

## EPILOGUE: WE ARE ALL DESIGNERS

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I tried an experiment. I posted a request on some internet discussion groups for examples of products and websites that they loved, hated, or had a love/hate relationship with. I received around 150 email responses, many passionate, and each listing several items. The responses were highly biased towards technology, not surprisingly, because this is the area in which most of the respondents worked; but technology did not receive high marks.

One of the problems with such a survey is the "too obvious to see" effect, as reflected by the old folk tale that a fish is the last to notice water. Thus, if you ask people to describe what they see in the room in which they are sitting, they are apt to leave out the obvious: floor, walls, ceiling, and sometimes even windows and doors. People may not have reported what they truly liked because that might have been too close to them, too enmeshed in their lives. Similarly, they might have missed the disliked things because they were absent. Still, I found the responses interesting. Here are three examples:

Global chef's knives - beautiful, functional and simple. ...  
They are delightful to hold and use. I keep mine under my  
pillow (youch! just kidding).

<i>Line #</i>
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The *pièce de résistance* is my watch. A George Jensen:  
sterling, large mirror face with two arms but no markings for  
numbers, the arm band is incomplete, only covers 3/4 of  
your wrist. Out of the ordinary, beautiful. (The design is in  
the Museum of Modern Art.) P.S. I stared at it, at least six  
years in Paris before I bought it.

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My VW Bug: love it -- it's simple, utilitarian, gets great gas  
mileage, small enough to park just about anywhere and just  
plain fun to drive. But I can't get past that stupid seat-lift-  
handle thing -- it drives me bonkers. (The lift-the-seat handle  
on the front seats -- they're in the "wrong" spot. ... Not one  
person has ever "gotten it right.")

Love it, hate it, indifferent to it. Our interaction with our everyday things reflects the three levels of design in very different ways. Loved objects ranged the gamut of all possible combinations of the three forms of design. Many an item was enjoyed solely for the visceral impact of its appearance:

After plunking down \$400 for an iPod I almost wouldn't have cared about the product after having unwrapped the packaging, it was that nice. [The iPod is Apple Computer's music player.]

*Line #*

I bought a VW Passat because the controls inside the car were pleasurable to use and look at. (Get in one at night -- the dashboard lights are blue and red-orange.) ... It makes driving more fun.

Remember the person in chapter 3 who bought water simply because the bottle looked so great? That response certainly belongs in this category:

I remember deciding to buy Apollinaris, a German mineral water, simply because I thought it would look so good on my shelves. As it turned out, it was a very good water. But I think I could have bought it even though it was not all that great.

Many products were loved for their behavioral design alone -- that is, their function and utility, usability and understanding, and physical feel.

I like my OXO vegetable peeler, too. It handles eggplant, broccoli stems and anything else I throw at it. They make those nice comfy handles.

*Line #*

Lie-Nielsen hand planes: I can plane tiger maple and produce a smooth, glassy, surface where most planes would tear out chunks of wood.

*Line #*

Can opener: You may recall Victor Papanek's short book *How Things Don't Work...* in it he mentions a can opener. ... I finally found it a few years back - it's been reproduced by Kuhn Rikon as their LidLifter Can Opener. In brief, it opens the can by splitting the seam, rather than cutting through the top. Lots of reasons why that's a good thing, but it's an appliance I actually look forward to using. Hand operated, needs little cleaning, fits my hand, does its job, stores in a drawer, easily accessible. A dutiful servant, as a kitchen appliance should be.<sup>1</sup>

*Line #*

The Screwpull lever model wine opener. Push down and pull up: the cork glides from the bottle. Push down again, squeeze and lift, and the cork comes off the corkscrew. It's wonderful! The day I got it I opened three bottles in a row, it was so much fun.

Reflective design also played a major role, with examples of trust, service, and just plain fun:

My Taylor 410 guitar. I trust my guitar. I know that it is not going to buzz when I play notes high on the fret board; it will stay in tune; the action on the neck will allow me to play chords and notes my hands cannot reach on other instruments.


*Line #*

I still tell people about my experience, years ago, with the Austin Four Seasons Hotel. I checked into my room to find a TV Guide on the bed, with a bookmark placed on the current date.

