberculosis booklet stressing the importance of paying proper attention to even mild symptoms, (b) an example of the characters created for the booklet, and (c) a poster linking hygiene to health and the logo created for the Institute Vila Rosário. (Artwork by Nestablo Ramos Neto.)
understanding. These sources provided the designers with a necessary understanding of themes important in Vila Rosário, which provided the information to create a local look and feel to the designs. The materials were produced locally, and distributed in Vila Rosário through health agents.

The designs were evaluated in three ways. In Vila Rosário, all of the main designs were evaluated with a variety of local participants in workshops. The focus was on whether people understood the design and whether they were enticing enough to produce. In Helsinki, a Brazilian expert specializing in public health in the tropics evaluated the design proposals. In this evaluation, the focus was on factual content and understanding the health care structure of the village. Finally, the design process was replicated in a two-week workshop in Namibia. Here, the question was whether it is possible to scale down the method developed in the study so that it could be used outside Rio de Janeiro (Figure 5.3).

The Vila Rosário study showed how a serious commitment to context may lead to a major redefinition of a design effort and how this commitment changed design from a technical exercise to a low-tech one. It also showed the importance of understanding the context in detail. The designs generated knowledge about the visible and material culture of the Vila as well as about its habits, beliefs, and social structures. When it comes to design ethics, the study showed serious commitment to poor people who do not usually get to enjoy good design. In terms of design research, it also led to questioning many first-world assumptions; for example, how can probe studies be done when people cannot read?

### 5.2 Understanding as the Basis of Design

Field research entered industry in the late 1970s and early 1980s mostly as a response to changes in computing. In essence, it was a response to a failed case. When computers moved from
universities, research institutes, and major corporations to homes and offices, users could not understand how these machines worked. The failure was obvious, but prevailing systems design methods were not able to explain why.

In response, researchers started to do fieldwork to see how computers were used in ordinary circumstances. This orientation primarily took place in countries with strong computer industries, with Silicon Valley leading the way. Field research proved to be especially useful for industry in the early phases of product design when requirements are specified. As design anthropologist Christine Wasson noted, “by 1997, every major design firm claimed to include ethnography as one of its approaches.”

This was certainly the case in Silicon Valley. In the Valley’s IT industries, ethnographic research was a response to the need to understand not only how people could use computers but also what they wanted from computing. Contextual design, in particular, became a business success.

Silicon Valley also gave birth to a more design-led approach to fieldwork. Researchers like Jane Fulton Suri and Alison Black at IDEO and Liz Sanders at Richardson/Smith pushed designers out into the field to see what people do in real life. The idea was to get designers out of the studio to bond with people and to focus on what they do rather than on what they say. For skilled designers, insights drawn from observations are based on years of experience. Fulton Suri discussed about how a few successful designers do fieldwork:

> Certainly ethnographic-style observation can provide inspiration and grounding for innovation and design. It increases our confidence that ideas will be culturally relevant, respond to real needs and hence be more likely to have the desired social or market impact. But for design and designers there’s much more to observation than that…. Successful designers are keenly sensitive to particular aspects of what’s going on around them and these observations inform and inspire their work, often in subtle ways. Firsthand exposure to people, places, and things seems to be key, but there is no formulaic method for observation of this very personal kind….

But their approach was certainly not without discipline or rigor. Each case involved a similar pattern: a focused curiosity coupled with exposure to relevant contexts, attention to elements that invited intrigue, visual documentation and revisiting these records later, percolation and talking about what was significant with team members and clients, and storytelling and exploration of design choices and details.
This kind of research goes far beyond tourist-like observation; it gains understanding of what goes on in people’s minds in some instances. It also goes beyond mere analysis. Making a systematic description of data is a step in the process of gaining an empathic grasp, but research does not stop there. Good design research is driven by understanding rather than data (Figure 5.4).

Somewhere between these orientations were other earlier practices, such as in the Doblin group and later E-Lab. Participatory design was a Scandinavian amalgam of computer science, design, sociology, and labor union politics. It sought to battle deskilling, which the Marxist labor theorist Harry Braverman saw as the main aim of management in his book *Labor and Monopoly Capital*. Instead of making workers replaceable by machines, participatory designers sought to empower workers.

### 5.3 Exploring Context with Props

Field research methods in design are immediately recognizable to professional social scientists. They are also often taught to designers by social scientists. Still, design ethnography differs from ethnography as it is practiced in anthropology and its sister disciplines. If there is something specific in design fieldwork, it is probably the focus on products and things and the use of mock-ups and prototypes. Even more differences exist when design begins. Designers’ analytic methods range from brainstorming techniques and future workshops to such co-design
tools as “magic things,” design games, video sketching, and using Legos to simulate products, interactions, and organizations.\textsuperscript{20}

\begin{quote}
We put a large number of components together into “toolkits.” People select from the components in order to create “artifacts” that express their thoughts, feelings and/or ideas. The resulting artifacts may be in the form of collages, maps, stories, plans, and/or memories. The stuff that dreams are made of is often difficult to express in words but may be imaginable as pictures in your head.\textsuperscript{21}
\end{quote}

The aim is to turn fieldwork into an exercise of imagination rather than mere data gathering. In the tough time lines of design, it is hard to view “dreams” by observation alone. If researchers want to learn about things like dreams, people have to be invited to the dream during fieldwork. Sensitizers like Dream Kits are useful for this reason as they function to elicit people’s projective fantasies.

For example, from 2008 to 2010, researchers from the Danish School of Design built a model to show how anthropology could be used in design. This model was developed in a book focusing on reducing garbage incineration in Copenhagen. The editor, Joachim Halse, opens the book by calling it a manifesto, stressing its political nature. For him, the book offers a participatory approach for creating design opportunities that evolve around life experiences. The spirit of the study was to lower the line between anthropological fieldwork and design, but there were other drivers as well. One driver was developed to get more and more diverse people involved in the process. In DAIM, shorthand for Design Anthropology Innovation Model, the researchers used mock-ups, acted out scenes, organized design games and workshops, and rehearsed service scenarios with people (Figure 5.5).

### 5.4 Generating Concepts as Analysis

One problem spot in fieldwork has been explaining synthesis — how design ideas emerge from fieldwork. Synthesis is a creative mash of common sense and research and stresses design opportunities rather than theory. This argument, however, puzzles non-designers, to whom this sounds mystical, to say the least. However, even though most designers avoid references to the social sciences, their methods are systematic.

Broadly speaking, there are two types of approaches that deal with synthesis. Some researchers borrow heavily from the social sciences. They search models from analytic induction, grounded theory, and thick description in symbolic anthropology.\textsuperscript{22} Christine Wasson tells how at E-Lab ethnographic data were analyzed from
instances of data into patterns. These patterns were then turned into a model that interpreted ethnographic materials and envisioned a solution for the client.

*The model offered a coherent narrative about the world of user-product interactions: how a product was incorporated into consumers’ daily routines and what symbolic meanings it held for them. These insights, in turn, were framed to have clear implications for the client’s product development and marketing efforts.*

Most design researchers, however, avoid social science models altogether. They build on well-tried methods from design practice, including well-known models such as the workplace models and
affinity diagrams in contextual inquiry and personas in software development (Figure 5.6).

