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Introduction

The range of topics addressed in *Design Issues* is one of the distinguishing features of this journal. When one steps back from the immediacy of a particular issue and surveys the material presented over a substantial length of time, it is possible to discern certain themes that appear with enough regularity to indicate their importance to the field. Design education, for example, has been treated often in these pages as have gender concerns. Contributors have argued passionately for the importance of sustainable design and suggested ways in which a concern for sustainable design could become central elements of design practice. Another theme deals with interactive design and the mutability of design work conceived in and for a digital age. *Design Issues* has also carried ground breaking articles articulating the shift from a conception of design as the creation of artifacts to an understanding of design as the organization of complex systems. In this issue, readers will note another of these recurring themes: design as the shaping of experience. Augusto Morello describes design as the anticipation of experience and Aušra Burns prods us to be aware of the user's experience. This foregrounding of experience is often coupled with an interest in models of consumer behavior and attitudes. Mika Pantzar explores the forces at work in attempts to create particular "consumer configurations." Carma Gorman provides a historical perspective on the creation of "future consumers." Using Harriet and Vetta Goldstein's 1925 text *Art in Every Day Life*, Gorman explores the role of targeted education in developing an "educated demand" for good design. Each of the authors brings a particular point of view to bear on understanding the nature of experience provoked by different design strategies. A cautionary note is called for in any discussion concerning attempts to imagine and control the consumers' experience. The line between professional hubris and skillful insight is a fine one. To attend to the user so that design enriches rather than impoverishes experience is the goal. The material brought together in this issue serve to remind the reader that thoughtful consideration of a theme from multiple perspectives should be a critical part of design strategy.

Also included in this issue is Loretta Staples's review of the technical developments responsible for the digital revolution in typography during the 1980s and 90s. Katherine McCoy contributes a provocative essay in which she suggests an alternative to the traditional conceptualization of information and persuasion as "oppositional modes representing the competing cultures of graphic

design.” This issue includes Anne Meis Knupfer’s review of the recent symposium “African-American Designers: The Chicago Experience Then and Now” which focused on the cultural milieu and professional careers of African-American designers in Chicago. The symposium was organized by *Design Issues* co-editor Victor Margolin. Symposium reviews like Knupfer’s insure that the constellation of issues and ideas raised during this one day event reach wider audiences.

Richard Buchanan
Dennis Doordan
Victor Margolin



Since its first issue in 1984, *Design Issues* has served as a forum for the thoughtful discussion of the history, theory and criticism of design. In response to the growing demand for the kind of articles and reviews published in the pages of this journal, the Editors are pleased to announce that *Design Issues* will become a quarterly journal beginning in January 2001. The Editors wish to thank the journal’s readership for their continued support and interest.

Consumption as Work, Play, and Art: Representation of the Consumer in Future Scenarios

Mika Pantzar

1. Introduction

We create the future by speaking, visualizing, and imagining about it. Representations describing the future of the consumer society have a tendency to shape the world in their own likeness. For instance, the creation of the image of a modern consumer has been essential for the success of the television and car.¹ Product developers draft the products of the future for imaginary consumers. Real consumers encounter these products on the market and transform their own lives accordingly, in the direction pointed by the products. It may be, paradoxically, that the imaginary consumer segments of marketing, in fact, produce real consumer segments.²

This kind of circular influence places any future oriented research—especially futures research—in a special position in the realm of science: real phenomena and real creatures are preceded by their representations. With this idea in mind—I refer to it as the **principle of constructive future studies**—I aim to examine some of the pictures or representations that have been made of the future consumer and the information society in particular.

It is not by chance that companies such as Intel, Philips, L.M. Ericsson, Nokia, and Siemens, for example, are actively involved in the debate about our future: “So to stay in rhythm, Intel must create ‘new uses and new users’—which is, in fact, the company’s slogan for keeping the market in sync with its own pace.”³ Correspondingly, in a film on design futures, Philips people say: “We know there is no need for any of this (i.e., new products). Our job is now to create the need, so that we have the reason to make the products—and sell them.”⁴

A key feature of futurological discourse is its power to influence and to convince. Great myths always have been a means of ruling the masses: earthly sacrifices and struggles would be rewarded in the Kingdom of Heaven.⁵ The rhetoric of economists about “increasingly keen competition, the necessity of adjusting to new technology, and the inevitability of unpleasant economic decisions” serves to promote the same great myth: that the individual must step aside when the interest of the system so requires. Similarly, the talk about megatrends implies a predestined and

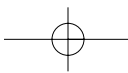
1 Mika Pantzar, “Kuinka teknologia kesytetään,” *Kulutuksen tieteestä kulutuksen taiteeseen* (Domestication of Technology, From Science of Consumption to Art of Consumption), (Helsinki: Tammi, 1998).

2 Peter Miller and Nikolas Rose, “Mobilizing the Consumer: Assembling the Subject of Consumption,” *Theory, Culture & Society* 14:1 (1997): 1–36.

3 Kathleen Eisenhard and Shona Brown, “Time Pacing: Competing in Markets That Won’t Stand Still,” *Harvard Business Review* (March–April, 1998): 59–69.

4 Peter Butenshon, “Design, Youth, Consumption,” *ICSID Information* (3/98).

5 Lyuben Nikolov, “Everyday Values vs. Oversocialization,” *International Sociology* 6:3 (1991): 375–9.



given future.⁶ Business futurologists have acquired a major role in constructing and replicating these disciplinary myths of “inevitability’s.” The future is a driftwood to which we will all have adjust.

The purpose of this article is to review—perhaps with some exaggeration and normative tone—the different types of consumers upon which the information society and new everyday technology is being constructed, as well as the “new human types” which thus are being bred. My data include a number of technological and social scenarios that have been published in recent years.⁷ The approach is based on the hypotheses about changing consumer motives and consumer types discussed more thoroughly in *The Domestication of Technology*.⁸

2. The Future Consumer Is a Player, a Worker, and an Artist

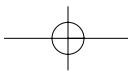
The changing relationship of the consumer to a new commodity can be seen as a three-stage process. In the earliest stage of a novelty product, the consumer’s relationship often is such that the product itself is understood as being a “message” in itself (*1. Stage of self-purposeful consumption*). The most important thing about the first automobiles and radios was the excitement of experiencing the product. I refer to this stage metaphorically as “*consumption as play*.”

Gradually, however, consumers will begin to raise their expectations of the novelty commodity (e.g., reliable operation of a motor or the quality of an image), and the relationship with the product then becomes more rational. The new commodity also will begin to make claims on its environment (e.g., radio and TV as coordinators of people’s daily schedules). (*2. Stage of instrumental consumption*). Metaphorically, this stage can be termed “*consumption as work*.”

Finally, the relationship to the commodity becomes increasingly critical. Consumers may begin to question the lifestyle which is based on the product, and start to analyze their own commodity-dependency (*Stage of critical consumption*). I call this stage “*the art of consumption*.” Is not the main role of art to create perspectives that are radically new, and to question and criticize the existing state of affairs? We might equally well talk about the stage of reflective or self-critical consumption.

The division into periods can be seen most clearly in the history of media technology. Along with the spread of film, record player, radio, and TV, the underlying motives guiding the choice of media products have been essentially transformed within the past one-hundred years: toys (“moving pictures and living sound”) have evolved into instruments for recording reality (“documents”) and, finally, also into means of shaping realities and questioning them (“editing”). This is a much simplified summary of the history of media technology.⁹

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- 6 Richard Slaughter, “Looking for the Real ‘Megatrends,’” *Futures* Oct. (1993): 827–49.
- 7 See David Brown, “Cybertrends,” *Chaos Power and Accountability in the Information Age* (London: Viking, 1997); Michael Dertouzos, *What Will Be? How the New World of Information Will Change Our Lives?* (New York: Harper Edge, 1997); Faith Popcorn, *The Popcorn Report. Faith Popcorn on the Future of Your Company, Your World, Your Life* (New York: Doubleday, Currency Book, 1991); Shirley Roberts, *Harness the Future: The 9 Keys to Emerging Consumer Behaviour* (Toronto: John Wiley & Sons Canada Ltd., 1998); Kevin Warwick, *March of the Machine: Why the New Race of Robots Will Rule the World* (London: Century Books, 1997).
- 8 Mika Pantzar, “Domestication of Everyday Life Technology: Dynamic Views on the Social Histories of Artifacts,” *Design Issues* 13:3 (Autumn 1997): 52–65.
- 9 Paul Levinson, *The Soft Edge: A Natural History and Future of the Information Revolution* (New York: Routledge, 1997).



In the “pre-realistic” early period, the audience was content merely with the experience of moving pictures. The media was the message. Gradually, however, audiences began to demand content, accuracy, and truthfulness; in other words: realism. In the latest stage, film also has developed into an instrument for “editing” and rearranging reality. Art films question the existing realities and create something new. In the future, the editing of digital virtual realities is likely to alter our relationship with the real world to an even greater degree, as I will argue later.

At the level of the information society as a whole, the next stage—the stage of art—still lies ahead of us. Enlightened critique of the consumer society calls for a better understanding of the role of culture and content. We also need a deeper understanding of our own commodity-dependency and the ways minor daily decisions influence global geophysical conditions. The critical question facing our contemporary society is: Which will come first—an active, critical awareness of the problems related to consumerism or a more radical backlash in the face of more extreme imperatives?

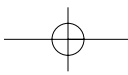
Table 1 is a summary of the characterizations of change presented in my book.¹⁰ These generalizations, which were based on historical observations, hopefully will serve as a stimulus for further assessment. The domestication of technology can be seen on many different levels in consumption. The motives for product choice, the function of the product, the socio-cultural atmosphere, the production technology, and the applications of the product all are transformed in the course of a product life-cycle.

Table 1: Changes of functions and choice motives in a product life-cycle

	Stage 1: Self-purposeful consumption (Consumption as play)	Stage 2: Consumption for instrumental value (Consumption as work)	Stage 3: Critical, creative consumption (Consumption as art)
Collective conception of the product's function	Toy, luxury, “wonder of science”	Tool, necessity, “serious” commodity	Critique of the material- intensive lifestyle
Production method and phase	Creative induction phase	Standardization	Reappraisal of the product's function
Function	Collective, shared experience of use, finding the function	Personal use, routines	Deroutinization, from necessity to luxury
Motive	Sensation, pleasure, status	Satisfaction of needs, routine	Stylization, collecting, self-expression

Can the information society and digital technology be understood on the basis of this kind of categorization? The above table can be interpreted in three different ways. The perspective in my book was primarily that of the rooting and stabilizing of an individual commodity: from toys toward useful objects. An alternative per-

¹⁰ Pantzar, “Domestication of Everyday Life Technology.”



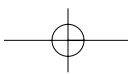
spective would be to picture consumption as play, consumption as work, and consumption as art as roughly representing the transformation of the Western mass consumption society over time.

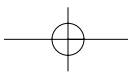
The various technological products of the late nineteenth century, such as the motion pictures, bicycle, or automobile, were characterized by a sense of play and curiosity. In the first decades of the twentieth century, the doctrine of industrial rationalization spread not only to business enterprises but also to households. The relationship to commodities became more disciplined, with an increasing emphasis on rationality. Particularly in the 1930s, the rational managerial controllability of consumption became a well-valued virtue both at the household level and at the level of the national economy as a whole (e.g., the New Deal and subsequently Keynesianism). At the same time, things such as household work, market studies, advertising, and design were drawn into the sphere of “modern science.” And consumption became part of a housewife’s work.

The next stage is still only emerging. The themes of increasing aestheticism in postmodern society and everyday life reflect the coming of a new age. Consumption is becoming more of an art than mere work. Simultaneously, work in many organizations is beginning to resemble play rather than strictly disciplined sacrifice.¹¹ Youth culture, in particular, mixes and combines different styles without restraint. Marketing professionals face a tricky problem with the uncontrollable “generation X.” Young people have their own specific way of interpreting street fashion and market messages. A combination of expensive designer clothing and flea-market gear speaks its own language. This phenomenon has to do with the trend of development on a more general level. Possibly, centralized control and governability is relinquishing its position to a theme which focuses on contingency, empowerment, uncertainty, and uncontrollability: examples of this likewise are seen in fashion, economy, and people’s everyday lives. I will return to this theme at the end of this paper.

A third way of interpreting the above table is to suggest that representatives of the different orientations (players, workers, and artists) are present simultaneously at all points in time. The main aim of this paper is to ponder this question: What will the new consumer types of the information society be like? What subgroups might consumption as work, for instance, fall into? It is not only a question of whether consumers can be divided into different segments by their relationship to technology, but also about new “versions of human beings” emerging as a result of the newest digital technology. Still, most of the technologically-oriented scenarios of the future tend to be quite secretive about the new type of human being. Why?

11 Paul du Gay, *Consumption and Identity at Work* (London: Sage, 1996).





3. John Doe, Versions 1.0–3.3

The American Dream—Without a Car and TV?