*Line #*

How about simply fun? I just got a souvenir mug; its decoration only becomes visible when it contains a hot drink, though: it's covered with heat-sensitive glazing that is dark purple-blue at room temperature and below but becomes transparent when hot. It's even practical: one look and I know when my coffee is no longer drinkable. Nice shape, too. I wanted it for the combination of all those factors, it's become my standard coffee mug now. Not exactly beautiful -- but close.

*Line #*

Something that puts a smile on my face every time I visit the site is that the logo on the site "Google" is like a little cartoon that changes with relevance to something current. They will have a little devil peeking through the O for Halloween, or some snow caps on it during winter. I just love that.	
	<b>The Google logo.</b> (During the December, end of year, holidays.)

Perhaps the most enthusiasm, though, was shown for communication services that enhanced social interaction and a sense of community. People loved their instant messenger tool:

"I can't imagine my life without it.

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Instant messenger ... is an integrated part of my life. With it I have a sense of connection to many of my friends and colleagues around the world. Without it, I feel as though a window to part of my world is bolted shut.

Email was seldom remarked upon -- in part because it is like water to these technologists, but when it was spoken of, it was a love-hate response:

I feel cut off from the civilized world if I don't get email. ... The volume of email I receive and feel obligated to answer almost puts this in the love/hate column, but on reflection, I may hate the volume, but I love the individual friends and family that comprise the unwieldy lot.

Household appliances and the personal computer (the pc) seem universally disliked: "Almost every appliance in my house is so ill-designed," said one. "Almost nothing about the PC is pleasurable," said another. And, remember, these respondents were technologists, most of them in the computer and internet business.

And, finally, some things were loved despite their faults. Hence, the love of the VW despite what the writer called "that stupid seat-lift-handle thing." Consider the following respondent's love for his espresso maker even though it was difficult to use (mind you, this response was from an expert on usability design). In fact, the lack of usability had some reflective appeal: "only a true expert, such as me, can use this properly."

I love my espresso machine. Oddly not because of its ease-of-use (it hasn't got much!) but because it makes great coffee when you know how. It requires skill and the successful application of that skill is rewarding.

Over all, the responses showed that people can be passionate about their belongings, the services they use, and their experiences in life. Companies that provide extraordinary service reap the benefits: the special personal touch of being at a Four Seasons Hotel and finding on her bed the television guide, opened to the correct page, prompted that respondent to tell all her friends. Some people had bonded to their things: a guitar, their personal website and the friends they had made through it, the feel of kitchen knives, a special rocking chair.

In my informal study I got at some aspects of our love and hate of things, but missed some of the truly loved items of the sort described by Csikszentmihalyi and Rochberg-Halton in their study *The Meaning of Things* that I discussed in chapter 2. They discovered such treasured items as a favorite set of chairs, family photographs, house plants, and books. Both of us missed favorite activities, such as a love of cooking, sports, or people. Both studies point to the development of true passion about the items and activities in our lives, Sometimes love, sometimes hate, but true attachments and bonds.

## PERSONALIZATION

How can mass-produced objects have personal meaning? Is it even possible? The attributes that make something personal are precisely the sorts of things that cannot be designed ahead of time, especially in mass production. Manufacturers try. Many provide customization services. Many allow special orders and specifications. And many provide a flexible product that, once it has been purchased, can be tuned and tailored by the people who use it.

Numerous manufacturers have tried to overcome the sameness of their product offerings by allowing customers to "customize" them. What this usually means is that the purchaser can choose the color or select from a list of accessories and extra-cost features. Cell phones can be equipped with different faceplates, so you can get one in different colors or designs - or paint it yourself. Some websites advertises that you can design your own shoes although, in fact, the only real alternatives you have are some choices among a fixed number of sizes, styles, colors and materials (e.g., leather or cloth).