It is easy to add analysis to both procedures. If it is important to study gender, researchers simply analyze males and females separately and compare the results to see what kinds of differences exist. Adding age to this is also easy; researchers simply break the male and female groups into older and younger categories.

There are many overlaps between these two families; for example, working through data using affinity diagrams shares its underlying logic with analytic induction. Still, analytic induction is not always easy. Reflecting on her experiences on teaching ethnography in corporate settings, Brigitte Jordan noted how teaching data collection is easy, but the lack of tradition in analysis complicates analysis in design firms. Social scientists learn the craft of analysis through years of education and fieldwork that are almost impossible to convey “to non-anthropologists during a brief training period.”

Seen from the other side of the fence, social scientists also fail: designers need more than verbal data and references from social science literature. When designers work with data, they make references to products, conceptual designs, and other pieces of design research rather than theoretical work in the social sciences.

As Wasson noted, the association between ethnography and anthropology is little recognized in design, and the word “anthropology” is almost never heard. An obvious exception is academic research carried out in universities, where it occasionally infiltrates into industrial practice. In particular, ethnomethodology has
found its way into many types of software, design, and interaction design conferences, journals, and books.\textsuperscript{30}

\section*{5.5 Evaluation Turns into Research: Following Imaginations in the Field}

As the design anthropologist Dori Tunstall noted, any anthropologist studies the material world.\textsuperscript{31} Constructive design researchers do this too; however, their interest is in a very special kind of make-believe world, which is partially their own creation. They introduce their design imaginations into the lives of people to be able to follow how these imaginations shape the activities, thoughts, and beliefs of these people. These imaginations are not treated as physical hypotheses like in laboratory studies; instead they are treated as a thing to be followed in context.\textsuperscript{32}
These imaginations can be almost anything, such as a bottle refunding machine made of cardboard, but typically they are prototypes as with Ianus Keller’s attempt to build a tangible system for creating and browsing collections of pictures. This was also the case in the project Morphome, which took a critical look at the idea of proactive technology — of using data from sensors to predict where human action is heading and adjusting things such as light and room temperature. Since there was no such technology on the market in 2002 when the project started, Morphome built proactive systems and devices, installed these systems into homes, and interviewed and observed people who used them. These imaginations can also go beyond prototypes. For example, Andres Lucero simulated interactive spaces with design games by using objects like Legos as a tangible means to make people imagine what it would be to work and live in such spaces.

Sometimes complex technological systems are needed to study designers’ imaginations, as in two early studies of mobile multimedia phones, Mobile Image and Mobile Multimedia. In these studies, researchers in Helsinki followed how people sent multimedia messages by recording real messages. A more recent example comes from Pittsburgh, where researchers have taken a service design approach to investigate service innovation for public services, in this case a transit service. Fieldwork with transit riders revealed that their greatest desire is to know when a bus will arrive at a stop. Commercial systems that provide this service cost tens of millions of dollars. So the researchers have taken a very literal approach to the idea of co-production of value. They have designed Tiramisu (means pick me up in Italian), a smart phone application that allows transit riders to share GPS traces while riding the bus. By combining the schedule from the transit service and GPS traces from a handful of riders, Tiramisu can generate real-time arrival predictions and make this available to riders over mobile phones or the web. In this design the riders literally make the service they desire. The researchers built a working system and initial field study indicates that riders will share traces and that these traces can produce accurate real-time predictions (Zimmerman et al., 2011).

To create proper conditions for using prototypes in research, some methodological decisions are needed. Esko Kurvinen argued with his colleagues that designers should place their imaginations into an ordinary social setting. They should also follow it in this setting using naturalistic research design and methods over a sufficient time span to allow social processes to develop. Kurvinen and his colleagues developed four guidelines for properly analyzing prototypes and other expressions as social objects.

1. **Ordinary social setting.** More than one person has to be involved in a unit of study to create the conditions for social
interaction. Social interaction has to take place in a real context to overcome studio-based contemplation.

2. **Naturalistic research design and methods.** People have to be the authors of their own experiences. They are involved as creative actors who can and will engage with available products that support them in their interests, their social interaction, and meaningful experiences. Data must be gathered and treated using empirical and up-to-date research methods.

3. **Openness.** The prototype should not be thought of as a laboratory experiment. The designer’s task is to observe and interpret how people use and explore the technology, not to force them to use it in predefined ways.

4. **Sufficient time span.** The prototype ought to be followed for at least a few weeks. If the study period is shorter, it is impossible to get an idea of how people explore and redefine it.

Designers usually prefer to work with rough models in order to not direct attention prematurely to design details. The last thing any designer wants is feedback focusing on surface features of the expression rather than the thinking behind it. Paradoxically, being too hi-tech and true to design leads to bad research and design.

### 5.6 Interpretations as Precedents

Field research has its roots in industry, where it primarily informs design. It has provided a solution to an important problem, understanding, and exploring social context. It has been useful, and it has turned into a standard operating procedure. Plainly, it is useful to know how people make sense of what they see and hear and how they choose what they do.

However, field researchers produce “local” understanding that describes the context that cannot be applied uncritically to other cases. It is also temporary rather than something long-standing. This specificity makes it useful in industry, but it also raises the question of generalization, how to apply his knowledge to other cases.

There are several ways to respond to the question of generalization. Often generalization is irrelevant. Every designer studies the masters, whose works are always unique. Benchmarking looks at the top, not the average. At the top, the number of cases is by definition small. Also, studying a negative case may teach a lot; for example, even the best designers and companies fail occasionally, and these failures may be just as informative as the successes. Often, research generalizes through a program; instead of trying to describe
universally applicable knowledge, it is often more useful to study one culture at a time. Finally, focusing on unique cases encourages creativity. Methods like cultural probes, experience prototypes, bodystorming, Magic Things, and role-plays came from individual projects. Cultural probes would not have been seen if researchers in London had relied on well-proven scientific methods.

There is also a bigger picture. There are well-known and respected fields of learning that build on case studies. These include history and the humanities, clinical medicine, law, case-based business schools, and many natural sciences. Most good designers, design firms, and design schools work through precedents. Whenever designers are faced with new problems, they study patents and existing designs to learn their logic. As a designer’s stock of precedents grows, he is better able to respond to various demands, put problems quickly into context, and foresee problems.

Experienced designers know how to spot opportunities, because they know so much about existing products, materials, production techniques, trends, and human beings (Figure 5.7).

5.7 Co-Design and New Objects

Field research has been an industrial success, and it is also alive and well academically. It flourishes in several niches and is done throughout the design industries in both big and small markets. There are people who build on the social sciences, collecting data carefully and processing it into “thick descriptions.” There are also people who stress the value of merely diving into society to gain an understanding of people for design. At advanced levels in design universities, it has become a default methodology: it is a conscious choice not to do any field-style research.

Over the past two years, some researchers in Northern Europe have started to talk about their craft as co-design or co-creation. What is new here is that the design process is increasingly opened
to people, whether stakeholders or users. When designers work as facilitators rather than detached observers, the last remnants of the idea that researchers ought to be detached, impartial observers — “flies on the wall” — disappear. What comes about is the idea that design is supposed to be an exploration people do together, and the design process should reflect that. Many designers doing fieldwork have taken this model to heart, sometimes making it increasingly difficult to draw a line between designers and non-designers.  

