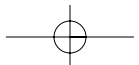
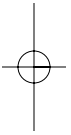
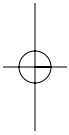


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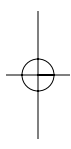
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*How Toasters, Toilets, Computers,  
and Many Other Things  
Come to Be as They Are*

HARVEY MOLOTCH

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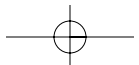
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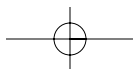
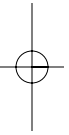
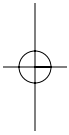
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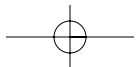
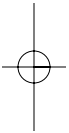
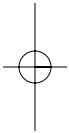


TO JACK AND THE MEMORY OF JOE.  
THEY SAVED ME MORE THAN DOUGH.

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## CONTENTS

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PREFACE: WHERE I COME FROM ix

ACKNOWLEDGMENTS xi

### CHAPTER 1

*Lash-Ups: Goods and Bads* 1

### CHAPTER 2

*Inside Stuff: How Professionals Do It* 23

### CHAPTER 3

*Form and Function* 53

### CHAPTER 4

*Changing Goods* 91

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CONTENTS

CHAPTER 5

*Venues and Middlemen* 131

CHAPTER 6

*Place in Product* 161

CHAPTER 7

*Corporate Organization and the Design Big Thing* 195

CHAPTER 8

*Moral Rules* 225

NOTES 261

BIBLIOGRAPHY 287

INDEX 000



## PREFACE

*Where I Come From*

I was born into the retail car business on one side and the home appliance world on the other, strategically placed to enjoy each new feature of the post-World War II prosperity. I caressed the taillights of my mother's Oldsmobile "88" and experimented endlessly with the Webcor stereo in my room. I used both to win friends and influence people. In late adolescence, caught by the winds blowing what would later be called "the sixties," I rebelled with a small foreign car and a better high-fidelity system. I used my mouth as well as my brain to bite some of the hands that fed me. Active in the New Left, I critiqued American materialism and denounced what I took to be its foreign policy reflection in the immorality of the Vietnam War.

Right about the war, I was less right about the goods. I now think the zeal to condemn people's products was and remains both bad political strategy as well as intellectually naïve. This book tries to work it all out, and I hope it does so in a way that sheds light beyond the vagaries of my own biographical tensions. One may not be able to go home again—Webcor, Oldsmobile, and much else are gone—but the wandering can turn up some things that are new and perhaps, even for others, interesting.

How we desire, produce, and discard the durables of existence helps form who we are, how we connect to one another, and what we do to the earth. In addition to ordering intimacies, these urges and actions

PREFACE

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influence the way peoples across large stretches of time, cultures, and geographies align, exchange, and conflict. I put aside both critics' simple denunciations and merchandisers' unyielding boasts to learn where, in both the large sense and in the small details, modern products come from. A good scan may even help make for better goods and more worthwhile lives.

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I appreciate financial and logistical aid from the William and Flora Hewlett Foundation “Hewlett Fellows” grant #98-2124 to the Center for Advanced Study in the Behavioral Sciences; the Rockefeller Foundation Bellagio Residency Program, and a London School of Economics Centennial Professorship. I will always be grateful for a

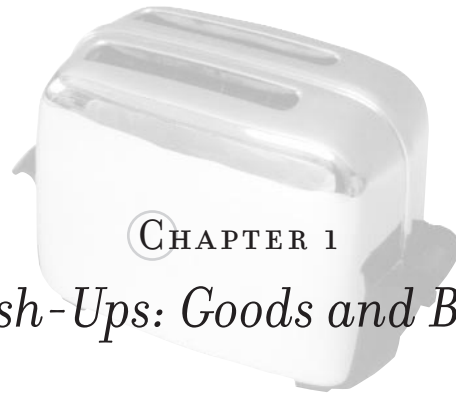
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career's worth of support from my esteemed colleagues at the University of California, Santa Barbara; I also owe a debt to new associates at New York University. The patience of so many informants from within the design profession generated both information and pleasure.

I pay special homage to my life partner, Glenn Wharton, who put me on to bibliographic sources, fresh ideas, and the presence of art, crumbling and otherwise, in all that we do.



## *Lash-Ups: Goods and Bads*

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Where does it come from, this vast blanket of things—coffeepots and laptops, window fittings, lamps and fence finials, cars, hat pins, and hand trucks—that make up economies, mobilize desire, and so stir up controversy? The question leads to others because nothing stands alone—to understand any one thing you have to learn how it fits into larger arrays of physical objects, social sentiments, and ways of being. In the world of goods, as in worlds of any other sort, each element is just one interdependent fragment of a larger whole.<sup>1</sup>

Like a toaster. It does not just sear bread, but presupposes a pricing mechanism for home amperage, government standards for electric devices, producers and shopkeepers who smell a profit, and people's various sentiments about the safety of electrical current and what a breakfast, nutritionally and socially, ought to be. Any particular toaster also contains the trends in fine and popular art that give it a particular look and texture of operation, including—in many models—a human satisfaction in the sound and sight of the pop-up moment. There are merchandise critics, trade associations, advertising media as well as the prior range of goods and hardware within which it must fit—wall outlets for its plugs, bread slicers calibrated for a certain width, and jams that need a crusty base. There is a global system that yields a toaster's raw materials, governments that protect its patents, a labor force to work at the right price, and a dump ready to absorb it in the end.