It is possible to have clothes made individually. In the past, they were made by tailors and seamstresses who would measure and fit a garment to your particular size and preferences. The result was well-fitting clothes, but the process is extremely slow, labor intensive, and, therefore, expensive. But what if technology were used to allow customization of everything – somewhat like the personal fit that one gets from tailors and seamstresses, but without the delay and cost? The idea is popular. Some believe that manufacturing to order – mass customization – will extend to everything: clothes, computers, automobiles, furniture. All would be manufactured specifically to specification: specify the configuration, wait a few days, and there it is. Several clothes manufactures are already experimenting with the use of digital cameras to determine a person's measurements, lasers to cut the materials, and then computer-controlled manufacturing of the items. Some computer manufacturers already work this way, assembling products only after they have been ordered, allowing the customer to configure the product according to their desires. This has a benefit to the manufacturer as well: items are only manufactured after they have been purchased, which means that no

stockpile of finished products is required, dramatically reducing the cost of inventory. When manufacturing processes are designed for mass-customization, individual orders can be made in hours or days. Of course, this form of customization is limited. You can't design a radically new form of furniture, automobile, or computer this way. All you can do is to select from a fixed set of options.

Are these customizations emotionally compelling? Not really. Yes, clothes might fit better, and the furniture might better suit some needs, but neither guarantees emotional attachment. Things do not become personal because we have selected some alternatives from a catalog of choices. To make something personal means expressing some sense of ownership, of pride. It means to have some individualistic touch.

We make our homes and places of work personal by the choice of items we place in them, how we arrange them, and how they are used. In the office, we arrange desk, table, and chairs, and post photographs, drawings, and cartoons on walls and doors.

Even items we dislike can provide a personal, redeeming touch: for example, a picture or a chair may be special because it is so detested -- a legacy, perhaps, of a family member or a gift, and now there is no choice but to smile and keep it. Then, at family reunion after reunion, a family may fondly recall just how some disliked picture or chair once dominated a section of the house. It seems paradoxical, but the sharing of common negative feelings can lead to positive bonding of the participants: yesterday's hated object drives today's loved experience.

Determining a desirable arrangement of belongings is often more a process of evolution than of deliberate planning. We make continual small adjustments. We might move a chair a bit closer to the light and place the books and magazines we are reading near the chair. We bring over a table to hold them. Over time, the furniture and the belongings are adjusted to fit the inhabitants. The arrangement is unique to them and their activities. As activities and inhabitants change, so too does the arrangement of the house. Other people coming to live there may not necessarily find it fits their needs -- it has become personal, it fits a person or a family -- a quality that isn't transferable to others. Stuart Brand, in *How buildings learn*, has shown that even buildings change: as different occupants find their needs no longer met, they change the structure to meet their new needs, often changing an otherwise nameless, faceless building into a distinctive structure with personal value and meaning to its current inhabitants.<sup>2</sup>

Objects themselves change. Pots and pans get banged and burned. Things are chipped and broken. But much as we may complain about marks, dents, and stains, they also make the objects personal -- ours. Each item is special. Each mark, each burn, each dent, and each repair all contain a story, and it is stories that make things special.

While writing this book, I met with Paul Bradley, studio chief of IDEO, one of the largest industrial design firms in the United States. Bradley wanted to be able to design things that would reflect the experiences of an owner. He was searching for materials that would age gracefully, showing the dents and markings of use, but in a way that was pleasant and that would transform a store-bought, mass-produced item into a personal one, where the markings would add character and charm that was unique to the owner. He showed me a photograph of a pair of blue jeans, faded naturally through use, with a rectangular faded patch in the front pocket where the wearer had always kept his wallet. We discussed the bangs and markings on our own cooking wear in our homes, and how they added to its appeal. We talked of favorite books made more comforting by the

wear and marks of reading, enhanced through marginal notes and highlighting. And he showed me his Handspring Personal Digital Assistant (PDA) -- which IDEO had designed -- and told how he had deliberately dropped and banged it to see if the scuffs added personal history and charm (they didn't).

The trick is to make objects that degrade gracefully, growing old along with their owners in a personal and pleasurable manner. This kind of personalization carries huge emotional significance, enriching our lives. This is a far cry from the mass customization that allows a consumer to choose one of a fixed set of alternatives, but has little or no real personal relevance, little or no emotional value. Emotional value -- now that is a worthy goal of design.

## CUSTOMIZATION

There is a tension between satisfying our needs by purchasing a ready-made object versus making it ourselves. Most of the time we are unable to build the objects we need, for we lack the tools and expertise, to say nothing of the time. But when we buy someone else's object, seldom does it fit our precise requirements. It is impossible to build a mass-produced item that fits every individual precisely.