During the past few years, several researchers have also turned to action research, where the goal is to use knowledge gained by studying a group or community in order to change it. Particularly significant work has been done in Milan in conjunction with companies and communities in Lombardy. The Milanese approach to research is characteristically locally rooted and action-oriented, aiming to change local communities rather than creating new products. Around 2000, researchers were trying to improve service systems and concepts. A few years later, this research evolved into studying how service design could be used to dematerialize society to make it ecologically and socially sustainable. In terms of attitude, current Italian researchers are well in line with the ethos that drove their teachers’ work but work far more methodically. Also, researchers in Milan are learning from other parts of the world; for example, the best book about co-design is written in Italian.

Prototyping Services: Nutrire Milano

Figure 5.8 Shoppers in a sustainable service prototype at Largo Marinai d’Italia in Milan, Italy. Here people enjoy food they have just bought in the market “convivium.” The market is a place to buy food but also a place to enjoy it, to meet friends, and to have a good time. (Picture undated, courtesy of INDAGO, Politecnico di Milano.)
Maybe the best example of design tackling issues far larger than a product comes from Milan, Italy.

Under the leadership of Ezio Manzini and Anna Meroni at Politecnico di Milano, a service design group specializing in sustainability, studied the relationship between the city of Milan and Parco Sud, a vast agricultural area south of the city, for almost a decade. Combining three interests — sustainability, service design, and the Slow Food values (Slow Food is the main project promoter) — the group tried to create a business model that would keep alive small-scale food production in Parco Sud.

Manzini calls this approach “action research.” The researchers worked with people trying to understand their hopes, needs, and worries. This research-based understanding was turned into projects that support the Parco Sud community. The aim has always been a permanent change to a common good.

This research illustrates the importance of fieldwork for design. Researchers have gone into Parco Sud and Milan, studying things like supply chains. They have ventured into co-designing business models through visual service design techniques. They also created a service prototype. There is a lively market every third Saturday of the month in Milan. The hope is that this prototype lives on and can be replicated elsewhere. Researchers have also built digital services to support their concept and continued designing new services for food production, provision, and consumption.

Key researchers in the group have mostly been trained in engineering, usability, and user studies. It is clear that in this study researchers had to work in the real world with people who have real problems and agendas. In trying to design viable business models, researchers do not have the luxury of going into a laboratory to build a model of research.

End Notes

5. For some of these research practices, see Nafus and Anderson (2010). This synopsis is based on Koskinen’s discussion with Ken Anderson, a veteran of design ethnography and the founder of the EPIC conference, Hillsboro, Oregon, August 19, 2010.
6. For cultural probes, see Chapters 2 and 6.
7. For example, see Hackos and Redish (1998).

11. Fulton Suri still works at IDEO, but Black has her own agency in Reading, near London. Richardson/Smith was bought by Fitch, which Sanders left to set up SonicRim in 1999.

12. Segal and Fulton Suri (1997) and Black (1998). Perhaps the best example of such work is Fulton Suri’s book *Thoughtless Acts? Observations on Intuitive Design* (Fulton Suri and IDEO, 2005), which consists of photographs of people’s own design solutions without captions, and a short text that explains the intentions of the book. This text is at the end of the book and is meant to be read after watching the images because, as Fulton Suri noted, life comes without captions.


14. E-Lab was bought by Sapient in 1999.

15. See especially Ehn (1988a) who offers a first-hand account of participatory design, although years after the work was done. Also Greenbaum and Kyng (1991) and Schuler and Namioka (2009).


18. Good and practical descriptions of fieldwork in design are Blomberg et al. (2009) and, for contextual inquiry, Holtzblatt and Jones (2009).

19. For a good example of systematic attention to products in fieldwork, see Jodi Forlizzi’s (2007) work on the Roomba in senior citizens’ homes.

20. For generative tools, see Sanders (2000), Stappers and Sanders (2003), and Sleeswijk Visser (2009). Magic Things are the brainchild of Iacucci et al. (2000), a good source for designing games is Brandt (2001), and a place to look at using video in design is Ylirisku and Buur (2007). A future workshop is from Jungk and Müllert (1983).


22. For analytic induction, see Seale (1999), and for its application in design, see Koskinen (2003) and Koskinen et al. (2006).


24. Good and practical descriptions of fieldwork in design are Blomberg et al. (2009) and, for contextual inquiry, Holtzblatt and Jones (2009).

25. For a good example of systematic attention to products in fieldwork, see Jodi Forlizzi’s (2007) work on the Roomba in senior citizens’ homes.

26. For generative tools, see Sanders (2000), Stappers and Sanders (2003), and Sleeswijk Visser (2009). Magic Things are the brainchild of Iacucci et al. (2000), a good source for designing games is Brandt (2001), and a place to look at using video in design is Ylirisku and Buur (2007). A future workshop is from Jungk and Müllert (1983).

27. For analytic induction, see Seale (1999), and for its application in design, see Koskinen (2003) and Koskinen et al. (2006).

28. “Thick description” is how Clifford Geertz, the dean of American anthropologists, described how anthropologists try to unravel “complex conceptual structures ... knotted into one another ... that are at once strange, irregular, and inexplicit.” Society is spaghetti, and the researcher’s job is to do “thick descriptions” to make it understandable (Geertz, 1973).

There is no shortage of good books on ethnography and fieldwork in the social sciences. To list a few, one can mention Lofland (1976) for fieldwork, Emerson et al. (1995) for writing field notes, Becker (1970) for a wide-ranging discussion on fieldwork and its problems, and Seale (1999) for analysis and quality control. The so-called Grounded Theory by Barney Glaser and Anselm Strauss has found its way into design more slowly than into fields like education (Glaser and Strauss, 1967; Strauss, 1987). If one builds on this “theory,” one gets instructions on how to build an abstract framework from observations, but there is a price. Unwary reliance on it leads to theoretical commitments: the process relies heavily on symbolic interactionism (see Blumer, 1969). This same remark also applies to contextual inquiry, where the commitments go to work flow models rather than theory (Beyer and Holtzblatt, 1998).


29. Wasson (2000, p. 385). As design ethnography mainly contributes to design rather than theory, the mother disciplines in the social sciences question its value. For example, as Tunstall (2007) related, the American Anthropological Association was then debating whether design anthropology is a worthy cause, or whether such a profit-seeking enterprise should be excluded from the scientific community.

30. In addition to researchers from Palo Alto Research Center, the most consistent ethnomethodologists writing about design have been former EuroPARC researchers Graham Button and Wes Sharrock and, later, Andy Crabtree (see Crabtree, 2004; Kurvinen, 2007). The Palo Alto Research Center has scaled down on ethnomethodology, but this work continues in several universities, mostly in the United Kingdom.

31. Tunstall (2008). However, there is a line here, which is well illustrated by Shove et al. (2007), who argued that designers should buy into “practice theory,” as they called their approach. Their study shows how social scientists understand design: they focused on studying things that exist at homes and were content with it. Their study had no projective features, even though one of the editors of the book was a designer.

32. From a systems perspective, Keiichi Sato usefully talks about the knowledge cycle between artifact development and user. In his model, artifact development process, use and context of use are in a loop in which knowledge of use and use context feed the design of the artifact, and the artifact (or service) and design knowledge embedded in the artifact feed use and shape context of use (Sato, 2009, pp. 30–31).


