

# Design Research

METHODS AND PERSPECTIVES

EDITED BY **Brenda Laurel**

## **Design Research: Methods and Perspectives**

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The goal of the book is to introduce designers to the many research tools that can be used to inform design as well as ideas about how and when to deploy them effectively. The chapter authors come from diverse institutions and enterprises including universities, product companies, consultancies, and research labs. Each has something to say about how designers make themselves better at what they do through research, illustrated with real-world examples. Topics of this multi-voice conversation include qualitative and quantitative methods, performance ethnography and design improvisation, trend research, cultural diversity, formal and structural research practices, tactical discussions of design research process, and case studies drawn from areas as unique as computer games, interactive museum installations, and spontaneous cinema as design practice. *Design Research* charts the paths from research methods to research findings to design principles to design results, demonstrating the transformation of theory into a richly satisfying and more successful practice.

The book can be purchased or viewed through a variety of online resources, including the Internet Archive. Chapters or segments can be provided on request.

I'm offering the introduction and table of contents here.

# Introduction

## Muscular Design

Brenda Laurel, editor

Not too long after the end of the 20th century, I was sitting in a meeting at Art Center to discuss the College's curriculum. Around the table were administrators, chairs, faculty members and students. As we spoke about reaching across departmental boundaries to offer more trans-disciplinary and foundational courses, a student in the Environmental Design department made a suggestion. "We need a course for every student in the college in their first term," he said, "that helps us to understand *why* we want to be designers."

I think that every designer dreams of making work that makes a difference. Most designers are aware of the common misconceptions of the profession. Designers are variously seen as decorationists, elitists, or servants of the consumerist machine. When their work is directed toward the marketplace, they rarely participate in the "research" that determines what product should be produced for whom—or why. When their work focuses on the investigation of design through form and process, they often stand accused of irrelevance or indifference. When they found great movements like the Bauhaus, they may be seen as self-proclaimed dictators of style. Each of those attributions ultimately marginalizes designers and design.

Underlying the discourse in this book about design research is a deeper conversation about the "why" of design. In this book you will encounter forty different voices. Each has something to say about how we make ourselves better at what we do through research. Each approach is situated in a particular context and reflects a distinct purpose. The authors argue passionately with one other about the object, process and goal of design research. But every one of them will tell you that it research is a key—in whatever form and for whatever purpose—to making design a more muscular profession.

Our book begins with a look at human-centered research. Immediately, we are off on a controversial discussion. To many, human-centered research is equivalent to market research; it smacks of commercialism and is rejected by many on those grounds. The traditional goal of market research has been to find ways to sell stuff to people. In the colloquial view, the function of market research has been to validate existing and proposed products and to figure out how to persuade people that they need to buy them. Occasionally, we think of market research as finding out what potential customers want. Here again, the colloquial view is overly simplistic. Customers typically can't tell you what they want, and they can't design a product, service or experience for you to sell them. If you had asked any number of people in 1957 what they would like to play with, none would have suggested a plastic hoop that they could rotate around their hips.

In the old model, market research was a back-end process, devoted primarily to the final stages of development including styling, packaging, branding, marketing and advertising. In the emerging paradigm, the process is being inverted, with design research as a front-end method, informing the development of products and services from the concept stage forward. In this way, design research can enable the product to speak for itself, freeing branding and marketing

to move toward honest communication and away from persuasion and the creation of desire. Human-centered design research encompasses a set of methods and practices aimed at getting insight into what would serve or delight people. It investigates behind the scenes, looking at individuals, situated contexts, cultures, forms, history, and even business models for clues that can inform design. Furthermore, good human-centered design research amplifies the designer's ability to shape popular culture and to smoothly transmit values through design.

Designers have their own “old models” to contend with. Brand/identity designer David Canaan wryly observes that most designers seem to see their mission as “educating the general public about good taste.” But over the last decade, the balance of power between those who sell products or services and those who buy them has undergone radical change. Thanks in part to the rise of the Web, communication between companies and audiences has moved from one-way persuasion to two-way dialogues about needs, desires, problems and dreams. Customer support, enabled in no small part by advances in telecommunications, has evolved to have ears and eyes as well as a mouth. The most stunning evidence of the growing power of the people may be the organized boycotts of companies over issues of child labor, animal treatment or genetic engineering—and the fact that many have achieved substantial results with large corporations.