Where is America heading now that the rising generation no longer believes in the car and the TV? This concern was voiced by American futurologists at the meeting of the World Futures Society in the summer of 1997. The car and the TV have shaped what we understand by the term “an American.” Is there another kind of human being now emerging to succeed the type produced by the automobile and television? And what might the key commodities in such a transition be nowadays?

In his most recent book, Douglas Rushkoff, the media researcher hailed as Marshall McLuhan’s successor, wonders why technology visions fail to openly discuss the notion that new technology changes the human being.¹² This is a good question. Are we dealing with a taboo: technology must not change us, so let us avoid even mentioning the possibility? Or is this a question of an empirical observation: technology does not change the human being fundamentally. I tend to believe the former argument.

Possibly, it is political correctness that does not allow us to see the nature of technology as changing (wo)man and her/his personality.¹³ The impact of technology is discussed only in the language of structural changes: How will our life change along with new technology? But not: How will we, ourselves, change with new technology? It is permissible with utilitarian tone to refer to “objective benefits,” but experiences, deep emotions, and addictions are excluded from this type of discussion.

An interesting reference could be made to the early days of modernism. The notion that technical innovations should alter the form of life lay deep in the political ideology of modernism. The architecture of modernity of the 1920s and the 1930s demanded far-reaching rationality. The crudest manifestation of this ethos can be found in the Soviet Union, where creating a new citizen was, at one time, openly on the agenda.¹⁴

I would argue that, just like it is said that capitalism “produced” the worker, cities encouraged the development of an urban “mentality of indifference,” and like big business created “the organization man,” so perhaps is our digital era now generating new types of personalities.

Without further justification I choose to abandon the idea—which I consider somewhat naive and too simplistic—of new information technology as the germ of the wise human being, a true *Homo Sapiens*. Moreover, I am not talking about a real or a widely spread new human type. The majority of the world’s population still live beyond the reach of the information society.¹⁵ The material on which I base my arguments primarily consists of the mental pictures and narratives encircling the technology debate, and only secondarily of empirical observations of a new type of human being.

12 Douglas Rushkoff, *Playing the Future: How Kids Culture Can Teach Us to Thrive in an Age of Chaos* (New York: Harper Collins, 1996), 93.

13 Langdon Winner, “Who Will Be in Cyberspace” *The Information Society* 12 (1996): 63–72.

14 Peter Gallison, “Aufbau/Bauhaus: Logical Positivism and Architectural Modernism” *Critical Inquiry* 16 (Summer 1990): 709–2.

15 What we choose as a measure of the information society naturally has a decisive effect on our picture of development. Most of the people in the world, e.g., do not have a telephone at their disposal.

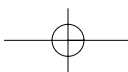
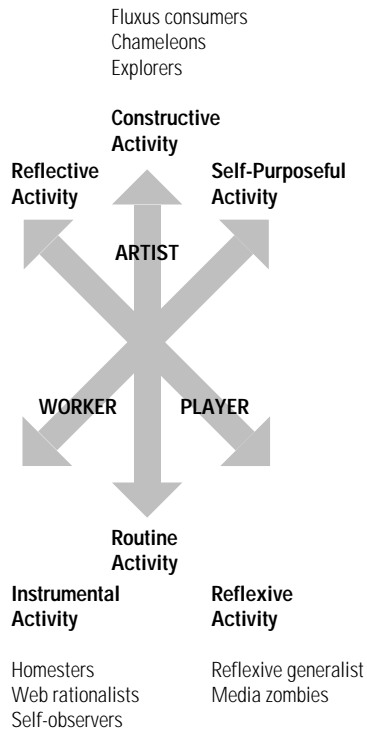


Figure 1
Consumer Versions in the Information Society



The following classification follows the tripartite division into play-work-art described in the previous section. I have fine-tuned this division with subtle distinctions. The new human types are set into “types of activity”—space in figure 1. As the dimensions, I have selected the following controversial but analytically useful pairs of opposites: instrumental vs. self-purposeful activity; reflective vs. reflexive activity; and constructive vs. routine activity. These categories are obviously problematic in many respects.¹⁶ It would be equally important to ponder how human culture—e.g., values and ideologies—and structures—e.g., the world of commodities—change along with the digital media. Social change has to do with the transition of activities, culture, and structures, and the categories are by, no means, distinct.

It is possible to identify, from current future visions, eight consumer types in the “information society”:

1 Consumption as an instrumental activity: houseworkers

- a Web rationalists
- b Homesters in their smart homes
- c Self-observers

2 Consumption for its own sake: self-purposeful play

- d Players (reflexive generalists)
- e Media zombies (addicts conditioned by interactively intelligent products)

3 Consumption as an art of reflection

- f Explorers
- g Chameleons constructing a social identity
- h Fluxus consumers

4. Rational Workers in the Home

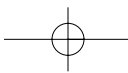
What kind of people are those whose activity is instrumental, often routine-like, but still very conscious? The newest information technology reinforces the traditional picture of the “rational consumer.” We might say that *Homo oeconomicus* is inscribed in the manual of the information society. It is no coincidence that the term “user” is underlined in information technology rhetoric. The users of older media, such as TV, are “consumers” and passive recipients. In new technology, however, users are actors and active creators of content.¹⁷ In the future, we will no longer watch TV. We will use it. We will not enjoy or consume something, but use it. Let us look at three subcategories which represent special cases of the rational user.

Version 1.1: The Web Rationalist

It has been predicted that electronic shopping will be the biggest winner in home networking. Judging by the precursors of teleshopping (e.g., Amazon.com, CdNow.com, Peapod.com), the only

16 The juxtapositions are not genuine—if *x*, then not *y*. It is a question of a fuzzier logic: probably, if *x*, then not *y*. Instead of the pair “reflective-reflexive,” it might be better to use “conscious-unconscious.” Both concepts refer to a reflection. Reflective activity originates from the brain and from thought, whereas reflexive activity is more of an automatic reaction: a question of reflexes. Instead of “self-purposeful,” it might be more appropriate to use the term “autotelic” activity.

17 Melinda McAdams, “Information Design and the New Media,” *Interactions* (October, 1995): 39–46.



conclusion to make is that the formerly very unrealistic ideal of *Homo oeconomicus*, cherished by economics, finally is being realized in network shopping. Or is this really the case? Electronic shopping makes it easy for us to make price comparisons, and the different alternatives are offered in a very concrete form with unit sizes and prices. We are able to read the book reviews in an electronic bookshop before deciding what to buy. We get an itemized bill from each purchase indicating, for example, the price of shipping and handling.

The food shop of the future, apart from monitoring the purchasing budget, will also keep a record of the number of calories purchased and consumed. A bank will automatically record the payments made with digital money into an account book. Expenses and income can be followed without difficulty. Moreover, since the time savings are considerable, network purchasing responds to a social call and offers an important opportunity to the consumer who wishes to optimize his or her leisure time, effort, and budget. This is what numerous visions of electronic shopping lead us to understand. In any case, a shopping revolution has been waiting just around the corner for a number of years.

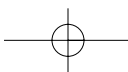
Version 1.2: The Homester in His/Her Smart Home

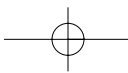
The Utopia of the “homester” appears to be typical of the American visions of the “intelligent” and safe home.¹⁸ It represents the tiny mouse in its hole, safe from the cat and the dangers of the surrounding world. The homester is a teleworker and a teleshopper. His/her children are telelearners, utilizing the most advanced technology. The safety of the home is guaranteed by a complex alarm system. The intelligent system allows access to only one exit and moving about only in daylight. Public space is visited only by abnormal actors to whom home is not paradise: predators and weak individuals—the homeless—in a broad sense.

My personal—no doubt a normative—stand on the smart home is that, so far the visions of the smart home have borne more resemblance to the MIR space station than to a genuinely intelligent home. An intelligent home requires adaptation and adjustment from its residents. What is essential is that all technical functions are integrated. The remote controller enables the residents to manage the energy consumption and air-conditioning in the building, as well as the influx of information and entertainment. Smart cards, entrance surveillance systems, and television cameras create a feeling of security. But security vanishes into thin air if the home’s central processing unit collapses. What will we do then, ask for leave of absence from the home, which was what the head of the MIR space station did when the gyroscope system failed?

Does the vision of the intelligent home represent the early twentieth century ideal of centrally controlled technological systems, which no longer works in postmodern world ambivalent

18 Dertouzos, *What Will Be?* and Popcorn, *The Popcorn Report*. In Finland, the task of developing intelligent buildings in the 1980s was assumed by three companies which have since fallen into economic crisis. These projects were designed on American models, although the Finnish reports on the subject indicate a somewhat critical view of the naive American model.





values? Are we basing the technology of the twenty-first century on the Tayloristic values of the early 1900s, when the ultimate goal was to minimize the diversity of human life?¹⁹ The terms used for the intelligent building are quite descriptive: “total house, automatic house, global house, smart house, and the intelligent house.”²⁰ But what will we call it when there are serious technical problems, or even total disorder?

The “home of the future” has been impending for almost a hundred years now. In the 1920s, it consisted of a living space full of electronic gadgets. In the 1930s, it was a mass-produced, turnkey home. In the 1940s the future home was seen as a dream-come-true, built around the kitchen. In the 1950s, it was a plastic module dwelling. The home of the future in the 1960s was a geometric structure; and, in the 1970s, an energy-conservation unit. The ideal of the intelligent home represents the 1980s.²¹ All of these technocratic forecasts, however, have failed. In the magazines, the home of the future has turned into a joke and an object of ridicule.²² A home of the Jetsons?

Paradoxically, many of the applications of intelligent buildings have focused on trivialities and not on “real-world” problems. Two experiments from America include a vacuum cleaner which switches off when the phone rings, and a robot, “robotler,” which serves refreshments but needs the help of a human to pour the drinks into the glasses.²³

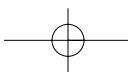
Where are the inventions that would genuinely ease our everyday life? Might we expect that the smart system could be switched off if we so wished? My own experiences with an “intelligent” computer program and an “intelligent” garage are rather depressing. The computer automatically keeps removing the letter “z” from my last name, and insists on numbering my paragraphs. The garage decided to lock my car out for the Christmas holidays. Surely, intelligent machines should not mean that the contents of the human brain are emptied into the machine?

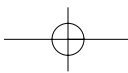
Will the interaction between a “learning machine” and a learning human being lead to similar “systemic risks,” as in the stock exchanges when the machines began to communicate with each other? Interconnected computers and their extremely short reaction times caused dramatic market fluctuations in the late 1980s. Might wisdom ultimately be about learning to understand the human-machine relationship? Or to live one day without electricity?

Version 1.3: The Self-observer

The consumers of the future will be more aware than ever before of the fluctuations of their own health. The Battalle Institute, which specializes in the commercialization of technology and in technology forecasts, considers the introduction of the self-monitor in the home as one of the major innovations of the future.²⁴ It is hardly

- 19 Donald A. Norman, *The Invisible Computer* (Cambridge, MA: MIT Press, 1998), 167. He points out that the idea of technology conforming to the people actually is of very recent origin: “This is the reason for the paradox that today’s technology is largely built from a machine-centered point of view, even though it is designed and built by humans.” Still, ordinary people perceive technology as full of contradictions: freedom/enslavement, competence/incompetence, and control/chaos. For these paradoxes, see David Glen Mick and Susan Fournier, “Paradoxes of Technology: Consumer Cognizance, Emotions, and Coping Strategies,” *Journal of Consumer Research* 25 (1998): 123–3.
- 20 Santiago Lorente, “The Global House” in *New User Telecommunication Opportunity in Automation and Information*. Paper submitted to the COST248 Home Group, Electronic House Online 1996.
- 21 Anne-Jorung Berg, *Digital Feminism* (A Gendered Socio-Technical Construction: The Smart House). (Senter for teknologi og samfunn. Norges teknisk-naturvitenskaplige universitet, Rapport nr. 28, 1996).
- 22 Brian Horrigan, “The Home of Tomorrow, 1927–1945” in Joseph Corn, ed., *Imagining Tomorrow* (Cambridge, MA: MIT Press, 1986).
- 23 Berg, *Digital Feminism*.
- 24 The complete Top 10 list of the commodities of the future can be found in Stephen Millett and William Kopp, “The Top 10 Innovative Products for 2006: A Technology With a Human Touch,” *The Futurist* (July–August 1996): 16–20.





accidental that the Institute is currently commercializing various inventions related to this issue. This is social constructing of reality at its best!

The self-monitoring device makes it possible for us to check our blood pressure, pulse, blood sugar, etc. If necessary, the machine also can serve as a home kidney unit, insulin syringe, etc. In the morning, we will ask the machine to tell us whether or not we are fit for work. The machine replaces the family doctor, dietitian, and personal fitness coach. If we are in danger of putting on weight, the machine will give us dieting instructions, and advise us to go jogging.