39. The expression of local knowledge is from the anthropologist Clifford Geertz (1983).

40. See Buchenau and Fulton Suri (2000), Iacucci et al. (2000), and the IDEO Card Pack.

41. Note that comparison to law cannot be taken literally. In law, precedents are not just aids to thinking but are binding. This is not the case in design, in which precedents in fact have to be surpassed. For this reason, Goldschmidt (1998) argued for discarding the notion of precedent and resorted to “reference” in her work on IT-based reasoning systems for architecture. However, as Lawson (2004, p. 96) noted, designers often refer to “whole or partial pieces of designs that the designer is aware of” as precedents. Like Lawson, we prefer to work with designers’ own language but remind the reader about not taking the legal analogy too seriously.

42. Similar to Brian Lawson, a student of design cognition who notes about architecture, “one of the key objectives of design education is to expose young students to a veritable barrage of images and experiences upon which they can draw later for precedent” (Lawson, 2004, p. 96). For a discussion on references and precedents, see Goldschmidt (1998) and Lawson (2004).


44. Geertz (1973).


46. Speed dating is a technique to quickly decide which design concept works best: Davidoff et al. (2007), Park and Zimmerman (2010), and Yoo et al. (2010). This technique was first invented in a project reported by Zimmerman et al. (2003). Dream Kits are from Liz Sanders. Bodystorming and experience prototyping are from IDEO; cf. Buchenau and Fulton Suri (2000).
47. Pacenti and Sangiorgi (2010). For doctoral-level work coming from this work, see Pacenti (1998), Sangiorgi (2004), and Morelli (2006).
48. For system-oriented work, see in particular Manzini et al. (2004) and Jégou and Joore, (2004); also Manzini and Jégou (2003). For a shift in unit of analysis, see Meroni (2007) and Meroni and Sangiorgi (2011).
49. In particular, this goes for Ettore Sottsass, Jr. Penny Sparke (2006, p. 17) described his philosophy as a conscious antithesis to post-war modernism, which “in Sottsass’ view, ignored the ‘user.’ His emphasis of the role of the user as an active participant in the design process, rather than a passive consumer, lay at the core of his renewal of Modernism. To this end, he experimented with a number of ways of bringing users into the picture while avoiding transforming them into ‘consumers.’”
51. Thanks to Anna Meroni, Giulia Simeone, and Francesca Rizzo who helped to write this inset. For philosophy behind Nutrire Milano, see Manzini (2008).
SHOWROOM: RESEARCH MEETS DESIGN AND ART

The program we call ‘Showroom’ builds on art and design rather than on science or on the social sciences. When reading the early texts about research programs regarding showrooms, we were struck by critical references to scientific methodology. There is little respect for notions such as data and analysis, and it is possible to encounter outright hostility toward many scientific practices. Research is presented in shop windows, exhibitions, and galleries rather than in books or conference papers. Still, a good deal of the early work was published at scientific venues, most notably human–computer interaction (HCI). This work was aimed at reforming research, which it did to an extent.

Contemporary artistic practice is beyond the limits of this book, but it is worth noting that art went through many radical changes in the past century. While traditionally, art largely respected boundaries between painting and plastic arts, performing arts, and architecture, the twentieth century broke most of these boundaries. Contemporary art has also broken boundaries between art and institutions like politics, science, and technology. Although painting still dominates the media and the commercial art market, art has increasingly become immaterial, first exploring action under notions like happenings and performances, and then turning human relations into material. With predictable counter-movements calling forth the return to, say, painting, art has moved out from the gallery and into the world at large (see Figure 6.1).

Design has had its own radical movements. Radical Italian designers of the 1960s and 1970s turned to art to create a contemporary interpretation of society. Thus, the Florentine group of Superstudio proposed cubic spaces that allowed the youth to wander in the city and claim possession of the city space. Similarly, the Memphis movement from Milan changed design by turning to the suburbs for inspiration. They found traditional furniture, cheap materials, neon colors, and cheesy patterns and
built designs that challenged the high-brow aesthetic of modernism. Designers like Jurgen Bey and Marti Guixé, and groups like Droog carry the spirit to the present.

For design researchers, contemporary art and design provide a rich intellectual resource. It links research to historically important artistic movements like Russian constructivism, surrealism, and pop art. It also links research to Beat literature, architecture, and music. It certainly created links to radical writers and theater directors like Luigi Pirandello, Bertolt Brecht, and Antonin Artaud, who broke the line between the artists and their audience. Through these artistic references, design research also makes connections to some of the most important intellectual movements of the twentieth century.

### 6.1 The Origins of Showroom

The most influential program in Showroom is critical design, which has its origins in the 1990s in the Computer-Related Design program of the Royal College of Art (RCA) in London. Collaborations with Stanford's Interval Research and European Union pushed this famed art school into research. Key figures were Anthony Dunne and Fiona Raby, who coined the term “critical design” to describe their work. Above all, critical design was indebted to critical theory, but its debt to Italian radical design and radical architecture groups of the 1960s–1980s is also clear. These groups challenged the modernistic credo of post-war architecture and design with non-commercial conceptual and behavioral designs. Building on this heritage, critical design tried to make people aware of the dangers of commercial design. The aim was to help people discover their true interests rather than accept things in shops as such.

Early studies in critical design focused on people's relationships to electromagnetic radiation, building on those few artistic and design projects that had questioned commercial approaches to designing electronic devices. Later, this work turned to exploring...
the impact of science on society. The main impetus was the debate on genetically modified food (GM), which came to the market from laboratories and agribusiness practically without debate, and raised a public outcry so loud that several European countries imposed limitations on GM products. To avoid this mistrust and polarization of debate, critical designers today work with cutting-edge science, opening up science to debate before mistrust steps in. Recent work has explored biotechnology, robotics, and nanotechnology. By building on science, critical design can look at the distant future rather than technology, which has a far shorter future horizon.

Another track also came from RCA’s Computer-Related Design program. Its main inspirations can be found in avant-garde artistic movements in post-war Europe rather than design. As the key early publication, the Presence Project, related, “we drew inspiration from the tactics used by Dada and the Surrealists, and especially, from those of the Situationists, whose goals seemed close to our own.” The situationists tried to create situations that lead people to places and thoughts that they do not visit habitually through dérive (roughly, drift) and détournement (roughly, turn-about). In London, media embedded in ordinary objects like tablecloths provided these passageways. Other artistic sources have been conceptual art, Krzysztof Wodiczko’s “interrogative design,” and relational aesthetics, in which the subject matter is human relations rather than situations.

The turning point was the Presence Project, an EU-funded study that developed media designs for three communities: Bijlmer in Amsterdam, Majorstua in Oslo, and Peccioli in Italy. While its designs were typical media designs of the era, including things like “Slogan Bench” and “Image Bank,” each was installed for brief field trials in Bijlmer. The main legacy of this project was the “cultural probes” that by now have become a routine part of design research in Europe. Later, this line of work produced a constant stream of media-oriented design work, like Drift Table, History Tablecloth, and Home Health Horoscope.

These prototypes became so robust that they could be field tested for months. The aim is to develop technology and find ways to create a “deep conceptual appropriation of the artifact.” Still, at the heart of this work is the situationist spirit. The task of design is to create drifts and detours, just like the Web does in making it easy to jump from one subject to the next.