Somehow all the elements come together more or less at the same time and in a given geographic place that operates not just as a container, but as a crucible that yields up one particular product and not another. Miami has produced no toasters at all, but Mt. Airy, North Carolina, became, during its day in the sun, the “officially designated Toaster Capital of the World.”<sup>2</sup> Toasters are indispensable in U.S. and British households; almost no Italians have them. In terms of timing, it will not do for one needed element (like jam) to be accessible in say, the mid-nineteenth century, but then to disappear just when another element, say electric outlets, are in place. So with other products: it may not work out if the trim of a dress arrives even a moment after the designer has left the room; a computer program fragment absent at the wrong moment is death to the new software.

Somehow, everything must—and this is the crucial idea—“lash-up”<sup>3</sup> such that the otherwise loose elements adhere; only then can there be a new thing in the world. Like a plant variety in the forest or a microbe among the animal species, a product comes about and stays around—sometimes for a relatively short time and sometimes for epochs—to the degree that the diverse elements that make it up continue to be. Electrical outlets in the kitchen make the toaster appliance useful just as the reality of the appliance incites builders to put in outlets near the kitchen table. The Anglo-Saxon support for toast continuously reinforces the existence of toasters just as such an eating-appliance habit helps mark off a particular people as distinctive. Not just having a taste for toast, people *enroll*, as sociologist Bruno Latour would say,<sup>4</sup> in the toaster project. Their commitment becomes evident when something goes wrong (no bread? no outlet?), yielding immediate acts of restoration.

Individuals enroll, organizations enroll, and even—in a sense—objects enroll. Objects too have a life in them, maybe not as in a “Toy Story” movie when dolls and action figures leap off shelves and discuss their fates, but in the way they sustain social practices just as those practices sustain them. Any search for the source of stuff must therefore look for this continuous mutual stroking between object and action that makes a thing “interactively stabilized.”<sup>5</sup> It also means a hunt for breakdown—for how elements stop working together, prompting at least a tweak in the new model if not the disappearance of a prod-



uct altogether. Change too is normal, maybe even inevitable. Tracing the connections in products can show how the social and the material combine to make, depending on circumstance, both change and stability happen in the world.

There have been other approaches toward figuring out where stuff comes from. Teachers instruct schoolchildren that stuff was “invented”—usually by means of a genius like Thomas Edison. The great man, through inspiration and perspiration, just does it. But even Edison depended on others’ work; he was part of a 14-person team when he “did” the lightbulb. More profoundly, he was always dependent on the surrounding web of political and cultural practices that made each of his innovations possible.

Less oriented toward a genius or even individuals at all, some see new stuff evolving through a great march of ever-improving artifacts, more or less driven by their own internal logic. One good gadget begets the next in just the way science knowledge is supposed to gather up. Engineer Henry Petroski—the rightly esteemed expert on “the evolution of useful things”—holds to this model.<sup>6</sup> In economists’ view of the world, Petroski’s formulation makes sense. Markets “demand” stuff and that is what companies produce—optimal stuff, in fact. New stuff comes into being precisely because better ways are continuously being found to satisfy bidders’ tastes. Sovereign consumers place their orders and the output is what we see in the stores. But tastes and improvements cannot be taken as self-evident, and neither can their origins. What is or is not “useful” and what is or is not a “taste” also arise from the complex mixtures of enrollments and intersections always behind everything.

There are critical scholars who complain about goods as nothing but bads. Sympathetic as I am with such grumbling, blanket denunciations are as overly simplistic as the product boosters’ ceaseless cheers. They too efface the production system’s actual operations. The book titles of Vance Packard’s best-selling trilogy summarize the complaining quite well. *The Hidden Persuaders* (1957) focused on corporate capture of consumer minds; *The Status Seekers* (1959) illustrated how ordinary people were made vulnerable to the manipulations, and *The Waste Makers* (1960) used the car industry to portray the needless



destruction that resulted. These popular books echoed more sophisticated analyses by the Frankfurt School of Marxian critical theorists founded in Germany between the world wars. Such thinkers were responding to the fact that labor did not revolt or even support trade unions with any consistency. Instead, workers wanted to consume material goods and experience commercial amusement. Through capitalist capacity to enthrall with mostly useless and shoddy artifacts, the theory went, people sublimated their more rational socialist urge into consumption and the dream of goods. Consumption thus signals alienation, as people substitute dead material for control over their working conditions and the goal of more meaningful social lives.<sup>7</sup> To bring all this about, producers must use gimmickry like planned obsolescence, clever advertising, and other seductions to deliberately foster dissatisfactions and build markets for still more superfluous outputs. For their part in this dreary, self-mortifying pursuit, consumers compete against one another in a game, as Thorstein Veblen put it, of “conspicuous consumption.”<sup>8</sup> Once others gain access to what you have, new stuff has to be acquired in an endless cycle of unhappy waste.<sup>9</sup>