There are five ways of dealing with this problem:

**1. Live with it.** Even if relatively inexpensive, mass-produced items are never quite what we need, we benefit from their lower cost.

**2. Customize.** Suppose everything was so flexibly designed that it could be modified as needed, wouldn't that solve the problem? The difficulty is that it is far more difficult to make something customizable than you might realize. Look at the modern computer software system, and you will immediately see the problem. My software offers a wide variety of customization options -- so many that I can't even find them when I want them. So many that just learning how to customize is itself a daunting task. Moreover, these customizations invariably fail to satisfy. Everything I do is more complex because I must always choose among numerous alternatives. The things I really want to customize -- my peculiar typing, spelling, and stylistic habits -- can't be customized.

Proper customization does not come by further complicating an already complex system. No, proper customization comes about through combining multiple simple pieces. Invariably, if something is so complex that it requires the addition of multiple "preferences" or customization choices, it is probably too complex to use, too complex to be saved. I don't customize my pen; I do customize how I use it. I don't customize my furniture; I do customize through my choice of which piece to buy in the first place, where I put it, when I use it, and how.

**3. Customized mass production.** As I have just discussed, it is possible to have items manufactured to order. Customers get something configured to their tastes, and costs can be lower because there is no need for expensive supplies of unsold items. However, because the range of customization is limited to such things as choice of components, accessories, and color, this customization is far from personalization.

Still, this trend will continue. In the future, body parts, cases, and other parts of a design could be stamped, pressed, cut, or molded to order. Efficient assembly lines could put together customized structures. The choice of

alternatives could expand. Manufacturing techniques are making it possible to extend the range of customization. This is the future.

**4. Design our own products.** In “the good old days,” so it is said, we either made all our own things or went to the local craftsman who would make something to our specifications, often as we watched. Although some still cherish those old days of folk arts – see, for example, John Seymour’s wonderful description of them in his *Forgotten arts and crafts*. But as our needs get more complex and specialized in this ever-more technological, information-rich age, it is an impossible dream that many of us would possess the skills and time required to design and construct the objects required in everyday life. Nonetheless, it is not totally impossible to follow this route, and those who do reap many benefits. Some make their own clothing and construct furniture. Many people create and maintain gardens. Some even build their own airplanes or boats.

**5. Modify purchased products.** This is probably the favorite and most widely followed method to make purchased items into personal ones. Harley Davidson motorcycles are famous in this regard: people buy one from the factory and then immediately send it off to a custom detailer, who completely alters it, the alterations sometimes costing more than the cycle itself (already expensive). Each Harley is therefore unique, and owners pride themselves upon their special designs and paint jobs.

Similarly, building custom sound systems in automobiles is now a major business, with proud owners showing off their sound systems in regional meetings and contests. So, too, with customization of automobiles, changing the electronics that control the acceleration and performance, altering the shocks, the tires and rims, and paint.

Of course, the home is perhaps the biggest site of customization. A row of newly constructed, identical-looking houses soon transform themselves into individual homes as their occupants change furnishings, paint, window treatments, lawn, and, over years, modify the house’s structure, adding rooms, changing garages, and so on.

## WE ARE ALL DESIGNERS

A space can only be made into a place by its occupants. The best that the designer can do is put the tools into their hands. Steve Harrison and Paul Dourish, “Re-place-ing space.”<sup>3</sup>

We are all designers. We manipulate the environment, the better to serve our needs. We select what items to own, which to have around us. We build, buy, arrange, and restructure: all this is a form of design. When consciously, deliberately rearranging objects on our desks, the furniture in our living rooms, and the things we keep in our cars, we are designing. Through these personal acts of design, we transform the otherwise anonymous, commonplace things and spaces of everyday life into our own things and places. Through our designs, we transform houses into homes, spaces into places, things into belongings. While we may not have any control over the design of the many objects we purchase, we do control which we select and, then, just how, where, and when they are to be used.