### 6.2 Agnostic Science

Showroom had an agnostic attitude toward science in the very beginning. The sharpest formulation of the ethos can be found
from the Presence Project, which studied three communities in Europe with cultural probes and then went on to do design for these communities. The project book provides a detailed description of the design process with a great deal of detail about the cultural probes, concept development, and how people in these communities made sense of the design proposals. In one of the project’s key statements, Bill Gaver tells how “each step of the process, from the materials to our presentation, was designed to disrupt expectations about user research and allow new possibilities to emerge.”

The final section of the book draws a line between epistemological and aesthetic accountability. The former tries to produce causal explanations of the world and is epistemologically accountable. For example, “scientific methods must be articulated and precise ... [allowing] the chains of inference used to posit facts or theories to be examined and verified by independent researchers.” Facts at the bottom of science also have to be objective and replicable, not dependent on any given person’s perception or beliefs. By implication, these requirements severely constrain what kinds of investigations can be pursued.

Against this, the Presence Project constructs the notion of “aesthetical accountability.” Success in design lies in whether a piece of design works, not in whether it was produced by a reliable and replicable process (as in science). Hence, designers are not accountable for the methods: anything goes. They do not need to articulate the grounds for their design decisions. The ability to articulate ideas through design and evaluate them aesthetically “allows designers to approach topics that seem inaccessible to science — topics such as aesthetic pleasure on the one hand, and cultural implications on the other.” Surrealism, Dada, and situationism provided ways to get into dream-like, barely worded aspects of human existence. Field research gives access to the routines and habits, but these art traditions focus on associations, metaphors, and poetic aspects of life.

There are many problems with this distinction. “Science” is characterized narrowly, and it sounds more like a textbook version of philosophy than a serious discussion. If one reads any contemporary philosopher or sociologist of science and technology, this description faces difficulties. For this reason alone, it is important to understand its polemic and provocative intent. For the philosophically unaware, it underestimates the power of science and overestimates the power of art and design to change the world. Another troublesome claim is the idea that science cannot access cultural implications. Believing this would delete the possibility of learning from the humanities and the social sciences, which are an important source of knowledge of culture and society. After all, design ethnographers do just that: study culture for design.
6.3 Reworking Research

The agnostic ethos is also reflected in the language used to talk about research. For example, instead of talking about “conclusions,” researchers talk about disruptions and dialog. Also, the Presence Project talked about “returns” rather than data. Cultural probes were specifically developed for inspiration, and they were described as an alternative to the then prevailing methods of user research. These visual methods were inspired by psychogeography and surrealism, and they were described as “projective” in the sense of projective psychology.

Researchers have reworked research practices to reflect these beliefs. The purpose of the Presence Project was not about comprehensive or even systematic analysis. The project was happy to get “glimpses” into the lives of people from probe returns and use these glimpses as beacons for imagination. Instead of analysis, “design proposals” are arrived at through a series of tactics rather than systematic analysis. Bill Gaver explained these tactics in the following manner.

*Tactics for using returns to inspire designs*

1. Find an idiosyncratic detail. Look for seemingly insignificant statements or images.
2. Exaggerate it. Turn interest into obsession, preference to love, and dislike to terror.
3. Design for it. Imagine devices and systems to serve as props for the stories you tell.
4. Find an artefact or location.
   - Deny its original meaning. What else might it be?
   - Add an aerial. What is it?
   - Juxtapose it with another. What if they communicate?"}

As probe returns were mailed to London from research sites, they were spread out on a table. Researchers who came by simply discussed pieces people had sent them, trying to be like gossipers: creating a coherent story of what they saw, with some touches of reality, but only some. The instrument was the researcher, who neither analyzed nor explicated data as an outside expert. Instead, he filtered things he saw through his own associations and emotions. As long as we accept the idea that people encounter the world with dreams, fable-like allegories, and moralities, this approach to analysis is justified. If parts of the human world are non-rational, methods should be too. It is difficult to select a word stronger than “gossip” to create distance to science.

It is also easy to imagine that “field testing” of the prototypes has artistic overtones. Ever since *Design Noir*, the Presence Project, and Static!, designs have been made public for longer
and longer time periods; these are tests only in a nominal sense of the term. The aim of this fieldwork is to provide stories, some of which are highlighted as “beacons” that tell about how people experience the designs and what trains of thought they elicited. These stories are food for debate; they are not meant to become facts (see Figure 6.2). 27

This research lives on in books, patents, and doctoral theses, as well as in exhibition catalogs and critical discussions in art journals, galleries, and universities. The outreach can be substantial, like in the case of the Design and the Elastic Mind exhibition in the Museum of Modern Art (MoMA). 28 As Dunne stated in Objectified, a documentary by Gary Hustwit, by going into places like MoMA, one can reach

> hundreds of thousands of people, more than I think if we made a few arty and expensive prototypes. So I think it depends. I think we’re interested maybe in mass communication more than mass production. 29

Still, one reason for why Showroom has a research following is because critical designers write about their work in ways recognizable to researchers. They tell the whole story from initial ideas to prototypes and how people understand them. The prototypes may be forgotten, but their message lives on in books.

### 6.4 Beyond Knowledge: Design for Debate

To go beyond individual projects, Showroom relies on debate rather than statistics, like Lab, or precedents and replication, like Field. It questions the way in which people see and experience the material world and elicits change through debate.
This goes back to the critical and artistic roots of these approaches. Design provides a “script” that people are assumed to follow, and they usually do. If people follow these scripts, they become actors of industry and its silent ideologies. Design structures everyday life in ways people barely notice. Usually, these scripts give people simple and impoverished roles, like those of the user and the consumer.

To give design more value, designers can adopt a critical attitude to make the public aware of their true interests. Critical designers look to shake up the routines of everyday life. Dunne summarized the primary purpose of critical design:

_to make people think…. For us, the interesting thing is to explore an issue, to figure out how to turn it into a project, how to turn the project into some design ideas, how to materialize those design ideas as prototypes, and finally, how to disseminate them through exhibitions or publications._

The methods for making people think borrow heavily from art. The designs and the way in which they are explained lean toward Verfremdung, as in “estrangement,” similar to critical theater by the German playwright Bertolt Brecht. For example, by adding inconvenient nooks into a chair, designers create distance from what people normally take for granted. Debate is a precondition to being critical toward the ideologies of design as usual as well as seeing poetry in ordinary things like Zebra crossings (see Figure 6.5).

Researchers get engaged with the world, taking a stance against its dominant ideologies. With hypothetical designs, research can explore technological possibilities before they happen. Design works like an inkblot test on which people can project their questions and worries.

### 6.5 Enriching Communication: Exhibitions

For many researchers in Showroom, exhibiting objects such as prototypes, photographs, and video are as important as writing books and articles. The exhibition format encourages high-quality finishing of designs over theory and explanation. At times, exhibitions may take the role of a publication. As Tobie Kerridge noted following Bruno Latour, exhibitions at best are Gedankenausstellungen, thought experiments that offer curators more freedom than academic writing.