The bad news runs on. Each of the world’s religions sponsors its own version of asceticism, reflected in the lives attributed to its priests as well as in doctrine and ceremony. These merge, sometimes in explicit ways into contemporary environmentalist thought, with the defense of nature intrinsic to doctrines of morality and transcendental responsibility. The “throwaway society” endangers God’s plan and the natural eco-system. Corporations tend to create goods using the most esoteric chemical compounds because they are the easiest to patent. They also do not break down in nature and have unknown effects on natural systems.<sup>10</sup> Product development thus has “a logic of digestion”<sup>11</sup> that is neither righteous nor healthy. In a feminist variation, exemplified by the traveling gallery show of home appliances called “Mechanical Brides,” merchandise “improvements” strengthen the chains that bind women to housework—with artiness (like the pastel washer) as part of the trickery.<sup>12</sup>

One way or the other, stuff produced and consumed by most people has been interesting to social thinkers as demonstrating a dangerous means of production and a system that misleads or dupes. A





poisonous vine, the critiques imply, can produce only noxious fruit, and, thinking in the other direction, such terrible stuff can come only from a pernicious system.

Ironically enough, a good deal of the basis for such critique comes from the mouths of producers themselves. The term “planned obsolescence” was coined not by a Marxist critic, but by the industrial design pioneer Brooks Stevens, who thought it a virtue to implant “the desire to own something a little newer, a little better, a little sooner than is necessary.”<sup>13</sup> Norman Bel Geddes, another important product developer, said he wanted to stir up a “cupidity and longing to possess the goods.”<sup>14</sup> In a 1937 reflection, a New York ad agency executive urged his colleagues to inject “a little fear in advertising . . . fear in women of being frumps, fear in men of being duds.”<sup>15</sup> A prominent business leader urged his colleagues forward with a call for “creative waste.”<sup>16</sup> The adulatory business press repeats corporations’ visions of themselves as intelligent, effective, and powerful, with richly persuasive techniques to manipulate consumers and build demand.

The specter of a manipulative corporate hold over needs and desires is thus not a fantasy coming from nowhere. But among any group of people, there will be many voices saying all sorts of things, however inconsistent with one another. And even when they all do speak alike, that does not mean they know what they are talking about. Even right before the Great Depression as well as before the more recent collapse of the Internet boom, industrialists were still talking bullish. Businesspeople’s wishful thinking or bravado should not be mistaken for empirical reality. It just is not that easy for the corporate apparatus to fool all of the people all of the time. It takes some real effort, as I will try to show, to beat out one’s competitors and develop a commodity that will not soon end up in the dustbin of business history.

Critics do accept, even celebrate certain kinds of goods—things that apparently do not arise from corporate cunning. Handcrafted material, especially when thought to emanate from indigenous peoples’ spiritual urges, transcends evils of conspicuous consumption, planned obsolescence, and techniques of domination. Also prized are goods touched by art-historical and intellectual pedigree, like products linked to the Bauhaus school of art and design—goods consecrated for enduring



functional beauty. More recently, there has been appreciation for merchandise modified by the less powerful, like low-rider cars among Chicano youth who “create the car as a site of resistance” or goods inverted in use, as when teens wear oversize pants or decrepit U.S. military garb.<sup>17</sup>

Rather than exceptions to the goods systems, I think, handmade creations, “aftermarket” customizing, and making things useful are all part of it. Handicrafts shift in and out of popularity much as machine-made goods. Diverse “outside” forces influence indigenous artifacts even in remote places. Bauhaus stuff represents, in my view, just another style—a judgment in no way intended to belittle the talent that created it. Similarly, when those from below alter goods after purchase they act in ways quite like the affluent. Wearing underpants as outerwear is more like stretching a limo than meets the eye. Besides marking difference for their respective users, such aftermarket adaptations become immediate stimuli for new products, tailored to the newly evident tastes. With a sharp eye toward innovators, deviants, and first-adopters, companies respond to what folks do.

I hold off on judging what is a good or bad product and certainly offer no expert opinion of what is good design. But I will be trying to show just how one product possibility takes hold compared to another, opening the opportunity perhaps to then know how it really could have been different. What I hope to avoid throughout is making common cause with those who condemn the lack of quality and individuation in what people seem to want. Though not oblivious to the dangers of goods, I bracket the specifically destructive tendencies of modern markets. Too much judgmental artillery has made it hard to see the artifacts through the smoke, much less touch them, turn them over, look inside, and ask questions about how they came to be and how they fit in to lives and economies. “The materialists are not interested in the material,” anthropologist Francesca Bray succinctly remarks about so many past analyses of goods.<sup>18</sup>

Related to my agnostic strategy, I interchangeably use terms like “stuff,” “commodities,” “artifacts,” “things,” “products,” “merchandise,” and “goods” despite their differing ideological and intellectual nuances. Among the multiple forces at work in determining stuff are



elements that can be found in almost any economic or social system. Figuring out what those might be, including the search for thrills, distinction, and solidarity, may help us disentangle the predicaments of our own time.