Sit down and decide where to put your coffee cup, your pencil, the book you are reading, and the paper you wish to write on -- you are designing. Even if this seems trivial and superficial, the essence of design is present: A set of choices, some better than others, perhaps none fully satisfactory. Possibly a dramatic restructuring to make everything work much better, but at some cost in effort, money, or even skills. Maybe if the furniture were rearranged or a new table purchased, the cup, pencil, book and paper would fit much more naturally or the aesthetics more pleasurable? Once this is considered and a selection made, you are designing. Moreover, this activity is preceded by other designs; namely, the design of the building and the room, the selection of the furniture and its placement, the location of the lights and their controls.

The best kind of design isn't necessarily an object, a space, or a structure: it's a process -- dynamic and adaptable. Many a college student has made a desk by placing a flat-sided door on top of two filing cabinets. Boxes become chairs and book cases. Bricks and wood make shelves. Rugs become wall hangings. The best designs are the ones we create for ourselves. And this is the most appropriate kind of design -- functional and aesthetic. It is design that's in harmony with our individual lifestyles.

Manufactured design, on the other hand, often misses the mark: Objects are configured and made according to particular specifications that many users find irrelevant. Ready-made, purchased items seldom fit our precise needs, although they might may close enough to be satisfactory. Fortunately, each of us is free to buy different items and then to combine them in whatever way works best for us. Our rooms fit our life styles. Our possessions reflect our personalities.

We are all designers -- and have to be. Professional designers can make things that are attractive and that work well. They can make beauty, create products we fall in love with at first sight. They can create products that fulfill our needs, that are easy to understand, easy to use, and that work just the way we want them to. Pleasurable to behold, pleasurable to use. But they cannot make something personal, make something we bond to. Nobody can do that for us: we must do it for ourselves.

Personal websites on the internet provide a powerful tool for people to express themselves, to interact with others all across the world, and to find communities that value their contributions. Internet technologies -- such as newsletters, mailing lists, and chat rooms -- allow people to congregate and share ideas, opinions, and experiences. Individual website and web logs allow personal expression, whether for art, music, photographs, or daily musing about events. These are all powerful personal experiences that create strong emotional feelings. Here is how one person described her website to me:

My own website - I sometimes want to give it up because it places great demands on my time, but it represents me online in such a personal way that it is impossible to imagine life without it. It brings me friends and adventures, travel and praise, humor and surprises. It has become my interface to the world. Without it an important part of me would not exist<sup>4</sup>.

These personal websites and web logs have become essential parts of many people's lives. They are personal, yet shared. They are loved and hated. They bring out strong emotions. These are truly extensions of the self.

Personal websites, web logs, and other personal internet sites are prime examples of personal, nonprofessional design statements. Many people expend

great amounts of time and energy in writing their thoughts, in collecting their favorite photographs, music, and video clips, and otherwise in presenting their personal face to the world. For many people, as with my correspondent, these personal statements represent them so intimately that it is inconceivable to imagine life without them – they have become an essential part of their self.

We are all designers -- because we must be. We live our lives, encounter success and failure, sadness and joy. We structure own worlds to support ourselves throughout life. Some occasions, people, places, and things come to have special meanings, special emotional feelings. These are our bonds, to ourselves, to our past, and to the future. When something gives pleasure, when it becomes a part of our lives, and when the way we interact with it helps define our place in society and in the world, then we have love. Design is part of this equation, but personal interaction is the key. Love comes by being earned, when an object's special characteristics makes it a daily part of our lives, when it deepens our satisfaction, whether because of its beauty, its behavior, or its reflective component.

The words of William Morris provide a fitting close to the book, just as they provided a fitting opening:

If you want a golden rule that will fit everybody, this is it:  
Have nothing in your houses that you do not know to be  
useful, or believe to be beautiful.<sup>5</sup>

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## END NOTES

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<sup>1</sup> "You may recall Victor Papanek's short book." (Papanek & Hennessey, 1977)

<sup>2</sup> "Stuart Brand has shown" (Brand, 1994)

<sup>3</sup> "Steve Harrison and Paul Dourish." (Harrison & Dourish, 1996)

<sup>4</sup> "My own website." Response to my query for people on an email discussion list about design to tell me of products or websites they love, hate, or have a love-hate relationship with. (Dec. 2002)

<sup>5</sup> "If you want a golden rule." (Morris, 1882. Quotation is from Chapter 3, "The Beauty of Life," originally delivered before the Birmingham Society of Arts and School of Design, February 19, 1880.)