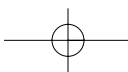
With plans of putting a ceiling on public health expenditure, the increasing privatization of health care services probably will take us back a hundred years. Only the most affluent people will be in a position to enjoy high-quality health care and prophylactic treatment—at home. Hospitals will be for the poor. The growth of an active population of old people will further encourage this development. The “help desks” of the future no longer will deal only with computer problems, but with human problems as well. A cardiac monitor or an intelligent WC, which performs analyses, will send our data directly to the nearest health care center. In case of alarming results, the message will be passed to the doctor in charge at the interactive call center, who will then contact the patient.

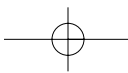
A human being who monitors himself or herself, and is connected to a machine, can be called a cyborg of the first or second degree. A first-degree cyborg is one with mainly cosmetic transplants: silicon breasts and silicon lips. A cyborg of the second degree has had part of the vital functions replaced with mechanical and more efficient devices: an artificial heart or a home kidney machine. The artificial parts can be exchanged for newer versions as needed. The vital functions of athletes, for example, can be considerably improved from the current level. Cyborgs of the third degree are continuously connected to machines, so that signals from the brain pass directly to the machines. Fourth-degree cyborgs have dissociated themselves from physical space: the consciousness of these bodiless actors floats around in cyberspace.²⁵ We will select the most suitable body for ourselves in Alphaworld, and perhaps even change our sex. We will visit each other’s avatar bodies. Could this be the ultimate freedom from exploitation by our bodies? Such a stage also might be termed consumption as play and art.

5. Consumption as Play

The idea of consumption as play (of current technology visions) is based on the notion that consumption primarily is an activity done for its own sake: the process itself always is more important than the outcome. A positive perspective to these “players” would emphasize the development of a new type of competence (reflexive gener-

25 Mike Featherstone and Roger Burrows, *Cyberspace/Cyberbodies/Cyberpunk—Cultures of Technological Embodiment*, (London: Sage Publications, Theory&Culture&Society, 1995); and Chris Hables Gray, *The Cyborg Handbook* (New York: Routledge, 1995).





alists), whereas a critical appraisal would stress the conditioning aspect of the activity (media zombies).

Version 2.1: The Reflexive Generalist

How does computer-based modeling of society affect our conception of the world and of human activity? What happens when we move increasingly from static to dynamic representations? What kind of adults will computer games generate?

Today's young people often are accused of superficiality. They seem to lack the energy to read an entire book or to concentrate on watching just one television channel. What I see in channel surfing, computer games, and network playing is not superficiality but a new type of competence of simultaneous action: insight and a capacity to react, a skill to combine various functions. Surfing across TV channels may indicate a more "genuine" state of desire than passive reception. Besides suggesting a kind of short-sightedness, the active use of the remote controller also implies a broad range of interests, and a state of mental activity and agility: not just anything goes. One may, of course, ponder why the remote controller lies more in the hands of the father and the children than the mother. Or who would remote control the intelligent home?

Youngsters who are active players of video games often have been found to be more creative solvers of problems and more skillful in conceiving visual information than more average youth.²⁶ They have a better abstractive ability than those who use the computer less: "Communication with a computer, therefore, affords the child opportunities that foster the development of representational ability which forms the basis for mental time travel, and mature social thinking about self and others."²⁷

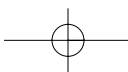
To deal with the surge of information and stimuli which overflows our comprehension, we need a new kind of competence. The reflexive generalist sees life as composed of playing fields where you have to act rapidly, anticipating, simulating and guessing. Action often precedes conscious deliberation (shoot first and aim later). There is more intuition and reflexes, and less consideration and reflection. Nor should we overlook the pedagogical power of the method of trial and error which is such an essential element in computer games.

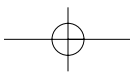
In the old days, an atlas of the world in elementary school gave a spatial, static picture of the world. We had to learn by heart the rivers in different Finnish provinces, and the names of the world's mountain ranges. Today's school children perhaps perceive the "world atlas" as time-space dimensions of dynamic maps, as possible worlds, and as interactive hypercycles of choices and consequences, where cause and effect no longer are distinguishable from each other.

Do we still need the metanarratives of religions to ensure long-range activity and self-discipline? Is there a multidimensional,

26 Rushkoff, *Playing the Future*, 50, 182.

27 Claire Fletcher-Flinn and Thomas Suddendorf, "Do Computers Affect 'The Mind'?" *Journal of Educational Computing Research* 15: 2 (1996): 97–112. These kinds of positive assessments raise an important question: Why is it that empirical research often stresses the blessings of human-computer interaction, whereas the more philosophical and less empirically oriented literature seems to be quite critical in this respect? Are we dealing with the truthfulness of empirical research—or maybe with the arbitrariness of questions being posed too narrowly?





more dynamic morality emerging beside the Biblical, taxonomic idea of good and evil?²⁸ Actors in society might develop new forms of self-perception and self-control through simulation and modeling capability to replace regulation from the outside.

However, life is not a game. Many of the irreversible processes of modern society are unfortunately controlled with economic and social models that are based on the principle of reversibility and control. After all, life is not SimLife, where “All life is an experiment.”²⁹

Version 2.2: Media Zombie

If the reflexive generalist is a utopia of new kind of competence, then the media zombie is a dystopia of a human being chained to an entertainment machine: computer-dependency and the end of rational life. The computer society and the hundreds of digital TV channels would offer unprecedented opportunities for the passive reception of stimuli.

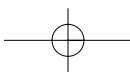
The increasing interactiveness of smart machines is one of the core changes in future technology. The pessimistic view is that machines which are capable of learning in interaction will lead to completely new kinds of human-machine dependencies. Although we speak euphemistically of “machines that learn and are customized to the user’s preferences,” possibly, we are dealing with a completely new level of dependency. Take, for example, a personal robot connected to digital TV, which searches the channels for the viewer’s favorite programs based on preferences revealed by previous watching choices. At the same time, the program robot of the media operator continuously monitors the changing of TV channels in households. The program robot learns “from experience” at what dramaturgical points people stop watching a program. Finally, the robot learns to select the programs from the producers’ list that will attract a maximum audience. The program-compiling robot in the media production unit then receives this information and begins to prepare combinations of different series of programs offering maximal satisfaction—as well as maximum dependency—to the viewer.

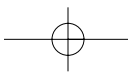
The picture of the media zombie fits in well with the long tradition of consumption critique. The elite are worried about the behavior of the masses. It is not hard to predict that the future flood of visual messages will provoke the rage of the literati as a form of “low-brow” culture at the stage when the multimedia and virtual stations become reality also apart from advertisers’ slogans. How will we react, for instance, to digital TV or third-generation mobile media phones in the first years of the twenty-first century? Will people be infected by them? Doctors already warned about the LSD-like harmful effects of virtual reality in the 1980s, before the first virtual helmet had even been manufactured.³⁰ Who will be the first to voice concern over the effects of digital and interactive TV on our genes, or on the quality of human sperm?

28 The Bible is, in fact, a most representative document of postmodern times. It is a hypertext in which the same events are described from several different perspectives. Its moral and unequivocal binding power probably is based, on the one hand, on certain universally approved chapters such as the Sermon on the Mount. On the other hand, people who have interpreted the Bible have tended to petrify their own interpretations into universal, binding norms.

29 For the problems of maps and illusion of modernistic control, see Donna Haraway, “Deanimations: Maps and Portraits of Life Itself” in C. Jones, P. Galison, and A. Staton, eds., *Picturing Science, Producing Art* (New York: Routledge, 1998).

30 Chris Chesner, “Colonizing Virtual Reality: Construction of the Discourse of Virtual Reality, 1984–1992 (CULTRONIX, 1997).





Rational utilization may turn out to be the winner of information technology, because it is so easy to talk about it in line with our cultural norms: technology is a servant. Consumers are the employers, the users of instruments, and the workers in consumption. There is, however, a contrasting view: consumers as artists.

6. Consumption as Art

What characterizes those people in the information society for whom consumption activity, in itself, is valuable and highly conscious, and for whom the creation of something new is more important than routines. I refer to this group as "artists." They have the ability and the desire to question their own relationship with consumption and with technology. There are at least three types of artists: the explorers, the Web chameleons, and the fluxus aesthetizers of the everyday.

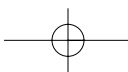
Version 3.0: The Explorer

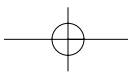
The first news in Finland about the Internet in the early 1990s described the revolutionary opportunity to surf on global information superhighways. Words such as navigating, browsing, and exploring were part of Web language. The journeys of exploration, the conquest of the West, and immigration to another country are apt metaphors for illustrating this attitude: the notion of capturing something new and facing the unknown.

Explorers discovered new continents, and often lost their way and misnamed those continents. They had the soul of a searcher and traveler, and a genuine uncertainty and risk in approaching the ends of the earth were part of their everyday life. Nor should one overlook the opportunity for economic gains and the symbolic elements of conquest. It is hardly a coincidence that the language used in speaking about virtual realities in the United States specifically is the language of the white man: using phrases including conquering the unknown frontiers of the Wild West, and words such as pioneers, junctions, watering holes, colonialization, resettlement, and reservations.³¹

When we surf in the Web, we are charting unknown territory. Curiosity and a chance to experience something new are an important motivation. One of the fascinating features of hypertexts such as those on the WWW is that they are open systems in which the true and untrue coexist. For information society thinking, which stresses unequivocal wisdom, this poses a problem: anyone at all can produce information, for instance, about the creation of mankind. Anyone at all can devise a scientific map of the missing link between man and ape. But maps open up to each individual in a different way. This offers a special challenge to the traditional universal concept of knowledge and to the advocates of taxonomic

³¹ Brown, "Cypertrends."





systems of knowledge. Maybe, along with the new media, the word “research” is regaining its original meaning: “to travel through” and “to survey.” And to re-search: “to explore again.”

Version 3.1: The Chameleon, Building a Social Identity

The germ of the future type of human being lies in youth culture, claims Douglas Rushkoff:³² in techno-music, rave, chat forums, cartoons, simulation games, Power Rangers, etc. For young people, everything is possible—at least in the imagination. What older people see in all this is either the moral decadence of a fragmented culture, or a shift into a global monoculture. Young people do not believe in the simplistic dichotomies of either/or. Accordingly, young Web citizens are constructing a completely new kind of collective identity. By engaging in games, by playing, dreaming, and changing their sex and their age, they are building, besides their own identity, a social identity and mutual understanding as well.³³ The various chat channels and joint Web sites for several users (e.g., Alphaworld) are a clear reflection of this type of future trend.

Paradoxically, the most important condition for new kinds of Web identities to emerge is the fact that the possibility for identifying the participants is nonexistent. It’s identity without identification—like chameleons. As virtual characters (avatars) constructed in the Web, according to researchers of cybersex, we are at last able to discuss our most intimate fantasies freely and openly.³⁴ The stories about respectable American housewives who build up sado-masochistic identities in the Web make one stop and wonder.

The wildest visions picture “sexbots” or sex robots that offer satisfaction many times superior to that offered by real people. The overwhelming predominance of sex in the content of Internet offerings is surely an implication of intrinsic pressures and of the direction in which the new human identity is evolving. More stimulation and more simulation. On the other hand, a corresponding phenomenon took place in the early stages of the video. The first to arrive were the sex videos, and only afterwards the other uses of the video.³⁵

One might imagine that the idea in the different chat channels and Web conversations is that we have the tools to raise, out of our own free will, our individual level of consciousness towards a more collective understanding and sense of responsibility. This process has no need for rulers or external influences, which often have been instrumental in the birth of collectives in the course of the history of mankind. “Worker ants” are becoming conscious both of themselves and of their role in building the anthill. Collective action is no longer based on violence and force, but on people’s own will and collective self-understanding. Many of those who believe in the information society probably base their views on precisely this type of Gaia vision of the growth of consciousness.³⁶ By means of communication made possible by information technology, we are

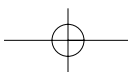
32 Rushkoff, *Playing the Future*.

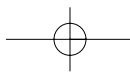
33 Sherry Turkle, *Life on the Screen. Identity in the Age of the Internet*. (London: Weidenfeld & Nicolson, 1996).

34 Michael Adamse and Sheree Motta, *Online Friendship, Chat-Room Romance and Cybersex* (Deerfield Beach, FL: Health Communications, 1996).

35 Ruby Dholakia, Norbert Mundorf, and Nikhilesh Dholakia, *New Infotainment Technologies in the Home. Demand-Side Perspectives* (Mahwah, New Jersey: LEA Publishers, 1996).

36 James Lovelock, *Gaia, The Practical Science of Planetary Medicine* (London: Gaia Books, 1991); and Rushkoff, *Playing the Future*.





better able to understand our collective self. This phenomenon can be compared to a stadium audience creating waves by standing up in turns—and thereby also creating a conscious sense of collectiveness.