### THE ANTHROPOLOGY OF CONSUMPTION

Whatever its antiquarian flaws, classical anthropology still has much to teach. It may be that prior generations of ethnographers were guilty of uncritically using their own cultures' assumptions as a basis for understanding and judging those who were unfamiliar—"othering" them, as we now can say. But the visitors to exotic places did treat material and nonmaterial aspects of life as together making up their subject matter. A culture, anthropologist Robert Redfield said, consists of "shared understandings made manifest in act and artifact."<sup>19</sup> As a matter of routine, such notions motivated ethnographers to study goods as a route into the whole social world. The spirit was empirical and, at least compared to those doing goods analysis among modern peoples, often conducted with a lighter load of theoretical baggage. At their best, scholars examined the actual procedures—the "deeply embedded operational sequences"<sup>20</sup>—including the technical, functional, spiritual, and artistic elements that enter in at each phase of history of a people and in the making of a single artifact.

We can advance an understanding of the analogous contemporary process by working through the details of goods, thinking of them as playing a more or less similar role in lives today as they did in pre-capitalist eras. Douglas and Isherwood's original—and largely unheeded—call for a contemporary "anthropology of consumption" rests upon such presumed continuities with pre-modern settings. "Consumption," then as now they cogently argue, "is the very arena in which culture is fought over and licked into shape."<sup>21</sup> "Consumption uses goods to make firm and visible a particular set of judgments in the fluid process of classifying persons and events," with goods acting as "markers" of social location and collective pasts and futures.<sup>22</sup> Decisions about what precisely to make and acquire, and when, where, and how to do it involve "moral judgments about what a man is, what a woman is, how a man ought to



treat his aged parents . . . how he himself should grow old, gracefully or disgracefully, and so on.”<sup>23</sup>

In her analysis of some home furnishings in late imperial China (seventeenth through nineteenth centuries), Bray points to such things as the marital bed, the chair (an idea imported from foreigners), woven fabrics, and most especially the household stove as each embodying relations of gender, nation, and kinship. “The Stove God was as much a symbol of family unity as the ancestral tablets” (there were also “stove scriptures”).<sup>24</sup> Even among the poor and under conditions in which extended kin shared other aspects of dwelling space, every family (even when headed by brothers) had its own stove, imperative given the larger role the appliance played in situating individuals within the cosmos.<sup>25</sup> The orientation to home furnishings as embedded in larger meanings parallels attitudes toward the house itself, including its major elements of architectural form, dimensions, and siting. Chinese houses have, in Bray’s phrase, an “invisible architecture” that was made explicit in imperial China but that remains—and here I move toward my modern application—as an implicit feature of design and consumption routines more generally. There are tacit “rules,” or at least sensibilities, in contemporary life that determine the social meanings that surround a thing’s acquisition and use—who has rights to sit where and on what occasion, or to adopt which posture on what kind of goods. People work their physicality and “furnishings” as a cultural ensemble of their time and setting. In the extreme, they deliberately deform their bodies to meld with their merchandise. Kayapo men of Brazil install large ornamental wooden plates in their mouths to hugely stretch their lips; the Ndebele women of South Africa elongate their necks with braces that gradually push their shoulder bones down several inches. Ear piercing, foot binding, diaphragm constricting, and breast cinching are other examples of reworking bodies—women’s bodies in most cases—into larger ensembles of goods using makeup, jewelry, tools, and clothes.

The “identity work” of goods does not occur in a single instance of consumption, nor even at particularly important rites of passage, although some happenings and acquisition events may carry special significance. Instead, identities and consumption constitute one another through routines of daily acquisition and continuous use.



*George Rodger, Young Masai N'dito in Ceremonial Dress, 1979.  
©Estate of George Rodger.*



“The bulk of provisioning,” Daniel Miller writes of buying goods at a shopping center, is connected to “an ongoing relationship, an underlying constancy complemented by a mood, a compromise, a smile, a punishment gesture, a comfort, all the minutiae that make up the constantly changing nuances of a social relationship.”<sup>26</sup> Put more succinctly, “Objects are social relations made durable.”<sup>27</sup>

In displaying their consumption aspirations and accomplishments, individuals exhibit to one another and confirm for themselves that they belong to particular groups. For gay men according to ethnographer Frank Mort, specific consumption habits—“clone” clothing and home decorating materials—were intrinsic to the formation of a distinctive community. For gay men, “consumption goods guaranteed effective participation in a new society. They also provided the conditions of freedom to “be oneself.” . . . Consumer rituals and a contemporary sexual lifestyle were understood to be inextricably linked.”<sup>28</sup> Mundane heterosexual toaster choice can also help realize a particular consumption tribe—based on ethnicity (bagel-wide slot), economic class (the Dual-it CPB-2, which sells for more than \$200), or some more subtle aspect of subcommunity (like the retro models now favored by “fashion-forward” consumers).