While marketing, advertising, distribution and customer service functions have been forced to adapt to this new state of affairs, the design disciplines have lagged behind. Design curricula in higher education rarely include design research as a set of skills with extremely high strategic value. Designers need to understand the tools of research, how they are deployed, how they map onto the various stages in the design process, and how research findings can contribute to both innovative and evolutionary design practice.

Many years ago, I worked with a Jewish colleague who owned the biggest Swiss Army knife I ever saw. It was at least 2 inches thick, containing virtually every tool made for it. I asked him, “What is that?” He replied, “it’s a Jewish Army knife.” Deciding to go for it, I said, “OK, so why do you call it a Jewish army knife?” Shifting from his vowel-neutral, California manner of speech into a thick Yiddish accent he replied, “Because you never know.”

Designers find themselves in a similar predicament today. Beyond the massive changes in dynamics among customers and companies, we work in a context shot through with rapid, often unexpected change along several vectors. Previously unimaginable technologies—from MP3 to nanotech—are blooming like time-lapse flowers. Shifting conditions in trade, politics and culture are forcing radical changes in the business models and operating methods of companies. Designers today work in a transmedia world: brands spread like viruses from print into video, web, email, sports-arena banners, LCD billboards, temporary tattoos and signage on spacecraft. Transmedia forces are at work in areas beyond branding, in the design of products, services and properties as well. Who knew, twenty years ago, that franchises as unlike as Citibank and the Harry Potter would live in every media type from atoms to bits? What next? One goal of this book is to put as many tools as possible on your belt, because “you never know”.

Designers work in a world in which the velocity and abundance of information are exhibiting non-linear growth. At the same time, the consolidation of ownership in many industries, from telecommunications and media to retail and agriculture, creates the paradox of translating more choices into less choice. The well-entrained consumer responds to increasingly spectacular and

superficial stimuli. The necessary push-back from designers who do not wish to vanish into the shadows of giant corporations requires not only that we design wonderful stuff, but also that we do it in such a way as to transform the consciousness of consumers from conditioned response to active participation. Not accidentally, the same transformation serves the political need to transform an apathetic public into a body of informed citizens. What we do is both framed by and transformative of the context in which we do it.

When one steps back from the marketplace, things can be seen in a different light. While time passes on the surface, we may dive deep to a calmer, more fundamental place. There, the urgency of commerce is swept away by the rapture of the deep. Designers working at that depth choose to delve into the essence of design itself. Form, structure, ideas and materials become the object of study. In the section entitled “Form”, you will meet some of those pioneers who are making exquisite journeys into the inner space of design. In counterpoint to the view that “you never know”, these explorers suggest that we know a lot, and that we can be continually informed by the cycle of form-making and reflection.

The third section, entitled “Process,” presents insights on how research can be facilitated, represented, propagated, understood and utilized successfully within a variety of contexts. Here you will find a strong emphasis on how design works within the framework of various kinds of organizations, and how we navigate structural and cultural obstacles as we bring the messages of design research forward. The final section, “Action,” provides case studies of projects that reveal design research at work--how methods are chosen and deployed in specific contexts and for specific purposes.

Simply put, designers who can harness the power of research will help design to become a more muscular discipline, acknowledging and utilizing its implicit power in explicit ways. The value placed on designers’ work will likewise increase, as independent creators, members of organizations and shapers of culture. A designer who knows how to deploy formal research appropriately may introduce strong new currents into the ocean of possibility. In the world of commerce, design research betters the odds for a successful, even delightful, match between an audience’s needs and desires with a product, service or experience. Research can enable designers to invent products that people didn’t even know they wanted—like the hula hoop or the Walkman. Of course, design research can fuel branding, marketing and advertising as well. Design research can function as the *corpus callosum* between development and marketing functions in a company, making formerly isolated (and therefore often adversarial) parts of the corporate “brain” able to work in concert through their connection of shared information to serve common goals.

Design has power; this has always been true. Design has consequences. The question is not whether consequences exist, but rather whether they are intended, by whom, and to what purpose. The challenge for designers is to claim and direct the power of their profession. From flying cars to brave new books to computer games, from industry to academia to the independent studio, designers today are employing a panoply of research methods to strengthen their work. This twenty-first century hodge-podge is beginning to coalesce into a coherent discourse. Our hope is that this book takes us a step further in that direction.

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