The newest technology and its multiple perspectives enable us to begin to understand more thoroughly than before our interactive dependence on other human beings and on nature. An even more radical idea is to see the newest technology as a way of releasing us, and making us free to return to our own “biological nature.”

Version 3.2: The Fluxus Consumer

The creative way of finding our place in a complex world is, for most of us, not done by being artists, writing texts, making music, but by selecting and buying ready-made symbols offered to us in the marketplace. We activate our creativity by living through things.³⁷

Technology does not necessarily change us or bind us. There is an alternative possibility. High technology may liberate our biological, creative selves from the artificial order and self-discipline required by the agrarian and industrial system. Is man’s 10,000-year-long confinement in a prison of cultural rules and regulations barring social interaction finally coming to an end? The book *Social Cage* by Maryanski and Turner, and the comprehensive study of values by Inglehart, would seem to point towards that kind of development, similar to futurologist Rolf Jensen’s argument of the rise of the Dream Society.³⁸ What about Nicholas Negroponte and the ideology of medialabs?

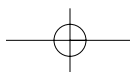
According to Jensen, we are moving into a society of dreams and storytelling. Possibly, new technologies—e.g., interactive games, motion based simulators—encourage whole new genres of experience. Terms such as “experience economy,” “experience society,” and “symbol intensive organizations” have been coined.³⁹ In such a society of narrators, we shall all be artists, creating something new. All of us, and not just the nobility: “Fergie, who doesn’t know how to cook, has conjured up a cookbook for Americans” (newspaper headline January 25, 1998), and “Fergie writing a book on how to bring up children” (newspaper headline June 11, 1998), for example.

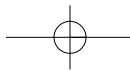
The creative fluxus person may well be a dominant form of human existence in the future. The term “fluxus” refers to an art movement which claims that every human being is a creative artist in his or her own everyday life. The fluxus movement wanted to stress the artistic dimension of seemingly meaningless things: church services, children’s play, the circus, fairs, and cooking all are forms of art. Sophisticated art can be thrown in the trash bin, once we begin to view our own everyday with new eyes, as a creative process similar to an artistic production. This was the line of thought of the representatives of the 1960s’ fluxus art movement,

37 Butenschon, “Design, Youth, Consumption.”

38 Ronald Inglehart, *Modernization and Postmodernization. Cultural, Economic, and Political Change in 43 Societies* (Princeton: Princeton University Press, 1997); Rolf Jensen, “The Dream Society,” *Futurist* (May–June, 1996):16–21; and Alexandra Maryanski and Jonathan H. Turner, *The Social Cage: Human Nature and the Evolution of Society* (Stanford: Stanford University Press, 1992).

39 Respectively, Joseph Pine, and James Gilmore, “Welcome to the Experience Economy,” *Harvard Business Review* (July–August, 1998): 97–105; Gerhard Schulze, *The Experience Society* (London: Sage, 1995); and Virpi Leikola and Thomaz Wood, “Symbol-Intensive Organizations: Management in the Age of Metaphor and Rhetoric,” forthcoming in Richard Goodman, ed., *Modern Organizations and Emerging Conundrums: Exploring the Post Industrial Sub-Culture* (San Francisco: New Lexington Press and Jossey-Bass, NA).





headed by George Maciunas.⁴⁰ The fluxus philosophy further contained the important notion that we are entitled to reject the newest technology. One of the goals of technological development is to create subsectors in our lives which are also able to function without technology, and where we can employ our own autonomy. In the face of the newest technology, the fluxus personality will ask: do I prefer to teach my child to play the piano or the stereo equipment?

In Conclusion

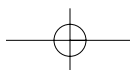
The aim of this article is to convey the view that the creation of a consumer and identification of needs—"consumer configuration"⁴¹—is an essential element of the innovation process, and also of the information-intensive society, not merely the final part of the process. The outcome of consumer configuration is a kind of manuscript according to which the consumer is assumed to act when he or she confronts a new commodity. Technology research refers to this manuscript of "correct consumption," prepared, for example, by means of scenarios, as a "script."⁴² It often is the innovative consumer who determines and defines the scripts for new commodities, which then become established.⁴³ In this sense, consumers also participate in the social construction of needs.

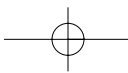
The extent to which various kinds of market studies and consumer segmentation into different groups shape reality in their own likeness is another interesting question in itself. Market studies are used as a basis for the production of new commodities, which, in turn, shape the consumers' everyday lives. We are dealing with a complex dynamics of interaction and circulation of ideas that can never be fully grasped by research that limits itself to narrow individual disciplines.

The consumer of the future does not exist in the form of a market waiting for new products to appear. On the contrary, the future consumer is being created by a wide diversity of actors with their own expectations, actions, and products. However, nobody can control the process as a whole, because the potential of new technologies usually does not reveal itself until it is applied in practice.

For one reason or another, the "politics of forecasts" and expectations management often have been treated with an indifferent or palliative attitude.⁴⁴ It is as if futuristic visions were neutral and innocently produced pictures of the future. Just like Moore's Law, which claims that the data processing capacity of computers would double within a period of a year and a half, similarly, our conception of future consumers will shape the world. Therefore, we need critical discussion about these consumers and citizens of the future. It also is important to form an idea of the actors of future society. In what light will we see one another? As characters in a play, as workers, or as artists? We are creating the future by means of language—obviously within a natural and cultural framework.

- 40 Elizabeth Armstrong and Joan Rothfuss, *LM: A Publication Called ... GM: FLUXUS, and that's it that was going to be Like a book with a title, that's all* (Minneapolis: Walker Art Center, 1993).
- 41 Steve Woolgar, *Rethinking the Dissemination of Science and Technology* (Cricit Discussion Paper No. 44, May 1994); and Steve Woolgar, "Technologies as Technological Artefacts" in W.H. Dutton, ed., *Information and Communication Technologies, Visions and Realities* (Oxford: Oxford University Press, 1996). There is an abundance of parallel expressions in the English language for the creation of a consumer: user configuration; social construction of the user; and inscription. A general presentation of this perspective can be found in the collection of articles by W.E. Bijker, T. Hughes, and T.J. Pinch, eds., *The Social Construction of Technological Systems. New Directions in the Sociology and History of Technology* (Cambridge, MA: MIT Press, 1987).
- 42 Madeleine Akrich, "The De-Description of Technical Objects" in Wiebe Bijker and John Law, *Shaping Technology/Building Society-Studies in Sociotechnical Change* (Cambridge, MA: MIT Press, 1992); and Madeleine Akrich, "User Representations: Practices, Methods, and Sociology" in Arie Rip, Thomas Misa, and Johan Schot, eds., *Managing Technology in Society: The Approach of Constructive Technology Assessment* (London: Pinter Publishers, 1995).
- 43 Tufan Orel, "Designing Self-Diagnostic, Self-Cure, Self-Enchanging, and Self-Fashioning Devices" in Richard Buchanan and Victor Margolin, *Discovering Design. Explorations in Design Studies* (Chicago: University of Chicago Press, 1995).
- 44 John Guise, "Designing the Future: The Culture of New Trends in Science and Technology" *Research Policy* 28 (1999): 81–98; and Slaughter, "Looking for the Real Megatrends."



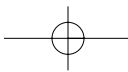
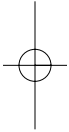


Even seemingly neutral language shapes the future—for example, our talk about the utility applications of information technology.⁴⁵

Future-oriented design studies may play an important role in the configuration of the new human being: they may serve as a democratic counterbalance to the modernistic speech which is based on domination and linear thinking, from the designer's desk to the users. Like all future-oriented debate, my own contribution is also quite goal-oriented and biased: I would like to raise the values of play and critique in technological development to an equal level with those of discipline and obedience. Accordingly, the designer's role is to generate commodities and services that are as "open" as possible, and which are well-suited for various uses and users. These include not only tools, but also toys and pieces of art.

Although I ventured some educated guesses above about the new type of human being, let us not forget that there is, indeed, a great deal of stability in human nature and human culture. Stability is based, on the one hand, on our biological traits and, on the other, on profound cultural undercurrents. The persistence of family values, for instance, has come as a surprise to many value researchers. Whatever happens in technology, values such as reciprocity, sympathy, and affection seems to prevail.

45 Päivi Eriksson, Katja Oksanen-Särelä, and Mika Pantzar, *Just a Tool: Metaphors of Computers in Advertising Texts*. Paper presented to "Samples of the Future," a conference on organization research, Stanford University, Sept. 20, 1998.



Typography and the Screen: A Technical Chronology of Digital Typography, 1984–1997

Loretta Staples

Digital technology radically influenced typographic design beginning in the early 1980s.¹ The computer enabled designers to create and manipulate letters in new ways, offering new options for crafting letterforms and “outputting” them—whether in the medium of toner particles on paper, or pixels on a screen. Digital tools, at first, necessitated (due to technical constraints), and later explicitly encouraged (due to technical advances) specific kinds of representations that would challenge their historical antecedents. Now, in the late 1990s, the mutation of letters continues. The spatial and temporal opportunities of cyberspace are resulting in even more radical depictions of letterforms that offer expanded formal and stylistic possibilities, while further challenging the norms of reading and writing.

This paper chronicles the technical developments responsible for the digital revolution in typography during the 1980s and 90s. It is an informal history based largely on my own observations as an early practitioner of “graphical user interface design”—one formally trained in graphic design and privileged to work at Apple Computer during the early 1990s. Because Apple was so instrumental in popularizing the technologies that stimulated typographic experimentation within the graphic design community during this period, my paper focuses on the Macintosh platform.

Early Concepts and Technical Advances

The Apple Macintosh computer, introduced in 1984, popularized the key technologies and concepts that would herald a new typographic age. While many of these technologies and ideas originated elsewhere, their dissemination via the Macintosh introduced a broad public to WYSIWYG (an acronym for “what you see is what you get”) and its associated technologies: bitmapped fonts and dot-matrix printing, which was quickly surpassed by laser printing.

In the 1970s, researchers at the Xerox Palo Alto Research Center (Xerox PARC) pioneered WYSIWYG and “direct manipulation,” key concepts in graphical user interface design. Their efforts—based on earlier pre-Xerox research—culminated in the Xerox Star, a computer system introduced in 1981, and its successor, “ViewPoint” (fig. 1).² The Star utilized a high resolution visual

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- 1 In 1983, Charles Bigelow and Donald Day defined digital type as that “made up of discrete elements. These elements can be line strokes, pixels, colors, shades of gray, or any other graphic unit from which a letterform can be constructed. Hence, digital typography is not new: mosaic tiles, embroidered samplers, and arrays of lights on theater marquees have long represented alphabetic characters as relatively coarse discrete arrays.” However, in focusing on the display device of the cathode-ray tube (CRT), and the requisite “digital computer...needed to control the on-off pattern of the electron beam” that articulated letterforms on the screen, they defined it specifically in terms of computer technology. Charles Bigelow and Donald Day, “Digital Typography,” *Scientific American* 249:2 (August 1983): 106.
- 2 Jeff Johnson, et al., “The Xerox Star: A Retrospective,” *IEEE Computer* 22:9 (September 1989): 11–29.

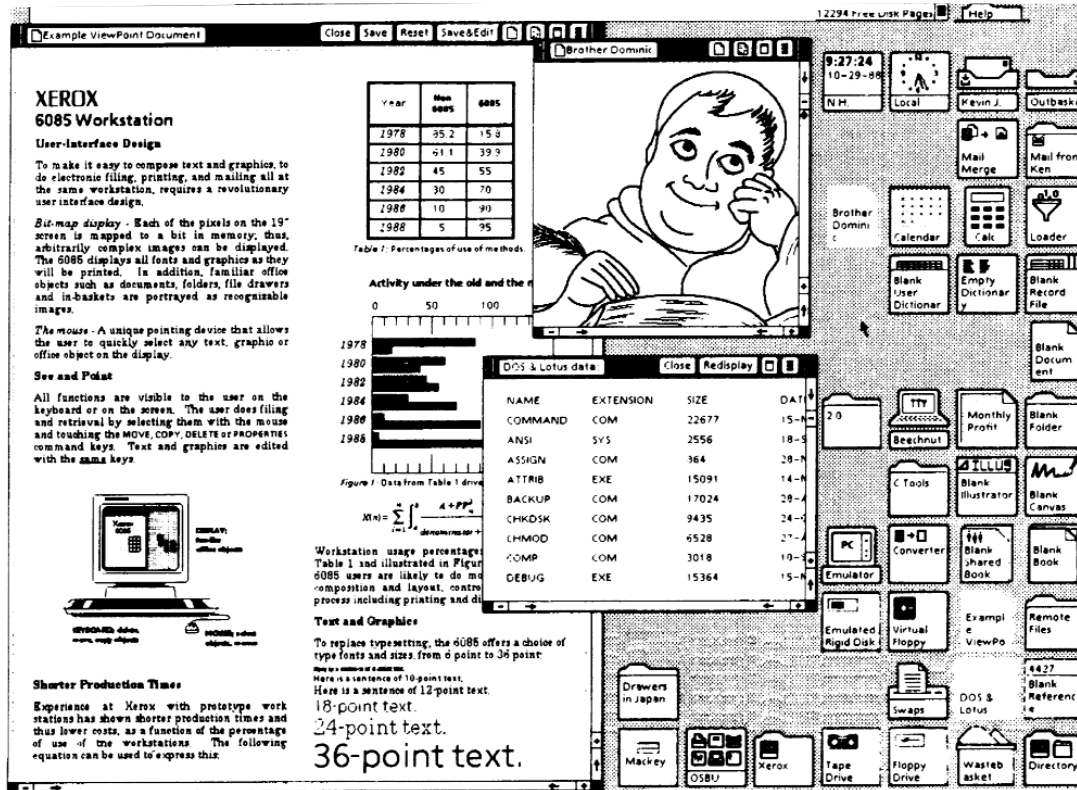


Figure 1
Xerox Viewpoint interface. From Jeff Johnson, et al., "The Xerox Star: A Retrospective," IEEE Computer 22:9 (September 1989), 11. Reprinted by permission of the Xerox Palo Alto Research Center.