The specific “feeling” an object gives off helps to constitute what indeed it *is* in social terms. Objects gain sentiment from accumulated social and physical use, worn surfaces in certain places and sedimented odors of specific peoples and their routines. Among the Trobriand Islanders, continuous exchange of beads and other decorative objects created physical wear that made palpable the large number of hands through which they had circulated, thus binding peoples together across large distances and over long stretches of time.<sup>29</sup> So it is with contemporary goods. People wash their jeans, buff their cars. Through physical handling as well as mental manipulation, “usage develops the physiognomy of an object; contact with its possessor puts into it resources of expressiveness.”

Marcel Proust was not the only modern observer to find redolent “information” in his mother’s perfume, the cakes served to him or the wallpaper of his room. The objects of his life could never be adequately represented as particular brands or commercial design patterns.



Instead they had meaning through the mutually reinforcing details that he—and, to a degree, he alone—could sense. So it is that every object, and each aspect of every object, is rich with meaning and affect, however demeaned as “fetish” for both tribal and modern peoples.<sup>30</sup> Sometimes, and in ways inexplicable to those who experience it, the “charge” can be especially strong, calling forth social-psychological associations that move the observer. The strength of the charge also depends, of course, on life stage and other circumstance. A teenager’s first car carries more magic than a professor’s final Volvo. A gown for the ball means something different than pants for work. But even ordinary things can take on elements of the “secular sublime”<sup>31</sup> in their ability to order social arrangements and one’s place within them. By drawing on these meanings artists can excite passions by putting mundane objects to work in still life, collage, or as theatrical stage prop. The urinal that Duchamp installed in an art gallery could shock not just because it was a common manufactured item, but also because he was juxtaposing that appliance’s polluting connotations with a high culture setting.

At the most profound level, artifacts do not just give off social significations but make meanings of any sort possible. That a urinal can be assumed to be for peeing, full stop, is a bedrock social agreement that Duchamp trades on to do his mischief. Given the inherent ambiguity of all reality and the nagging suspicion that we always exist on the edge of existential chaos, objects work to hold meanings more or less still, solid, and accessible to others as well as to one’s self. They form the tangible basis of a world that people can take to be a world in common, things to be taken as “real” in an agreed-upon working consensus. The presence of goods helps anchor consciousness against the social vertigo of living in a world of random and dreadfully unsteady meanings.<sup>32</sup> Having a toaster, we all implicitly agree, is a reasonable way to make breakfast, not a pillow or an artwork or merely a constellation of meaningless sensory inputs. Treating a toaster as a breakfast appliance and acting toward it as such helps suspend the potential for chaotic doubt. The physical existence of the toaster and the circumscribed technique of operating it help make our world possible. We can ignore that the toaster can come in a variety of different styles, shapes, modes of oper-



*"The Fountain" 1917*

Marcel Duchamp, *Fountain (Second Version)*, 1950. ©Philadelphia Museum of Art. Gift (by exchange) of Mrs. Herbert Cameron Morris; ©Artists Rights Society (ARS), New York/ADAGP, Paris/Estate of Marcel Duchamp.

ation, and depends on so many other social and technical elements that maybe it does not so clearly exist as a clear and separate thing at all. We can bracket the fact that toasters are used for things like pizza or waffles, or exist on the arbitrary judgment that toast is something that is worthwhile enough to keep in our world, even though it is irrelevant to other worlds (like that of the Italians). By treating the toaster as "simply so," we reassure one another that we see the world in a similar way, that we are sane and that there is a stable reality "out there."





Now we have a first and fundamental answer to our question of where stuff comes from. Goods provide a basis, in a number of different ways including their use, for there to be a sense of social reality. They help us be sane.

In addition to the intrinsic connection it makes between the social and the artifact, classical anthropology has another idea worth taking on board in the modern context. Art and spirituality are endemic to economic activity, rather than superfluous or in opposition to it. In anthropological treatments, artistic expressions of all sorts, including various aesthetic motifs, simultaneously reflect and constitute the very nature of the culture, including how it comes to be productive. Scholars take the “decorative life” very seriously indeed. Speaking of Iatmul (New Guinea) people’s relation to their domestic equipment, Gell says “the decoration, which is distinctive, binds the lime-container to its owner in a most intimate fashion; it is less a possession than a prosthesis, a bodily organ acquired via manufacture and exchange rather than by biological growth.”<sup>33</sup> People work to decorate but also decorate to work. That is, in expressing themselves artistically, they find a motivation to make things happen and in that same way tools become more usable. From this comes food and other means of sustenance.