In research exhibitions, designs are exhibited in the middle of theoretical frameworks rather than as stand-alone artworks. Also, design researchers typically want to create distance from the art
They connect their work to the commercial roots of design with references to furniture shops and car shows. Tony Dunne wrote:

_The space in which the artifacts are shown becomes a “showroom” rather than a gallery, encouraging a form of conceptual consumerism via critical “advertisements” and “products”…. New ideas are tried out in the imagination of visitors, who are encouraged to draw on their already well-developed skills as window-shopper and high-street showroom-frequenter. The designer becomes an applied conceptual artist, socializing art practice by mobbing it into a larger and more accessible context while retaining its potential to provoke people to reflect on the way electronic products shape their experiences of everyday life._

Exhibiting in places like shops and showrooms also connects critical work to everyday life. In projects like Placebo and Evidence Dolls, Dunne and Raby gave their products to ordinary people. As encounters with everyday life become more important, this approach gets closer to field research. The idea, however, is to use people’s stories to create a rich understanding of the prototypes, not to gather detailed data for scientific research. Field studies and writing become a part of the Showroom format, but the aims are conceptual.

### 6.6 Curators and Researchers

There are also problems when research takes place in the exhibition context. Often, exhibitions are not solo shows but compilations of many projects collected under an umbrella envisioned by a curator.

Typically, the curator places the work into a new framework by juxtaposing things that were not necessarily included in the original research projects. Some research concerns and knowledge might be present in the exhibition, but many are not, and yet others are typically rephrased or substituted. Further, most designs are ambiguous and often designed to prompt imaginative interpretation and interrogation. This explanatory framework reflects the curator’s interpretation of the research, which may differ significantly from the original goals of the researchers (Figure 6.3).

For example, the Energy Curtain from the Swedish Static! project has been used and showcased in diverse settings. Energy Curtain has been studied in several Finnish homes, it has been at energy fairs to represent a national research program, and it
has been in the touring exhibition Visual Voltage commissioned by the Swedish Institute. The exhibition has been in places as diverse as the Swedish Embassy in Washington, design exhibitions, expos and museums, and a luxurious shopping mall in Shanghai. It would be naive to think that the original research intent shapes how people look at design and read meaning into it in all of these places. When researchers’ prototypes travel the world without the original theoretical context, they may even be treated like products. Approval is expressed through the question: Where can we buy this?\(^2\)

Although exhibitions create many possibilities for communicating design research, they also create a need to carefully consider how other events, writings, and publications can be used to complement them to keep researchers’ intentions alive. It is important to engage locally in staging further discussions and debate. For researchers, the attempt to control these meaning-making processes around design means extra work and traveling, which also makes research expensive.\(^3\)

### 6.7 How Not to Be an Artist

When techniques and practices are borrowed from art, research may be labeled as art and treated accordingly — as political or social statements rather than serious design research. There are plenty of developments that push design to art. For example, curators find it easy to integrate conceptual design into art exhibitions, as in Hasselt, Belgium, where the art museum Z33...
organized the 2010 exhibition Design as Performance as a sequel to its Designing Critical Design exhibition in 2008. Despite its name, the 2010 exhibition was framed explicitly as art, and most of the participants were artists.\footnote{44}

It is critical that designers fight being labeled as artists. Anthony Dunne explained how he draws the line:

\begin{quote}
What we do is definitely not art. It might borrow heavily from art in terms of methods and approaches but that’s it. Art is expected to be shocking and extreme. Design needs to be closer to the everyday life, that’s where its power to disturb comes from. Too weird and it will be dismissed as art…. If it is regarded as art it is easier to deal with, but if it remains as design … it suggests that the everyday as we know it could be different, that things could change.\footnote{45}
\end{quote}

One way to distance design from art is to take discourse out into the real world. Much of the early work focused on changing design, but recently designers are getting engaged in larger societal issues.\footnote{46} We have already described how critical design has shifted its attention upstream from criticizing design to making science debatable.\footnote{47} The Stockholm-based project Design Act is another example. It discusses “contemporary design practices that engage with political and societal issues” by examining “tendencies towards design as a critical practice,” which is ideologically and practically engaged in these issues.\footnote{48} If designers participate in dialog about the meaning of their work, it is not only curators, critics, and media who define it. A degree of control can be gained this way.

The main challenge of this tactic is to take debate to places where it matters. If researchers stay within the art world, it only strengthens the art label. To make debate meaningful, it ought to be organized in companies, government offices, malls, and community meetings, and face the questions contemporary artists face when they have turned human relationships into art. As the British critic Claire Bishop noted, the question for art is whether it ought to be judged by its political intentions or also by its aesthetic merits.\footnote{49} Is serious social content enough to justify a piece of design research, or should it also be judged on its aesthetic merits? Mere disturbance is easy, but is it enough (Figure 6.4)\footnote{50}

Another tactic is to do design at a high professional level. This catches the attention of professional designers, who do not get to label researchers’ designs as art, bad design, or simply not design. If researchers succeed in being taken seriously as designers, they may be able to direct attention to the intention behind the work.

The most eloquent articulation of this tactic comes again from Dunne and Raby. They stress that their conceptual products
could be turned into products because they result from a design process, are precisely made, require advanced design skills, and project a professional aura. Fiona Raby, in an interview to the Z33 gallery in Belgium, said:

*By emphasizing that this is design, we make our point more strongly. Though the shock effect of art may be greater, it is also more abstract and it doesn’t move me that much. The concept of design, however, implies that things can be used and that we ask questions — questions about the here and now. What is more: all our works could actually be manufacturable. No one will of course, but as a matter of principle, it would be possible.*

Here critical designers meet post-critical architects and many contemporary artists. The aim is to create ideologically committed but good, honest, and serious design work to make sure that attention focuses on design rather than labeling. This is how many design revolutions have come about; for example, Memphis designs were mostly theoretical, but no one could blame them for bad design. They were taken seriously and, ultimately, conquered the world.

A third tactic is to study prototypes in real life. An early example of following what happens to design prototypes in society
is Dunne and Raby’s *Design Noir*, and another is the Finnish domestication study of two prototypes done by the Interactive Institute, Energy Curtain and Erratic Radio. In London, Bill Gaver’s group at Goldsmiths is also working on longer and more complex studies that move beyond notions of evaluation.

Empirical research turns even very explorative designs into research objects. However, for Showroom researchers, fieldwork is typically not about issues around use but about issues like form. For instance, they may ask how static and visual notions of form are moving toward the performative and relational definitions. They also gather material that helps them to build better stories and concepts for their exhibitions.

### 6.8 Toward Post-Critical Design

Recent work at the Interactive Institute in Sweden shows how researchers can deal with these problems. This work has built on design, philosophical investigation, and more recently, critical discourse in architecture. This work has explored computational technology from an aesthetic perspective and combined traditional materials with new technologies. Its topic is how sustainable design may challenge thinking about energy and technology. Static! explored ways of making people aware of energy consumption through design. Switch! explored energy use in public life and architecture.

Static! and Switch! consisted of several projects. Design examples were reinterpretations of familiar things. Throughout, the idea was to build new behaviors and interactions into old, familiar forms like radios and curtains. The purpose was to create tension between familiar forms and unexpected behaviors to elicit new perceptions, discussion, and debate.