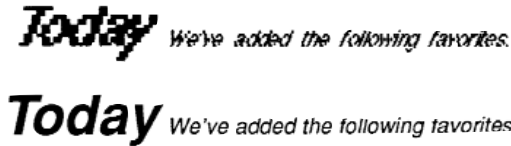
display consisting of windows, icons, and actual-size images of document pages that computer users could "handle" through a novel input device, the mouse, used to control a small pointer on the screen. Users manipulated these virtual objects by touching them with the pointer and then clicking with the mouse, an operation called "selection," used to isolate an object and its corresponding range of possible actions. Once selected, users could further manipulate the object, performing actions such as moving and copying.

The document served as the seminal object in this scheme. While Xerox, a pioneer in photocopying technology, could not have desired a wholly paperless office, the company pursued office automation as a strategy for expanding its business markets. Electronic document production and storage promised new marketing opportunities based on computer systems designed for offices.

WYSIWYG employed the use of actual-size images of document pages on the computer screen and the corresponding ability to print them as they appeared. The Macintosh's 72 pixel-per-inch display corresponded closely to the number of dots used to print a Macintosh file on its companion product, the dot-matrix-based ImageWriter, making for a tight match between screen image and printed output.³ While seemingly trivial now, in 1984, this innovation challenged the sterility of computerized word processing by

3 The 72-pixel-per-inch display was designed to correspond with the point, since it was the standard unit of measurement for specifying type. Johnson, et al., "The Xerox Star: A Retrospective," 12.

Figure 2
Comparison of ImageWriter (top) and
LaserWriter output.



presenting a graphically-enhanced environment for typing and visibly altering text through the specification of multiple fonts, sizes, and styles.

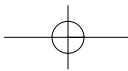
The tight coupling of image to output changed not only the way people created documents, but the way they thought about them. Computer users increasingly considered the text's appearance as central to the writing process. Early Macintosh users, discontent with impoverished "text entry," readily exploited typographic control through the built-in styling capabilities of the Macintosh Operating System.⁴ These included, by default, the ability to choose among multiple typefaces and font families that could be installed in the Macintosh system file. In addition, Macintosh applications included standard options for rendering type as "plain text," bold, italic, underlined, outlined, and shadowed in a range of sizes, usually 10 to 24 points.

The coarseness of dot-matrix printing made for degraded visual quality, but this changed quickly with the introduction of the Apple LaserWriter printer in 1985. The LaserWriter enabled the Macintosh to rival offset printing through a technology that greatly enhanced the appearance of type and images (fig. 2). In moving to 300 dots-per-inch, the LaserWriter rendered letters considerably more smoothly, able to define subtler details in contour that would especially affect the appearance of serifs and smaller sizes of type.

While Apple's LaserWriter provided the hardware technology that would democratize typographic design through the rise of "desktop publishing," Adobe Systems provided the software innovation through PostScript, a "page description language" (PDL) built into the LaserWriter. PostScript made possible the printing of detailed page layouts, complete with images and text arranged and scaled to the designer's specifications.⁵ Sophisticated graphic layouts previously requiring laborious manual composition now could be assembled with ease through software programs that made page layout almost as easy as word-processing. These programs, when used in conjunction with the LaserWriter, ensured offset printing quality graphic output. The LaserWriter also included a limited number of built-in PostScript fonts that could be supplemented by fonts downloaded from the Macintosh system folder to the printer's memory.

To showcase the capabilities of the LaserWriter and PostScript, Apple worked with selected software companies to develop page layout applications. Aldus's PageMaker, Boston Software

- 4 Computerized word-processing's leading product at the time was WordStar, a program that supported limited WYSIWYG capabilities, but without extensive typographic control. Roger B. White, Jr., *WordStar With Style* (Reston, VA: Prentice Hall, Reston Publishing, 1983).
- 5 The PostScript PDL was not wedded to a particular output device, however. In being "device independent," PostScript document descriptions contain no specific information regarding output devices and, as such, will print at whatever level of resolution the given output device makes available. Frederic E. Davis, et al., *Desktop Publishing* (Homewood, IL: Dow Jones-Irwin, 1986), 167.



Publishers' MacPublisher, and Manhattan Graphics's ReadySetGo provided programs ranging in price from roughly \$150 to \$500.⁶ All supported the integration of text and images in multiple-column formats. While the documents produced with them could be sent to any Macintosh-compatible printer, they were especially impressive when transformed by the LaserWriter's PostScript software. Within a few years, desktop publishing supplanted professional typesetting and offset printing as the preferred low-end prepress and printing option.

The Digital Construction of Letterforms

In the late 1970s and early 80s, researchers and programmers, notably at MIT and Stanford, began developing new ways to describe and image letters digitally.⁷ Philippe Coueignoux's CSD (Character Simulated Design) of 1975 decomposed the Roman alphabet into a set of primitives that could be recombined to form any letter.⁸ Pijush Ghosh and Charles Bigelow attempted a similar strategy in 1983.⁹ Donald Knuth's groundbreaking METAFONT provided a rich programming language for designing type through the algorithmic specification of geometrical relationships.¹⁰ However, the mathematical expression it required was alien to most type designers, and METAFONT never caught on.¹¹ Digital typography embraced an ever-widening group of constituencies, from computer scientists such as Knuth to more traditional type designers including Charles Bigelow and Kris Holmes, who were to produce new innovations for the page and screen. Their typeface, Lucida, introduced in 1986, satisfied the multiple demands of page and screen through a comprehensive set of fonts suitable for printing and screen display (fig. 3).¹²

The cathode ray tube (CRT) used pixels ("picture elements") as the defining matrix for the construction and display of letters. The Macintosh of 1984 provided only two color options for their display: black and white. The Macintosh Operating System itself required different typefaces in order to communicate necessary textual information through the Macintosh interface. Chicago and Geneva, bitmapped typefaces designed to suit this need, typographically defined the Macintosh "look and feel" until 1997 (fig. 4). Chicago 12, used in pulldown menus and dialog boxes, employed a standard stroke width of two pixels, so that gray versions of usually black letters could be created by alternating black and white pixels. (Gray was required to signal the unavailability of various commands.) Geneva 9 appeared on the Macintosh "desktop" to label icons, and in list views of files and applications in the Finder.

While the typographic needs of the Macintosh interface posed one set of requirements, printed documents posed another: variety. The original Macintosh provided a number of bitmapped typeface options, most of them novel. A few classics emerged

6 Ibid., 95–99.

7 See Richard Rubinstein, *Digital Typography: An Introduction to Type and Composition for Computer System Design* (Reading, MA: Addison Wesley, 1988) for a comprehensive description of digital typographic innovation from its inception through the late-1980s.

8 Ibid., 141.

9 Ibid., 141.

10 Donald E. Knuth, *Computer Modern Typefaces* (Reading, MA: Addison Wesley, 1986).

11 Rubinstein, *Digital Typography*, 141–145.

12 Charles Bigelow and Kris Holmes, "The Design of Lucida®: an Integrated Family of Types for Electronic Literacy" in J.C. van Vliet, *Text Processing and Document Manipulation, Proceedings of the International Conference, University of Nottingham, April 14–16, 1986*, (Cambridge: Cambridge University Press, 1986), 1–17.

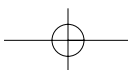


Figure 3

Lucida, by Charles Bigelow and Kris Holmes.
From Richard Rubinstein, *Digital Typography: An Introduction to Type and Composition for Computer System Design* (Reading, MA: Addison Wesley, 1988), 216. Reprinted by permission of Addison Wesley Longman.

roman
 ABCDEFGHIJKLMNOPQRSTUVWXYZ&
 abcdefghijklmnopqrstuvwxyz .,:!?"'
 0123456789 # \$ % @ + - = < > ^ ~ _ () [] {} / \ *

bold
ABCDEFGHIJKLMNOPQRSTUVWXYZ&
abcdefghijklmnopqrstuvwxyz .,:!?"'
0123456789 # \$ % @ + - = < > ^ ~ _ () [] {} / \ *

italic
 ABCDEFGHIJKLMNOPQRSTUVWXYZ&
 abcdefghijklmnopqrstuvwxyz .,:!?"'
 0123456789 # \$ % @ + - = < > ^ ~ _ () [] {} / \ *

bold italic
ABCDEFGHIJKL MNOPQRSTUVWXYZ&
abcdefghijklmnopqrstu vwxyz .,:!?"'
0123456789 # \$ % @ + - = < > ^ ~ _ () [] {} / \ *

sans
 ABCDEFGHIJKLMNOPQRSTUVWXYZ&
 abcdefghijklmnopqrstuvwxyz .,:!?"'
 0123456789 # \$ % @ + - = < > ^ ~ _ () [] {} / \ *

sans bold
ABCDEFGHIJKLMNOPQRSTUVWXYZ&
abcdefghijklmnopqrstu vwxyz .,:!?"'
0123456789 # \$ % @ + - = < > ^ ~ _ () [] {} / \ *

sans italic
 ABCDEFGHIJKLMNOPQRSTUVWXYZ&
 abcdefghijklmnopqrstuvwxyz .,:!?"'
 0123456789 # \$ % @ + - = < > ^ ~ _ () [] {} / \ *

sans bold italic
ABCDEFGHIJKL MNOPQRSTUVWXYZ&
abcdefghijklmnopqrstu vwxyz .,:!?"'
0123456789 # \$ % @ + - = < > ^ ~ _ () [] {} / \ *

Figure 4

Macintosh system fonts Chicago 12 and Geneva 9.

Chicago 12

Geneva 9



Figure 5
Display PostScript at work in the NeXT interface. From *Welcome to the NeXT Decade* (Palo Alto, CA: NeXT, 1988).

however—Helvetica, Times, and Palatino among them—with other options available from font vendors such as Adobe.

PostScript laser printers used economical descriptions of letterform outlines, as distinct from memory-intensive bitmaps, to form letters on printed pages. Thus, a given font family required two separate descriptions—one for screen display, and the other for printing. In fact, a third technology mediated between bitmap and outline during the Macintosh printing process: Apple's QuickDraw “drew” all images to the Macintosh screen. Printing from a Macintosh to a PostScript laser printer therefore required the translation of QuickDraw commands into PostScript, a task undertaken by the Macintosh Operating System's Print Manager in conjunction with the LaserWriter software driver.¹³

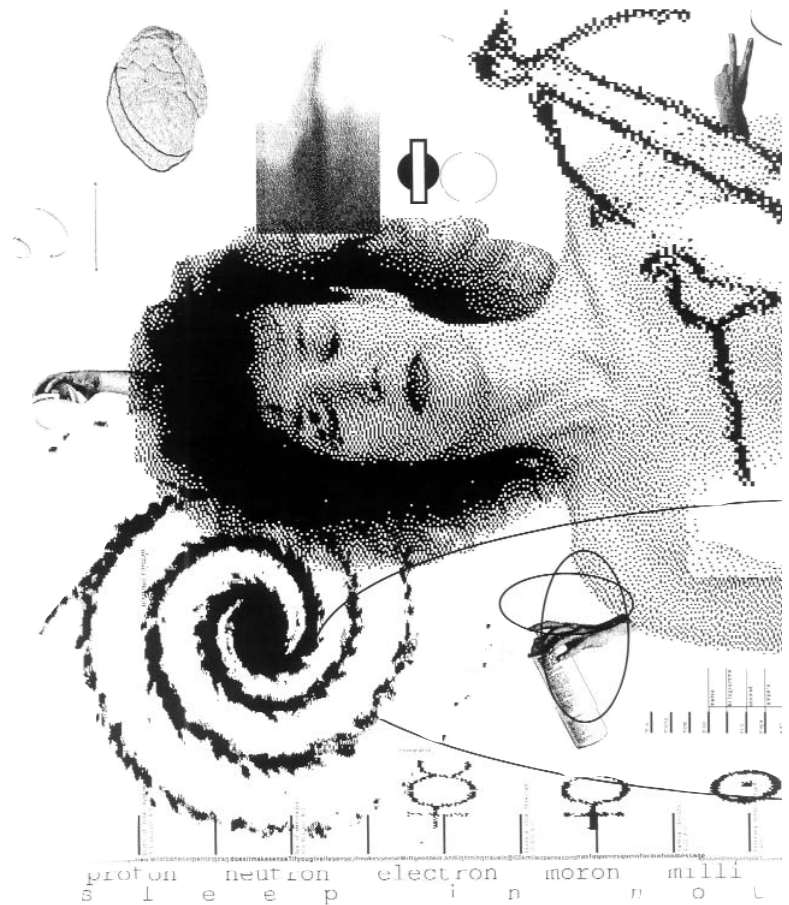
The NeXT computer, introduced in 1989, utilized PostScript for both screen display and printed output, eliminating any need for intermediate translation (fig. 5). In addition, the NeXT fully exploited grayscale technology in its user interface, an enhancement of the visual standard established by the Macintosh. The NeXT interface, through an expanded range of values from black to white, displayed icons and dialog boxes modeled with greater dimensionality, pushing the visual space of the graphical user interface from 2- to 3-D.