To be sure, one can go too far with art, treating it as about the only thing one needs to understand a culture. Some have complained of archaeologists who, in too facile a way, use motifs, colors, and forms of pots and baskets to deduce the underlying meanings, structures, and processes of the culture. Dubbed “ceramic sociology” by detractors, this approach substitutes access to decoration for real ethnographic evidence.<sup>34</sup> Though it makes some sense when other kinds of evidence are lost to history,<sup>35</sup> this approach surely is not viable for a contemporary anthropology of consumption. No matter what the circumstance, there is only a loose coupling between any aspect of a given artifact and the rest of a culture. One needs to know, for any given piece, just how it came to be, in material and social terms, over the life of a craftsperson and over the life of the people in which the maker lived. In other words, we need to know its social and material linkages, or *chaines operatoires* as one school of French archaeologists call it.<sup>36</sup> One must go beyond the surface of a piece to examine the decisions that went into making it,



including the constraints imposed by available technologies, gender relations, and other aspects of social organization.<sup>37</sup> Too much of the analysis of contemporary production and consumption resembles ceramic sociology. Reflecting a tendency inherited from the Frankfurt School of an earlier era, but much elaborated in postmodern theory, analysts grab the surface features of an appliance, a Disney attraction, a video game, or a hotel lobby and declare it a “text.” Scholars then “read” the larger patterns beneath. From the motif of Mickey Mouse at Times Square one can deduce a shallowness to urban life; by looking at a fantastical piece of postmodern hotel architecture one understands how society has become mired in illusion; by watching people’s zeal for goods with designer labels, we can read people’s insecurity with their own identities. Such analytical gossiping cannot substitute for searching out the social evolution and detailed practices that stand behind the tangible outcomes.

Apart from methodological problems, the mistakes in such readings arise, I think, from a bias against exuberance and other human activity that is not practical in a narrow sense. The critics always seem so dour, upset that people under capitalism are having fun or are otherwise behaving in an “irrational” way. So much scholarship, indeed the very heart of classic sociological theory, treats post-tribal and post-medieval societies as virtually defined by the break with spiritual motivation, communal sentiment, and sensuality. Indeed, this sundering with a romantic, undisciplined, or mystic-inclined past, so the big story goes, is the reason there could be modernization at all. In explaining the rise of capitalism through Protestant religiosity, Max Weber invoked the Calvinist version of rational and individualistic striving. Capitalism could happen because there finally came a religion whose God moved off stage so people could, with rational single-mindedness, devote themselves to material achievement. It is a religion that works because it gets spirituality (and sensuality) out of the way, substituting the denatured spirit of capitalism for transcendental glory. Even critics of capitalism, Marx most famously, seem to accept the goodness of the rationality it claimed for itself.

One way or the other, modernism is set up as an inversion of all that has come before. Whether in studies of development dynamics in



poor countries or anxiety about school behavior or the factory floor, evidence of the aesthetic or the spiritual (or the frivolous or the intoxicating) is noticed as a production distraction, ephemeral to the serious matters of life. The value of sensuality or fun at work, and the idea that real goods can come from them, have thus been a hard sell, both on the left and right. Social theorist Daniel Bell, reflecting a common view, juxtaposes “play, fun, display, and pleasure” as antithetical to “virtue of achievement, defined as doing and making.”<sup>38</sup> For those on the left, omnipresent alienation is supposed to be a growing scourge helping to ready the workforce for revolt. The idea that work contains sensual pleasures is counter-intuitive and hence unrecognized. On the right, too, work is drudgery, which is why it becomes necessary to motivate dutiful labor with money or by promising eventual leisure—if not on earth, then at least in heaven. Although gestures toward creativity on the shop floor and even allowance for a little fun now creeps into management talk,<sup>39</sup> behavior not clearly relevant to the bottom line mostly meets with skeptical anxiety.

Just how, in the contemporary world, can we imagine aesthetics, fun and spirituality as entering into goods given all the resistance to seeing it there? Again, we need to look carefully, with a wide enough scan to consider amusement along with the other inputs into production processes—including, of course, the pain and suffering that many do indeed experience.

#### THE DYNAMICS OF CHANGE AND STABILITY

Allowing fun and expressivity into the production picture delivers, as one of the first payoffs, some insight into the problem of how and why goods change compared with how and why they do not. Besides growing anthropological evidence that there has always been more change than meets the contemporary eye, a theme for a later chapter, there are basic features of human cognition and spirit that both limit and encourage changes in the material world. Tendencies toward both constancy and change have profound roots; the specific kinds of goods that come to be derive from how these tendencies are dealt with at a particular time or place.



Let's look first at the fact that things seem to always keep changing. Too easily dismissed as superfluous "fashion," change is driven by built-in social motors and need not be prompted by outside marketers. In some realms of changing goods, there are no marketing mechanisms at all. One is the illicit drug industry, a huge part of the world economy as well as a major source of opposition from authorities. Drug use seems to have its own fashion dynamic as various substances gain and lose popularity. Although government efforts do have an effect on price and availability, there seems to be an internal autonomy that determines, for example, that a hallucinogenic like LSD should lose out to Ecstasy among the comparable population segment of a later generation. Similarly, among a different group, the appeal of heroin in the 1950s and '60s gave way to crack in the late 1980s and '90s. All advertising—"just say no" campaigns—runs against these substances, yet they rise and fall with little reference to the anti-merchandising efforts, even "war," waged against them.<sup>40</sup> Similar fads and fashions arise in linguistic patterns, especially among youth, who pick up, disseminate, and then abandon phrases, styles of intonation, and body kinetics in ways that cannot be explained either by commercial exploitation or government activity. Fashion comes from somewhere deep.