For example, one of the subprojects in Static! was Erratic Appliances — kitchen appliances that responded to increasing energy consumption by malfunctioning and breaking down. One prototype was Erratic Radio. It listened to normal radio frequencies and frequencies emitted by active electronic appliances around the 50 Hz band. When the radio sensed increasing energy consumption in its environment, it started to tune out unpredictably. To continue listening, the user had to turn some things off. Erratic Radio has an iconic Modernist shape with a hint of classic Braun design, which gave it a persuasive and usable quality and underlined that the difference with normal radio was behavioral. Its inspiration was John Cage’s Radio Music, but it
took an opposite approach to Daniel Weil’s Bag Radio, which broke the form of the radio but not its function. Prototypes like Erratic Radio were done in the spirit of the philosopher Ludwig Wittgenstein’s thought experiments: they were aimed at questioning things we take as necessities even though they result from industrial processes.

Symbiots from the Switch! project at the Interactive Institute showed some artistic tactics at work. Inspired by notions such as symbiosis and parasitism in biology, Symbiots explored how these natural processes could be used to change ordinary forms into new ones. In Symbiots, graphical patterns, architectural configurations, and electrical infrastructure were turned into a photo series in the genre of hyper-real art photography. The intervention started with neighborhood studies. Residents participated in making the photographs, distributing posters, and discussions. The photo series were done in two different formats, art photographs and posters, to emphasize that there is more than one way to construct design objects.

This kind of work faces several problems. Most of this work is reported in scientific conferences and exhibited in contemporary design galleries. While it also may have some presence at expos and fairs and other venues closer to a commercial context, it is still clearly placed outside the market. If researchers want to show how design can make the world a better place, they have to go where people are. This does not happen through intellectual debates in galleries.

The pros of this step over the boundaries of the design world are obvious, but so are the cons. While fellow designers and critics may be able to pick up the intention behind the work and respect it, this cannot be taken for granted in a place like a shopping mall. Shopping malls place the work in a commercial frame in the original spirit of the Showroom metaphor, while an embassy places it into a political and national frame. This is unavoidable: design does not exist in a void. However, the key question is how to make sure that the research intention is not hijacked to serve someone else’s interests (see Figure 6.5).

There are no easy answers to this question. Engagement and commitment have come to stay in constructive design research, but it is far more difficult today than it was in the 1960s and requires elaborate tactics. It is hardly possible to be counted as an avant-garde artist by emptying a glass of water into the North Sea, as Wim T. Schippers did in the 1960s, and shocking the audience has gone to such extremes that it has become very hard to continue like this. Design has had its own share of failures, such as claims to solve the refugee crisis by building better tents.
Figure 6.5 Zebra crossings are graphical elements that become benches when they get a third dimension. Concept from Symbiots. Project team Jenny Bergström, Ramia Mazé, Johan Redström, and Anna Vallgårda. Pictures by Interactive Institute, photographs by Olivia Jeczmyk and Bildinstitutet.
In this case, anything does not go. It pays to be careful with this type of claim or risk being dismissed as art. Like artists and architects, designers today tend to make local rather than global commitments and exhibit doubts and controversies in their work. Showroom is about exposing, debating, and reinterpreting problems and issues. Ambiguity and controversy belong to it, just as they belong to contemporary art.

End Notes

1. For a definition, see Bourriaud (2002). For an influential review, see Kester (2004). Bishop (2004, p. 62) lists as key sources Walter Benjamin’s “Author as Producer,” Roland Barthes’ “Death of the Author,” and Umberto Eco’s The Open Work.
2. For example, see O’Doherty (1986).
3. John Thackara (1988, p. 21) once argued that “because product design is thoroughly integrated in capitalist production, it is bereft of an independent critical tradition on which to base an alternative.” Design has had more than a few critical phases that have gained quite a following, including Victor Papanek’s writings about ecology in the 1960s, and Italian radical design movements. Anti-commercial comments have been voiced even in the commercial heartland of design by people like Georg Nelson, who lamented Henry Dreyfuss for his commercialism after the 1950s; cf. Flinchum (1997, pp. 138–139).
7. Betsky in Blauvelt (2003, p. 51). In another essay, he has characterized Droog as a “collection of detritus of our culture, reassembled, rearranged and repurposed … they have institutionalized political and social criticism of a lifestyle into design and thus into at least some small part of our daily lives” (Betsky, 2006, pp. 14–15). Interestingly, most design researchers do create original designs rather than redo or remake things, even though this has been routine in the art world, especially in the 1990s (Foster, 2007, pp. 73–74).
11. For example, Weil (1985); Dunne’s (2005) Hertzian Tales is a virtual cornucopia on this work.
14. See especially Material Beliefs, a project in which Goldsmiths and the Royal College of Art collaborated. The best document is Beaver et al. (2009).
15. Presence Project (2001, p. 23). For situationism, see especially Debord (1955). Situationism shares a curious historical link to the Bauhaus (or more correctly, Ulm), which has been recently analyzed by Jörn Etzold (2009). The Danish artist Asger Jorn was a pivotal figure in early situationism. He was a founding member of the group CoBrA (Copenhagen, Brussels, Amsterdam). When he heard that Max Bill, a former student of Bauhaus, was building a
new design school in Ulm in continuation of the Bauhaus, he contacted him, arguing against Bill that the Bauhaus is not a doctrine with a place, teaching, and heritage, but artistic inspiration. Jorn founded a competing organization he called the Imaginary Bauhaus, which soon became the International Movement for an Imaginist Bauhaus (IMIB).

After learning about the Lettrists in Paris and establishing contact with Michèle Bernstein and Guy Debord, the two groups joined forces. One of its name proposals was IMIB, but it was discarded for the Situationist International, probably due to Deboard’s negotiation skills. As years went on, Debord became the main figure. For him, the father to be murdered was Sartre rather than Gropius.

The connections of the situationists and design in Bauhaus style are distant. For Walter Benjamin, the sparse aesthetic of Bauhaus spaces opened materials for experience in ways in which there was no correct use anymore. The situationists tried to achieve something similar by opening the city with their dérives and dépaysements (disorientations). In this sense, the latter group shares a modernist credo, even though its materials, situation-changing aims and techniques could hardly be more different from the material and specific practice of the Bauhaus. Still, important differences remained:

“…whereas Bill’s HfG in Ulm emphasized inheritance [from Bauhaus], doctrine, and continuity, Jorn and Debord’s counter-effort was aimed above all at the intensification and consummation of disinheritance, as well as the affirmation of that absence of experience that Benjamin had identified as the impetus of modernity in the Bauhaus.” (Etzold, 2009, p. 160).

16. Guy Debord’s situationist notion of spectacle, from which he wanted to save people, is indebted to Marx’s notion of commodity fetishism, and in particular, Georg Lukacs’ Hegelian interpretation of Marx, which gave humans an important role in changing history instead of reducing human action to economic relationships alone. Other important sources of situationism were French existentialism, surrealism, and Antonin Artaud’s theater; cf. Jappe (1999). See also Debord (1958).

17. See Debord and Wolman (1956). The situationists urged artists to place artistic work into everyday settings, where it matters to ordinary people. Nicholas Bourriaud (2002, pp. 85–86) noted that what is missing from this notion are other people: constructed situations derail people as individuals, but not direct them to see through those social relationships that define their habits. As such, the situationists were one group in a long list of twentieth century avant-gardists, including Dada and surrealism, but also Allan Kaprow’s happenings, the Fluxus movement, Joseph Beuys’ performance art, and Yves Klein’s hard-to-classify work; cf. Bourriaud (2002, p. 95).


19. Cultural probes were introduced for the first time to an international audience in Gaver et al. (1999).

20. For Drift Table, see Boucher and Gaver (2007), History Tablecloth is from Gaver et al. (2006), and Home Health Horoscope is reported in Gaver et al. (2007).