13 Jim Heid and Peter Norton, *Inside the Apple Macintosh* (New York: Simon & Shuster, Brady, 1989), 221.

Emperor Oakland Emigre

Figure 6 (above)
Emperor, Oakland, and Emigre,
by Zuzanna Licko.

Figure 7 (right)
Detail from 1986 issue of *Design Quarterly*
by April Greiman, "Does It Make Sense?"
Reprinted by permission of the Walker Art
Center and MIT Press.



Corresponding Innovations in Graphic Design

Almost immediately upon the introduction of the Macintosh, a small handful of insightful graphic designers recognized the esthetic potential of computer-based typography. In 1985, Zuzanna Licko designed three typefaces—Emperor, Oakland, and Emigre—that deliberately exploited the look of the pixel (fig. 6).¹⁴ These typefaces soon redefined the look of an emerging publication, *Emigre*, founded by Licko's husband, Rudy VanderLans, with artist Marc Suson and screenwriter Menno Meyjes. It has since become one of the most influential design publications of this century, serving as a primary vehicle for the dissemination of new critical typographic ideas. *Emigre* showcased typefaces designed by Licko and others, and served as a catalog for purchasing those very fonts. Licko and VanderLans lived and worked in the San Francisco Bay area, and their close proximity to Silicon Valley encouraged their exploration of its emerging technologies.

At the same time, in Los Angeles, April Greiman, a Swiss-trained graphic designer, began experimenting extensively with digital imaging and typography in her printed work. Like Licko and VanderLans, she used pixellated letterforms and pictures in posters and brochures, later incorporating video imagery as well (fig. 7).¹⁵

14 Rudy VanderLans, Zuzanna Licko, and Mary E. Gray, *Emigre: Graphic Design Into the Digital Realm* (New York: Van Nostrand Reinhold, 1993), 18–25.

15 April Greiman, *Hybrid Imagery: The Fusion of Technology and Graphic Design* (New York: Watson-Guption Publications, 1990), 55–99.

Figure 8
Aliased (left) and antialiased versions
of the letter “a.”



By bringing the actual look of the screen—whether a computer display or television monitor—to paper, Greiman began to challenge the authority of the page as the official bearer of the word. Trained at Basel’s Kunstgewerbeschule, Greiman had already garnered a reputation for combining the rigor of Swiss formalism with the irreverence of California pop to create an entirely new look and attitude in contemporary graphic design—“California Swiss.” Silicon Valley’s influence transformed her work even further by providing a new formal vocabulary explicitly shaped by digital technology.

While pixellation characterized the look of these early typographic experiments, blurring and antialiasing characterized the later look of digital typography.¹⁶ “Aliasing” is a technical term used to describe the stairstep appearance (“jaggies”) of curved edges of forms composed of pixels. In letterforms, aliasing is especially problematic because this stairstepping interferes with the smoothness of curvature required to define so many individual characters. The problem is compounded in typefaces with serifs and in type rendered in small sizes, since few pixels are available to create each letter.

Antialiasing solved this problem by blurring the edge of the letter into its background (fig. 8). For example, the edges of a black letter resting on a white background, when antialiased, reveal the insertion of gray pixels along the contours of the letter. Only computer systems capable of displaying more than two colors (black and white) could support antialiasing. While antialiasing eliminates the jagged look of letters on the computer screen, it also diminishes their legibility by decreasing edge contrast. The loss of contrast between letter and background virtually obliterates smaller sizes of antialiased type.

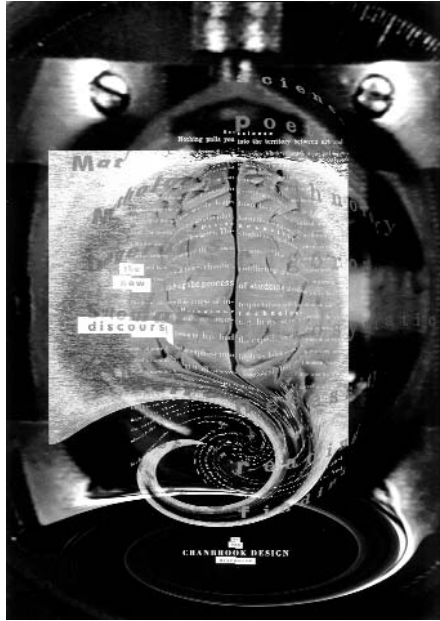
Early Macintosh software programs for graphic editing did not include antialiasing. Until the introduction of the Macintosh II in 1987, the Macintosh computer supported only black and white displays. With grayscale technology, and then color, antialiasing became an obviously desirable feature and was later exploited in another innovative Adobe product, Photoshop, introduced in 1990.

Its developers originally intended Photoshop for use in high-end digital photo-retouching. As such, Photoshop presumed the existence of a workable image, in contrast with paint programs that

¹⁶ For more on the technical aspects and esthetic and cultural implications of blurring in contemporary graphic design, see Loretta Staples, “What Happens When the Edges Dissolve?” *Eye* 5:18 (Autumn 1995): 6–7.

Figure 9

1993 poster by P. Scott Makela. Reprinted by permission of Laurie Haycock Makela.



- 17 Graphics programs are bitmap- or vector-based. Vector-based programs rely on mathematical descriptions for describing geometrical forms. Their interfaces generate drawings consisting of curved or straight line segments, with “handles” used to conduct editing operations such as resizing, rotating, and skewing.
- 18 Photographic images and text were handled separately in manual mechanical production for offset printing. Text and line art were assembled together, while photographs underwent the intermediate process of halftoning (conversion from continuous tone to dots) prior to mechanical insertion. FPOs (“for position only”), low-resolution photo reproductions—were commonly used on mechanical boards as placeholders for the higher quality images that would replace them later during the film stripping process. Even within page layout programs, text and images remain separate due to their respective technical requirements for outputting.
- 19 Barbara Maria Stafford has written extensively about the status of the visual in contemporary culture, tracing its decline to the enlightenment, and elucidating biases toward the linguistic in contemporary thought. Barbara Maria Stafford, *Good Looking: Essays on the Virtue of Images* (Cambridge, MA: MIT Press, 1996).

provided a clean slate at the outset. Photoshop integrated a number of powerful yet relatively easy-to-use tools for editing images, and for adjusting and modifying color attributes. In addition, it provided a limited set of tools for creating and adding type to images—tools seized upon by graphic designers looking for new alternatives to standard typesetting in the desktop environment.

Adobe’s earlier and equally influential product, Illustrator, had quickly become the preferred high-end drawing tool for digital designers. Behind its sophisticated interface, Illustrator automatically generated PostScript code during the drawing process. This code could be downloaded directly to any PostScript printer as a text file of PostScript code or saved as “encapsulated PostScript” (EPS), a format which retains a visual preview of the image created.

In contrast, Photoshop was a high-end bitmapped graphics program for editing pixels.¹⁷ While this distinction may seem negligible, it is key. Photoshop provided designers with the technology for easily compositing photographic images and type within a single surface.¹⁸ The unifying layer of pixels comprising them both, in essence, demoted letters to the status of pictures. This revolutionized typography by radically altering the way designers conceptualized and executed typographic (as opposed to image-based) work. Photographic space equally subsumed the two, undoing the descriptive or adjunct relationship usually borne by text to image. In a text-based culture already skeptical toward the visual, images had nothing left to lose, letters everything.¹⁹ This blurry affiliation of letters and images became the new norm for graphic design.

In addition to its limited but significant phototypesetting capabilities, Photoshop’s “filters” provided a readily available set of commands for applying sophisticated visual effects to an image at

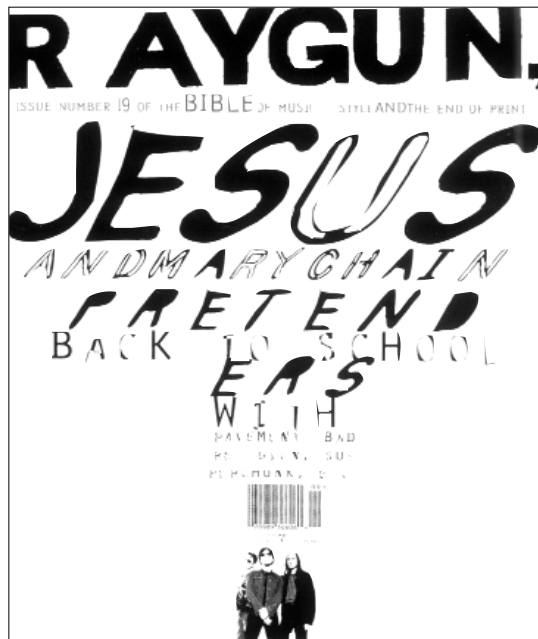
the touch of a button. England's Neville Brody began fusing images and type in 1992, designing provocative posters that would showcase Photoshop's photomanipulative powers.²⁰ He toyed extensively with ambient, blurred compositions, as did many others including P. Scott Makela at Cranbrook in the U.S. (fig. 9).

The dissolution of the word continued as a major trend throughout the 1990s, with David Carson a major instigator. His pioneering sensibility, first at *Beach Culture* magazine and then *Ray Gun*, established new thresholds for type's legibility (or lack thereof). Often criticized, Carson's controversial work further threatened the authority of traditional typography through extensively distorted letterforms and erratic layouts (fig. 10). By offering an alternative to the more refined "production values" of TV, film, video, and advertising, Carson challenged the prevailing sensuous norms of mass media. As might be expected, however, the mainstream readily absorbed his once-radical esthetic.

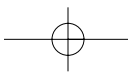
Paper vs. the Screen

Digital typography's innovations through the early 1990s lay primarily in technologies and corresponding attitudes that revised the image of the printed word. Beginning in the late 1980s, however, a new medium emerged to force the issue of the screen to the forefront: the CD-ROM. Interactive multimedia created a new venue for displaying words, introducing new technical and esthetic issues. "Authoring" tools such as VideoWorks (later to become Macromedia Director) and Apple's HyperCard served as early development platforms for building interactive pieces destined for the screen, and included limited text-handling capabilities. The distinc-

Figure 10
Cover of *Ray Gun* by David Carson. Reprinted
by permission of David Carson.



20 Jon Wozencroft, *The Graphic Language of Neville Brody* (New York: Rizzoli, 1994), 16.



tion between text and image persisted in these software development environments, with editing tools capable of creating letters either as “text,” dynamically reeditable through the keyboard, or as “paint,” static arrays of bitmaps that, once created, required the editing of their individual pixels.

The suite of digital tools used to develop multimedia products supported numerous options for media creation and integration. Text (again, in multiple formats), still and motion graphics, video, and sound could be brought together within a single environment, and then orchestrated through built-in programming languages. Once “compiled,” users could navigate these multimedia spaces freely, choosing from among pre-programmed options specified by the designer.

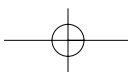
Despite the opportunities created by multimedia’s screen requirements, typeface options remained limited. Among the hundreds of digital fonts available for use, most provided bitmaps not finely tuned for the screen but, rather, coarse counterparts to their corresponding outline files (again, these PostScript outlines were used in printing). Screen fonts remained of secondary importance despite the demands of the new medium.