Sociologist Stanley Lieberson documents the autonomy of fashion in choice of baby names. At least in the United States, children's first names come in waves and then, with few exceptions, decline in popularity, sometimes disappearing almost completely. "Jennifer" emerged from virtual non-use at the end of the nineteenth century to become the most popular girl's name in the United States from 1970 to 1985, then to abate. But there was no "Jennifer" marketing apparatus, Jennifer lobby, or Jennifer NGO. To start explaining change, we need to suppose something like a human proclivity for something a bit different, new, or inventive. The use of Jennifer did not start all at once, but through leaders, "first-adopters," as they say in merchandising and anthropology. Within any group there are individuals who are stronger in this tendency to start the change ball rolling. Some people desire an unusual name for their child and as they act on the desire, they bring something new into being. But because the pioneers make their choices without knowing what others are simultaneously doing, the result can



be that a name chosen for being unusual turns out not to be so unusual. If innovators are responding to common cues in the social environment there can end up being a whole gaggle of “Jennifer,” where there were once very few. Then, when innovative parents start discovering how common “Jennifer” has become, it falls from favor among those with the name-pioneering inclinations. They move on to a newer model—“Jocelyn,” perhaps. Meanwhile, Jennifer becomes an appropriate name for parents wanting to conform. Eventually, the name can become so common that even conformers avoid it. U.S. birth records are littered with once highly popular names that are now in almost total disuse—“Ethel,” for example. There is thus a dynamic for fashion: names rise and fall together because people are responsive to what they think others are doing but are not aware of just what that is.

Choosing merchandise has some of the same qualities as choosing first names. Economists now regard some types of merchandise as “positional goods,” meaning that people want or do not want them because others have them. They do not want the product for its intrinsic merit, but because having it will position them better relative to other people. In my view, all goods have a positional aspect, and this sets up the same kind of internal dynamic for merchandise change that Lieberman finds for names. Those most disposed toward innovative products respond to cues available to others as well. Hence what might seem a distinctive choice becomes a collective one, with mass consequence. Sizable numbers of pioneers choosing, say, a Bauhaus-like rectilinear toaster (dominant in the ’80s), begin the process that takes that style of toaster toward a still larger constituency and then abandonment. It becomes too common.

Some people wanting to be distinctive may have selected Early American colonial furniture, say, in the 1940s—when styles like English Chippendale were more popular—only to later learn that too many others were moving in the same direction. Early American became a mass fashion and spawned one of the largest furniture manufacturers and retail chains in the United States, “Ethan Allen,” named for the U.S. Revolutionary War hero from Vermont. But Ethan Allen the company was headed for trouble when so many enrolled into the style that not even conformers wanted it anymore. Ethan Allen then adapted by moving into a version of American craftsman style that took hold in the late



'80s and it struggled to market a French country look, however incongruous with its name. For Early American as for any other style, "overpopularity becomes the seed for the fashion's destruction."<sup>41</sup> Like those who choose the last Ethel, consumers who select the last Early American dining set sit alone, at risk of the stigma that comes with deviance. As Lieberson remarks about the overall dynamic, "a certain instability is thus inherent in fashion because of the 'errors' this collective process generates." These kinds of internal mechanisms are, he says, "the building blocks underlying virtually all changes in taste."<sup>42</sup>

External events also do matter, in names as in merchandise. The stardom of Gary Cooper helped keep "Gary" among the top 20 boys' names in the United States from 1935 to 1959 (although Bogart did nothing for "Humphrey"), just as big Hollywood movies often, although not always, influence fashions in clothes and hard goods. The rise of Hitler ended "Adolph," just as World War II made for simpler furniture and clothing designs. Monica Lewinsky's White House service may well have decreased the number of girls named "Monica" after 1998 (this is my surmise), while the Queen of England moves British taste in women's clothing and artifacts toward the dowdy and traditional. Assimilation-oriented American Jews, responding to the prevalence among Anglo-Saxons of names like Stanley, Seymour, Sheldon, and Morton, so conformed that these names became "Jewish names," around the 1920s, which meant that WASPS stopped using them and then, with their emulation function lost, Jews spurned them as well.<sup>43</sup> So too in the product world, consumers in the pursuit of innovation or conformity draw on prevalent social distinctions and mimic the esteemed, in ways consistent with the ideas of analysts like Veblen. But even in these examples, emulation is never the only thing going on; we return to the idea of wider forces at work. There are the "bedrock" internal mechanisms, changing cultural meaning, along with variations in personality, spirit, and, as I earlier intimated, the very mechanisms through which the mind works. And, yes, also the proclivities of corporations after money through the sweat of other people's brows.

The other side of built-in change is built-in stability. Even in twentieth-century America, Lieberson finds, people do not name their children



any old thing, not even the pioneers. Instead, new names are typically built on old names, as when a name like “Marilyn” comes around, at least partly through a rising fashion of adding a newly popular “lyn” sound to prior names entering decline, like “Mary” (additional examples from the same era include “Carolyn,” “Jocelyn,” and “Rosalyn”).<sup>44</sup> There are other people who wish to conform more completely, hence generating perennial popularity for “John,” “James,” and “Robert”—all on the U.S. top 20 boys’ name list since 1906. There are also family traditions in which some names persist in the lineage over generations.