26. This tactic is reminiscent of psychoanalysis, where the analyst listens to the feelings that animate the patient’s talk, and uses his own feelings to make sense of the patient’s free associations. For a famously clear exposition of psychoanalytic technique, especially the interplay of “transference” (the patient’s emotions) and “countertransference” (the analyst’s feelings that respond to the patient’s feelings), and how they are used in deciphering the patient’s psyche, see Gaver et al. (2007).

27. For example, Gaver et al. (2007, pp. 538–541). There are precursors to all of this. In the humanities, this approach is called explication du texte or close reading. The difference is in the means: design is a material practice that aims at changing behavior through this material practice. Thus, rather than descriptive, the method is projective, done through design proposals.


29. Objectified, 1 hour, 09 minutes, and 35 seconds – 1 hour, 10 minutes, and 03 seconds.

30. Akrich (1992) talks about the scripting and describing that technology imposes on people.

31. As Dunne told to Parsons (2009, pp. 145–146). There are many ways to formulate this impoverishment in literature cited in this chapter. For example, existentialists like Jean-Paul Sartre would talk about bad faith, Nietzsche about slave morality, Marx about false consciousness, and Freud about neuroses. These concepts surface once in a while in design. For example, Quali Così Siamo — The Things We Are, an exhibition of Italian design curated by Alessandro Mendini for Triennale di Milano in Summer 2010, was partly based on psychoanalytic metaphors.


35. Beaver et al. (2009, pp. 110–111). The problem with staying within design and thus trivializing is pointed out by Jimmy Loizeau on p. 111.

36. Kerridge (2009, pp. 220–221). Design has been exhibited for decades. The past decade saw two developments: design was turned into art, which drove the prices of prototypes and one-offs sky high. As expected, there are already exhibitions mocking such ideology by celebrating ordinary industrial things, while simultaneously treating them as ready-mades (see Design Real, Grcic, 2010).


40. MoMA’s exhibition Design and the Elastic Mind is a good example of the power of the curators. Critical design was only part of the exhibition, which also showed works from artists and scientists specializing in visualization and digital art.

There are curators and critics who know the difference between art and design and take designers’ reluctance to be labeled as artists seriously. The best recent example comes from Berlin’s Helmrinderknecht gallery focusing on contemporary design. Sophie Lovell curated an exhibition called Freak Show: Strategies for (Dis)engagement in Design that ran in this gallery from November 13, 2010, and January 15, 2011. Exhibited was work from ten groups of designers, two of them coming from critical design. Each group challenged the prevailing ideas of design as usual, and explored ways in which design could become a life-serving force. These ways consisted of using bioengineering in James Auger and Jimmy Loizeau’s work coming from Material Beliefs, and El Ultimo Grito’s animalistic tables made of cardboard and artistic resin. The exhibition was a mélange of concepts, one-offs, small series products, and to-be production pieces.
41. See in particular Gaver et al. (2003, 2004).
42. Indeed, there is a market for prototypes by star designers like Philippe Starck and Ron Arad, whose prototypes may be valued at hundreds of thousands of dollars. This market is significant enough to have its own chronicler (see Lovell, 2009). To our knowledge, there is no market for design researchers’ prototypes, but after institutions like MoMA have exhibited design research, the day will come when we will see research prototypes in auction houses.
43. For example, when Visual Voltage went to Berlin, the exhibition was expanded with local designers. There were events and a design research workshop around the themes of the project. See www.visualvoltage.se/.
44. For Design as Performance, see Z33 (2010); for one-offs and prototypes as art objects, see Lovell (2009); and for art exhibitions showing that industrial products are not art (sic), see Grcic’s (2010) Design Real.
48. See www.design-act.se/.
49. Bishop (2007, pp. 64–67) raised this question, suggesting that its history can be traced back to “Dada-Season” in Paris in 1921. She also suggested that relational art should somehow try to create “highly authored situations that fuse social reality with carefully calculated artifice” (p. 67). Art and by implication, design, can and perhaps even should disturb viewers, and learn from earlier avant-gardes like Dada, surrealism, or in America, Beat poetry. To promote change, one should not accuse art of mastery and egocentrism if it seeks to disturb rather than only something that emerges through consensual collaboration.

The difficulty lies in negotiating the line between constructing a disturbance that evokes new thought models and shocking. As Grant Kester (2004, p. 12) noted in his study of dialog in art, much of the twentieth century avant-garde built on the idea that art should not so much try to communicate with the viewers, but rather seek to challenge their faith to initiate thinking. The premise was that the shared discursive systems (linguistic, visual, etc.) on which we rely for our knowledge of the world are dangerously abstract and violently objectifying. Art’s role is to shock us out of this perceptual complacency, to force us to see the world anew. This shock has borne many names over the years: the sublime, alienation, effect, l’amour fou, and so on. In each case, the result is a kind of epiphany that lifts viewers outside the familiar boundaries of common language, existing modes of representation, and even their own sense of self. As Kester noted, recently many artists have become considerably sophisticated in defining how they work with the audience. Rather than shocking, they aim to create work that encourages people to question fixed identities and stereotypes through dialog rather than trauma. Prevailing aesthetics in such work is durational rather than immediate.

Of course, this is the stance held by critical designers, as well as other representatives of Showroom, even though they have not been less vocal about their design tactics. The aim is to lead people to see that there are ways of thinking and being beyond what exists in the marketplace, but the way to lead people away from their habits is gentler and far less ambitious than in earlier avant-gardes that came from rougher times.

Another problem with shocking is that contemporary art has gone to such extremes that it is increasingly difficult to shock. Shocking also leads to the problem of trivialization — something is shocking so it must be art and hence inconsequential. For good reason, critical designers try to avoid this tactic in their work as well as their discourse. A good discussion of the problems of shocking is den Hartog Jager (2003).
50. With the exception of critical designers, there are few debates in which designers study these questions. Andy Crabtree's (2003) advice is to think of technology as breaching experiments (see also Chapter 8), and Bell et al.'s (2005) argument is that designers need to make things strange to see things that are grounded in various “ethnomovements” of the 1960s, not contemporary art. These movements argued for studying people from within, through their meanings, rather than using researchers’ categories. One way to make the routine noticeable, unquestioned, and moral is to disturb and breach those routines. The reader can try this at the workplace by doing one of Harold Garfinkel’s (1967) breaching experiments. Take any word people routinely use and press them to define it. Calculate how many turns it takes before people get angry at their friends, who should know what words like “day” or “flat tire” mean.

In critical design, as in contemporary art, disturbance is usually an opening into critical reflection rather than into studying the routine activities of everyday life. The difference may sound subtle, but it is essential.

52. For post-critical architecture, see Mazé (2007, p. 215); for contemporary art, see Bourriaud (2002, pp. 45–46).
56. See projects Slow Technology and IT/H11001 Textiles.
58. See Ernevi et al. (2005).
59. First reported in Ernevi et al. (2005).
60. For Wim T. Schippers, see Boomkens (2003, p. 20).
61. For this example, and for discussion on designers using artistic tactics for photo ops, see Staal (2003, p. 144).
63. For a note on these doubts and commentaries on architect Rem Koolhaas’ work, see Heynen (2003, p. 43).