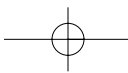
A few insightful designers (Bigelow & Holmes already mentioned) recognized the needs of the screen, and worked to create more choices. Apple developed proprietary screen fonts, the Espy family, for use in its instructional products in 1993. Espy served as a legible alternative to Chicago and Geneva, which were too closely identified with the look of the Macintosh desktop. Matthew Carter, an experienced type designer who already had tackled numerous challenges in designing for various typesetting technologies, co-founded Bitstream to develop digital typefaces. Responsible for many print and screen-based innovations, in 1995, Carter designed Walker, a typeface commissioned by the Walker Art Center that featured interchangeable “snap-on” serifs.²¹ He later worked with Microsoft to design proprietary screen fonts.

Adobe Systems had quickly emerged as the leading provider of digital fonts, but printing remained the company’s priority given the fact that PostScript had never gained acceptance as a screen display technology. Nonetheless, many of their font families included well-drawn bitmaps used by early designers of electronic media. Adobe’s 1990 product, Adobe Type Manager (ATM), contributed significantly to the quality of screen type in its ability to smooth and scale type to any size, using only a limited number of bitmaps along with the font’s corresponding outline file, both stored in the Macintosh system folder.²² With ATM, designers could generate type sizes beyond the 10–24 point bitmaps typically furnished by type publishers. While ATM improved the onscreen look of larger type sizes, small sizes proved a persistent problem. Designers wanting small sizes of type relied on the 10- and 12-point furnished

21 Ellen Lupton, *Mixing Messages: Graphic Design in Contemporary Culture* (New York: Princeton Architectural Press and Cooper Hewitt, National Design Museum, Smithsonian Institution, 1996), 34.

22 ATM was not explicitly designed for this purpose, however. ATM allowed non-Postscript printers to print Adobe fonts, desirable because it strengthened Adobe’s position as the premier digital type foundry. Improved screen appearance was a side benefit for print designers wanting improved screen previews. Gregory Wasson, “Adobe’s Font Utility Isn’t Perfect, but It’s Still a Worthwhile Investment,” *MacUser* 6:2 (February 1, 1990): 64–65.





bitmaps or the automatic scaling of the Macintosh system, which usually provided poor results.

Meanwhile, Apple began developing an alternative type format to rival Adobe's PostScript fonts. TrueType relied on auto-scaling to generate type sizes as needed, side-stepping PostScript. A "font war" ensued, with Apple and Adobe vying with each other to become or remain the industry standard. Eventually, both companies conceded. Adobe published its Type 1 standard to support the creation of non-Adobe PostScript fonts, and Apple supported Adobe Type 1 fonts in addition to its own TrueType format.²³

Developers of authoring tools generally neglected typographic needs but, by 1996, Director included antialiasing as a feature of its built-in text editor. Designers now could create dynamically reeditable text, whose smooth appearance rivaled that created by an external graphics editor such as Photoshop.

Typography and the World Wide Web

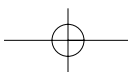
An even more demanding and influential medium emerged in the mid-1990s to overtake the CD-ROM market, and bring the concerns of digital typography to a wider public. The World Wide Web presented the designer with even more complex typographic dilemmas by placing ultimate control of typographic appearance in the hands of the audience. Web browsers—software for viewing files (Web pages) stored on the array of servers that in essence comprise the Web—provided user-definable preferences for a number of design attributes including typeface, font size, and color. In addition, these browsers also provided, by necessity, predefined typographic specifications to ensure a minimally adequate display by default, should users choose not to specify their own preferences.

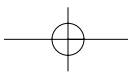
With users given the option to freely override the designer's specifications, most graphic designers made use of such tools as Photoshop to create text that could be set, antialiased, and saved as a graphic file. Despite the economy and efficiency of HTML²⁴ text, which requires no downloading time and remains dynamically re-editable, most graphic designers entering the arena of Web design chose (and continue to choose) "graphic text" as the means through which to ensure a stable typographic appearance on Web pages, reserving the use of HTML text for lengthy passages.

Graphic designers and clients alike considered the subversion of graphic identity by Web browsers a distinct problem. In an effort to enforce graphic identity, new companies including @Home Network—founded to bring Web access to the home through the infrastructure of cable television—devised font strategies to override user preferences. @Home's proprietary browser automatically displayed HTML text in @Home's signature fonts (a default setting users could change, however). This strategy was in place by the time of the product launch in 1996. @Home's creative director, Roger Black, created the product's look—as he had done success-

23 Laurie Flynn, "Warnock Says Adobe Won't Make It Easy on Competitors," *InfoWorld* 11:41 (October 9, 1989): 6 and Jai Singh, "Apple Opens Door to Adobe Fonts—System 7 to Include Type 1 Fonts, Adobe Type Manager," *PC Week* 8:34 (August 26, 1991): 12.

24 HTML (Hypertext Markup Language) is the "tagging language" used to create Web pages. Tags placed before and after the words constituting the textual page content effect typographic attributes including styling and relative sizing.





fully for the *New York Times*, *Newsweek*, and a number of other popular magazines. The product strategy strengthened @Home's overall look and feel, critical for a Web publication serving as a directory for the best on the Web. @Home's editorial identity offered a potential competitive advantage against search engines capable of directing users to specific Web pages and thus bypassing any intermediate editorial commentary that might urge or discourage visiting a given Website.

At the same time, Black's experience as a print designer limited his ability to recognize that the "magazine" served simply as a metaphor, and perhaps not the appropriate one for such an innovative medium. Black might have chosen television, film, or even architecture as the organizing metaphor for @Home's browser, breaking new ground in subverting the "pageness" of the Web. Other graphic designers would follow suit, bringing the limitations of page-oriented conceptual models to Web design.

In an effort to establish a standard that would unify digital type formats, an industry consortium proposed the OpenType format early in 1996. Through OpenType—a "common container format for TrueType and Type 1 fonts"—Adobe and Microsoft promised greater typographic control on the Web through the ability to embed fonts in HTML documents.²⁵ Other efforts, including TrueDoc, a joint initiative between Adobe and Bitstream, also ensured greater typographic control of Web documents.²⁶ On the whole, however, these efforts have been slow either in development, in gaining industry support, or in adoption as a standard.

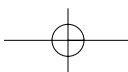
Typography and Computation in Cyberspace

While most graphic designers scrambled to take advantage of new opportunities posed by the Web in the mid-1990s, university and industry researchers pursued more innovative and radical approaches to type design in cyberspace as a result of their vast computing resources and funding to permit such exploration. MIT's Visible Language Workshop, under the direction of Muriel Cooper, produced prototypes of multidimensional information displays incorporating type. Using infinite zooming, along with various levels of transparency and opacity, VBL's designers—including David Small, Suguru Ishizaki, and Lisa Strausfeld—constructed maps, charts, and timelines that users could navigate as if in flight, a radical departure from the planar, frontal organization of most standard user interfaces (fig. 11). When VBL's work debuted at 1994's "TED5" conference, it created a stir among the graphic design community.

Since Muriel Cooper's death in 1994, the Visible Language Workshop has been supplanted by another Media Lab research group headed by Cooper's heir apparent, John Maeda. His Aesthetics & Computation Group explores the intersection between typography and programming to exploit computer processing

25 Rebecca Gulick, "Interlocking Font Deals Find Center in Adobe," *MacWEEK* 10: 20 (March 20, 1996): 10–12.

26 John Clyman and Jonathan Matzkin, "The Font Forecast—Adobe and Bitstream Recast Type Design," *PC Magazine* 15:13 (July 1, 1996): 31.



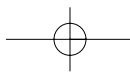


Figure 11

"Information landscape" by Lisa Strausfeld. From "Financial Viewpoints: Using point-of-view to enable understanding of information," <http://www.acm.org/turing/signs/sigchi/chi95/Electronic/ACMcopyright.html> (New York: Association for Computing Machinery, 1995). Reprinted by permission of the Association for Computing Machinery, Inc.

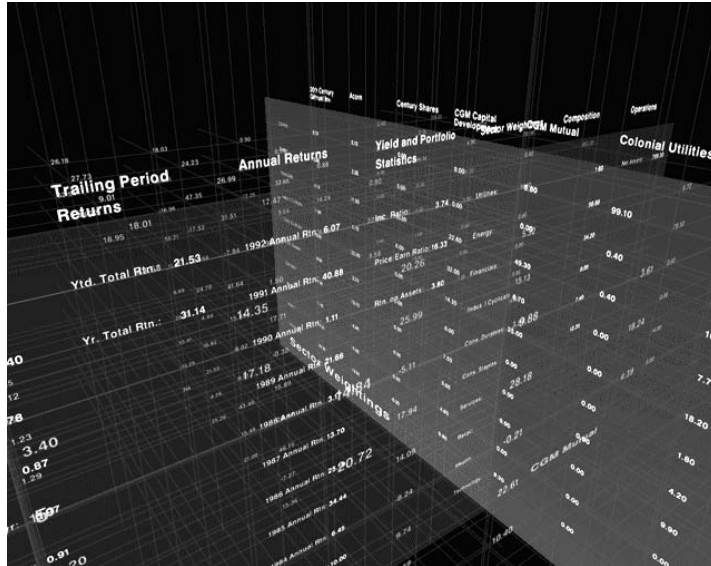
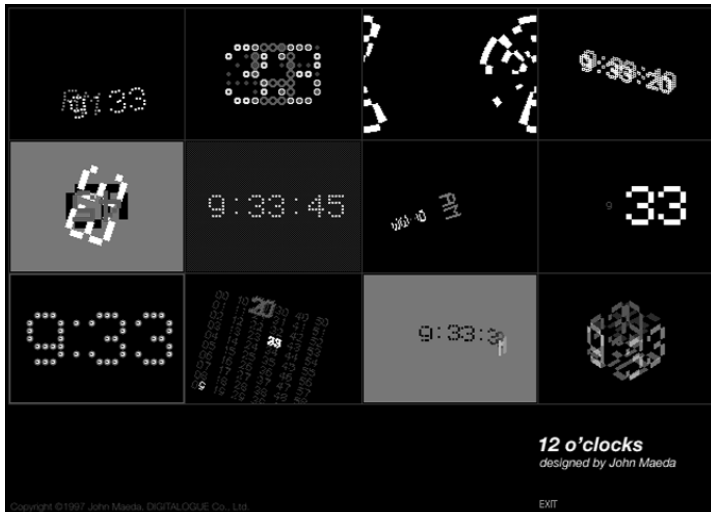


Figure 12

Screen from 12 o'clocks by John Maeda. Interactive clocks visually interpret the passage of time 12 different ways. Reprinted by permission of John Maeda.

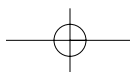


power unconstrained by authoring tools. Maeda trained as a computer scientist, but his interest began shifting to graphic design while still a student. After completing undergraduate and graduate work at MIT, he earned a doctorate at Tsukuba University Institute of Art and Design in Japan. As an award-winning art director in Japan, he explored print and interactive design, and published whimsical electronic typographic works (fig. 12).²⁷ Maeda represents a new breed of designer—the programmer/typographer—destined to drive the future of graphic design innovation.

Outside the academy, J. Abbott Miller of the design studio Design/Writing/Research undertook innovative experiments in dimensional typography. Using high-end computer workstations, Miller and his colleagues created three-dimensional letterforms.²⁸ Lathing, extrusion, and texture-mapping defined new typefaces as

27 John Maeda, *Flying Letters* (Tokyo: Naomi Enama, Digitalogue Co., Ltd., 1996) and *12 O'clocks* (Tokyo: Naomi Enama, Digitalogue Co., Ltd., 1997).

28 J. Abbott Miller, *Dimensional Typography: Case Studies on the Shape of Letters in Virtual Environments* (New York: Princeton Architectural Press, 1996), 24–25.