As I will try to show, people also stick with certain kinds of goods—Scotch Tape, both the product and the brand, has had a very long run. But as with the adjustment of “Mary” with a “lyn” update, so new goods accommodate to old patterns, typically changing only incrementally. There have been changes in Scotch tape over the years, but gradual ones. When in 1960 the 3M company introduced a variant that would not yellow over time, it called its product “Scotch magic tape” (holding on to the “Scotch”) and also kept the tartan plaid packaging, although switching from red as the dominant color to green. The company kept the dispenser, for a time, as it was. Change and conformity are thus not only both on the scene at once, and existing in the development of a single product, but exist through one another. Allowing some conformity with the past enables people to accept something new, while the innovation helps keep the old product going into the future.

The social dynamics at work, conformity and change, also are tied in with one another. Emulators have two challenges, one involving timing and the other arising from the vast range of details they need to get right. In terms of timing, if what you want to conform with is also changing, you must keep up or, quite ironically, end up as different—the “last Ethel” problem. To avoid deviance or, in a more benign label, being called “eccentric,” people have to move along with the group. They must know when to change in order to conform or they will stand as an example to others of what happens when you are just “out of it.”

To emulate, conformers are plagued by being able to see only a portion of what is going on around them at any given moment—including the kinds of stuff people they wish to imitate are buying and using.



Folks pick up on the surrounding cultures in at least somewhat idiosyncratic ways—they may see only the living room, but not the bedroom, or see a retro piece as deco when it is “actually” postmodern. Even within a world of conformers, each conformer thus acts differently. With each striving to emulate the other, there will be a never-ending chain of adoptions and adaptations that, as they move through the network, change the substance. Like rumors that spread from one person to the next, replication is never exact and the “errors” cumulate to qualitatively different kinds of outcomes. In this daisy chain of imperfect emulation, change becomes incessant.

Better understanding of the stuff system, including its “deep” mechanisms of change and stability, can be helpful to the world. My bet is that we can improve goods—both socially and ecologically—and comprehend more about the society that produces them if we understand how and why they come to be as they are.

### THE ROUTE

How to do it? My first step was to go where I thought the action was, to those whose job it is to turn cultural currents into economic goods: the so-called product designers (or industrial designers, a synonym in my usage). My hunch was that by investigating the concrete practices of the design workplace, I could wend my way to the larger issues of culture and economy. Since these are the people most directly responsible for the way products present themselves, they would be central to the process that creates, in whatever combination, seduction, obsolescence, utility, or aesthetic satisfaction. By discovering what affects how designers do their work—what they consider and put up with as they move through their routines—one can trace the forces that shape things.

In the chapter following this one, I report my findings on the designers’ goals and routines—the way the profession operates. In successive chapters, I take up issues beyond the design workplaces, many involving conditions in other business settings as well as across historic and geographic circumstances. In chapter 3, I investigate how, in past eras and among different cultures, efforts to make goods both attractive and useful were carried out. This is my chance to consider the arts





and to address the perennial debate: What does or should count more—utility and function or aesthetics and form? Through the history of specific goods and production systems as well as analysis of contemporary products, I try to show how—more than meets the hand or the eye—function and form both enter into making effective artifacts.

In chapter 4, I take up the problem of change and stability by showing how, once again, form and function, aesthetics and utility, work in tandem. Within any product and across the range of a people's goods, style and fashion make things new and different while other forces encourage continuity. In chapter 5, I show that those in the distribution systems—people like store owners, but also some less likely suspects—influence what stuff can be. They provide not just settings for products, but shape what they sell. In chapter 6, I deal with the fact, sometimes taken for granted, that all stuff must come from some geographic place. There must be the right somewhere for there to be the right stuff. The way cities and regions operate, including their local character and traditions, shape the nature of things.

Chapter 7 investigates how arrangements in economic organization work into the goods; merger movements, outsourcing, and other currents in business life, particularly those of recent vintage, have consequence for what is out there to buy and use. The development of brands represents a corporate redefinition of stuff and changes the particulars of products. Stories among investors including growing appreciation of the very idea of design further shapes goods. Government actions, like setting standards, involve conflicts among corporations, non-governmental organizations, and nations; the way they are settled also ends up in our stuff.

I finish with a return to the old problems that have so consumed critical scholars, problems that they were right to address but that can now be treated in a more straightforward, or at least different, way. So in chapter 8, I shed whatever degree of moral neutrality I have been able to simulate and take my stab at making things better. There are ways, taking into account how goods really happen, to make some strategic improvements.

Now, on to the world of design practice. I report on my visits to some creative people who must somehow accommodate it all—technol-



WHERE STUFF COMES FROM

ogy and engineering, form and function, change and stability, shopkeepers and wholesalers, individual tastes, corporate organization and even some moral notions held by themselves and others. Their route to doing a job is our route to better understanding where stuff comes from.

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