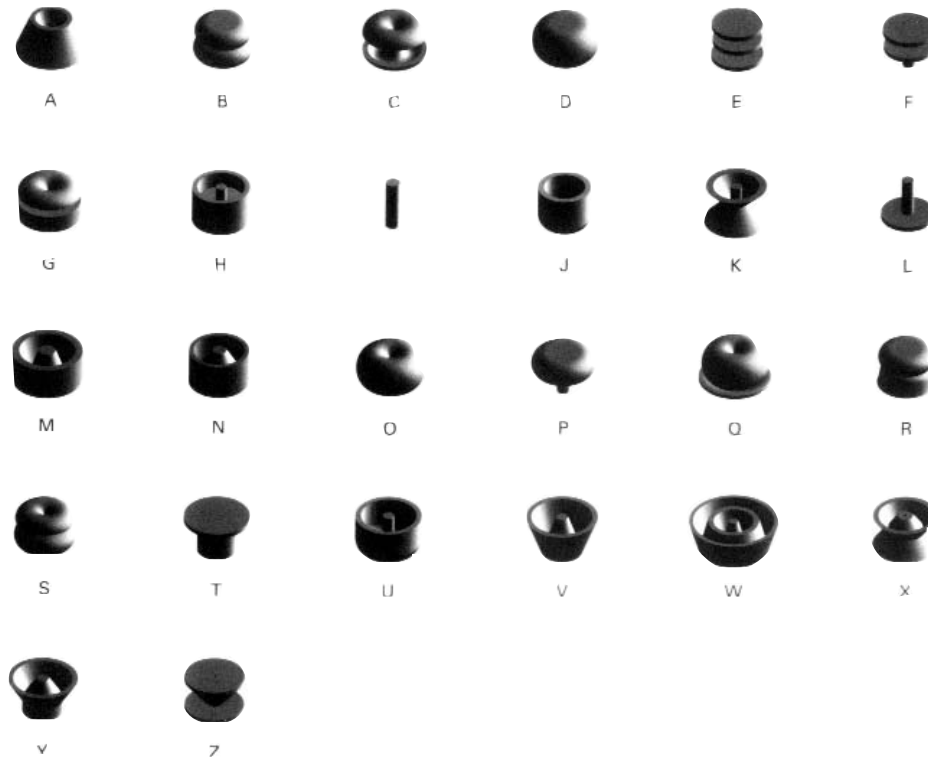
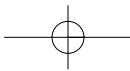


Figure 13
 Univers Revolved by Ji Byol Lee. From J. Abbott Miller, *Dimensional Typography: Case Studies on the Shape of Letters in Virtual Environments*, (New York: Princeton Architectural Press, 1996) p. 24–25. Reprinted by permission of J. Abbott Miller.

well as novel interpretations of existing classics. While Miller himself acknowledged these studies as conceptual explorations, they already have proved influential. Ji Byol Lee's lathed version of *Univers* and *Univers Revolved* (fig. 13) appeared in the pages of the *New York Times Magazine* of September 28, 1997, an issue on the impact of computing in contemporary life. The image of the letter in cyberspace has once again made its way back to the page.

Conclusion

The period from 1984 to 1997 saw the proliferation of key technologies that popularized digital design. New tools, including the Apple Macintosh computer and associated software, especially that from Adobe Systems, enabled designers to create, edit, and disseminate words and images in new ways. Initially, designers translated the on screen image of pixellated letterforms into fonts for printing—a wry visual commentary on the play between page and screen. Numerous experiments followed that challenged typographic norms. Designers developed hybridized forms and ignored the traditional rules of legibility. Adobe Photoshop allowed designers to fuse text and image into a single pictorial layer, and stimulated the rise of visual effects-driven typography in the early 1990s. The hyperplastic esthetic that developed in print design during this period migrated back to the screen through the World Wide Web in

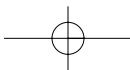
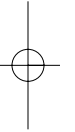
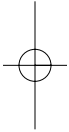


the mid-90s. Typographic innovation now continues in cyberspace through computer-modeled and algorithmically-driven typography.

By making it possible for designers to conceptualize and realize letters in new ways, digital technology has provided the platform through which words ultimately could be subsumed in the larger pictorial space of the image, leveling the relationship between the two. In so doing, digital technology revised the status of the written word in the late twentieth century.

Acknowledgments

Much of the content of this article was originally presented as a lecture at the 1996 symposium organized in conjunction with the exhibition "Mixing Messages: Graphic Design and Contemporary Culture" at the Cooper Hewitt National Design Museum. I would like to thank the curator of that exhibition, Ellen Lupton, for inviting me to participate in that symposium. In addition, I wish to thank the Radgale Foundation for granting me the space and time to write this piece



Design Predicts the Future When It Anticipates Experience

Augusto Morello

Portions of this text first appeared in Italian in the magazine *Telega* nr.14.

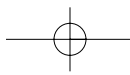
Design is an activity that, in a complex, computerized society such as the one that we are entering now, calls for appropriate technical skills, creativity, and an attentive eye for aesthetic values, but also a marked ability to ponder the relationship between humanism and the world.

This is the new human frontier: designing complexity.

Design means the competent, aware, and creative conception of the goods and services that constitute what we call the “material culture”:

- *Competent* because (and this is more than obvious) today, more than in the past, the limitations and opportunities for design are numerous, interconnected, and multidisciplinary: the materials, the process and product technologies, the markets, and the final recipients of the goods that are designed are changing rapidly and profoundly, calling for sweeping, in-depth knowledge that is constantly updated;
- *Aware* because the specific and overall advantages to be gained from an appropriate design, and the direct and indirect harm that can be caused by a design that does not pay attention to its context, are or can be/become potentially incalculable: an awareness of the impact of design on the environment encourages (good) designers to go one step further than their immediate responsibility—which often is limited to complying with set standards—to introduce the notion of “competent conjecture,” in other words, a sense of responsibility towards the future;
- *Creative* because diversity is a value in itself, both in the sense that, when it introduces advantageous qualities, its principles are easily adopted by many; and in the sense that the resistance of diversity enables diverse cultures to be recognized and to coexist freely in the world; in other words, it respects the principles of the freedom of choice and of competition.

Design is, therefore, on the one hand, the main factor whereby technologies are humanized and, on the other, the main factor of diversity between cultures; also and above all in a “globalized” world. It is, thus, a form of research *complementary* to but *not dependent* upon technological research: *complementary*, because no technology on its



own is capable of determining complete innovations for the individual and/or for society, even though the interpretation of technologies tends, with their “maturity,” towards banalization; *not dependent*, both because the same technology can be interpreted in different forms and configurations, and because design increasingly often stimulates new technological research and solutions.

Design also is an activity on the borderline between the production of objective utility (or function) and the production of subjective utility (or *ophelimity*) which, together, constitute the “value of goods” and determine the “quality of wealth” produced. In effect, design induces: objective utilities, such as functionalism, ergonomics, adaptation to the yardstick system, and even solutions that adapt this latter to new goods and technologies; subjective utilities, when it imbues goods with meaning and symbolic and psychological values, in other words, giving a sense to the vector of cultural development in the form of semantics, of syntactics, and of pragmatics;¹ and even that particular subjective and synthetic interpretation of resolved complexity that is aesthetics.²

In terms of supply and demand, design thus can be defined as that conceptual activity that does not so much search for what the individual and/or social user wants—or seems to want—as that activity that knows how to find what the user might want.³ Hence, among other things, the need to reconsider the meaning and re-dimension the value of trends.

In particular, trends should not be confused with fashions; since there is no dynamic *per se* in a fashion, while there is in a trend—by definition. There could be such a thing as a fashion of trends, however. When a fashion is born, it seems to take the form of an anti-trend *par excellence*, breaking an evolutionary continuity, taking a stand as a mutation, and, finally, dominating “its” time until it is replaced by another fashion. A trend is (or ought to be) in itself, by definition, the decodification of a flow from one time to another, of the succession (as we used to say) of different conditions.

Fashion is, in a certain sense, closed within its own time (synchronic); a trend obviously is open to different, contiguous and successive times (diachronic). And this remains true whether fashions (and trends) change slowly or quickly.

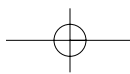
In addition to its meaning and cultural value, the diversity induced by design also affects the economic decisions made by enterprise, local administrations, governments, and the various supernational structures—especially if they also were set up for the purpose of economic development—in the various areas of the world: enterprise (and the entrepreneurial system in general) adopts diversity (often developed on the basis of common technologies and diffused in analogous markets) as a factor of imperfect competition—i.e., not depending essentially on the price—hence its tendency to consider, albeit improperly, design as an added value; local administrations adopt diversity (or could do so) as a factor in

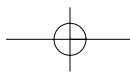
1 In 1938, Charles Morris introduced the tripartite division of semiology into *semantics* (which concerns the relationship between signs and their denotations), *syntactics* (which also concerns the relationship between signs, regardless of their meanings), and *pragmatics* (which deals with the relationships between signs and their users). The significance of this classification is patently evident in the development of material culture.

2 The reference is to an interpretation of aesthetics as an expressed, convincing perception of complexity, before its rationalization that deprives it of emotion. (See A. Morello, *Stileindustria*, December 1995.)

3 See A. Morello, *Stileindustria* (May 1995).

4 In the well-known European Union Green Paper on innovation, this is rigorously limited to technologies; the term design is only mentioned once in the entire text.





- 5 Weak thought, post-modernism and irrationalist impulses certainly are not the most favorable combination of elements for an innovation that knows how to distinguish between complexity and complication.
- 6 The new movement in American marketing, which was to have important effects later on, can be said to have been inaugurated by a notable book: A.F. Firat, N. Dholakia, and R.P. Bagozzi eds., *Philosophical and Radical Thought in Marketing*, (Lexington, MA: Lexington Books, 1987). Significantly, Philip Kotler also agreed to contribute to this book which departed from his previous stance. See also A. Morello, "Discovering Design Means [Re-]Discovering Project and User" contribution to the conference "Discovering Design: Explorations in Design Studies," held at the University of Illinois, Chicago, in November 1990; (Ill.), and later published in V. Margolin, and R. Buchanan, eds., *Discovering Design* (Chicago: University of Chicago Press, 1990); and lectures at the Virginia Polytechnic Institute and State University, Blacksburg, Virginia, November 1990.
- 7 The notion of "disability" is extremely restrictive and, quite often, is perceived as discriminating against disabled people; it often is replaced now by "inclusiveness," in the sense that products should be equipped with features that can be enjoyed by everyone. This corresponds to a definition of "humanity" that is couched in such a way as to include everybody, regardless of disabilities. The European Institute for Design and Disability, based in Dublin, is represented in Italy by the Italian Institute for Design and Disability, a thematic delegation of the Italian Association for Industrial Design, Milan.
- 8 The Helsinki office of the International Council of Societies of Industrial Design (ICSID), with 154 member organizations in fifty-one countries, has established a "Mediterranean portfolio" with which it intends to study the developments in design and material culture in exchanges with emerging countries and in the multi-ethnic societies that are inevitably forming.

achieving local affirmation and/or as a cause of consensus among those whom they administer (the design of public/community goods), if not as one leading to the birth or development of enterprise and job creation; governments and supernational structures adopt diversity increasingly frequently for the same ends (although more extensive in scope) as local administrations, developing training, information, research, and promotion plans, and the European Union is a clear example.⁴

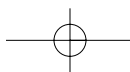
As a distinct form of research, design and its development require pre- and/or meta-design places and chances; for the purposes of technological and sociological information; for studying, criticizing, and comparing, i.e., developing, design methods; for studying configurations and expressive languages; for studying the behavior of organizations at the moment of innovation and of its diffusion; for developing and spreading the necessary professional skills and capacities among the creatives involved (designers and other contiguous professions); and, lastly, for verifying and interpreting the results. But the situation now, as we face new complexities, is one of dangerous cultural shortfalls; these were accentuated in the second half of the seventies with the appearance of:

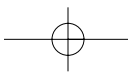
(a) Theses that seemed to question whether it was even at all possible to design in the face of increasing complexity, of the unpredictability that ensues and of the plurality of possible choices;⁵

(b) Increasingly frequent formalist (and often provincial) tendencies, diffused and encouraged by end distribution interested in innovation for innovation's sake, that induced undeniable average decay in design quality, dominated by a form of marketing that, only now, and, paradoxically, before anyone else, feels the need to review—such as in the practice of customer satisfaction—the logic of the relationships between enterprise and users, especially end-users.⁶

There now is, notoriously, a plethora of new themes: from sustainable development to saving physical resources; from recycling to dismantling and environmental protection; from the problem of local versus global to designing (private and community) services, taking the socioeconomic and cultural impact of teleinformatic technologies into account, from disability (or rather inclusive design)⁷ to the multiple requirements of the multiethnic society⁸ that now is developing: a society that also will prove to set a hard test indeed for the conventional techniques used to divide users into segments.

All this will lead to a form of design tailored more towards identifying new product configurations than to merely attributing new forms or new aesthetics to them. Rather, it will give them new, appropriate meanings through semiologies of products conceived to suggest new languages of expression to designers and enterprise alike.





- 9 The technical standards that are frequently expressed by such supernational bodies as the European Union oblige the design process to take them into account not only as limitations, but also as opportunities. In the future, it will be impossible to verify that they have been complied with after the creative design process: creativity itself will have to be aware of them in advance, not the least because this approach reduces the time to market.
- 10 A. Morello, *Introduction to the Milan Dialogues*, ADI-Cosmit, 1994.
- 11 The idea of long cycles can be attributed to Nikolai Kondratieff (1917), whose “major economic cycles” were edited by Giorgio Gattei for publication in Italy with the title of *I cicli economici maggiori*, (Bologna, 1981). This idea was developed (1972–78) by Cesare Marchetti of the International Institute for Applied Systems Analysis (IIASA, Luxenborg, Vienna), who expounded on it at a congress of the Italian Marketing Studies Association (1978), hence the IIASA paper, “Society as a Learning System” (1982). The fundamental inventions and innovations to have been introduced over the last three-hundred years appear to have come in waves, with a substantially isomorphic, precise configuration and frequency, and with a contraction of the timescale by a factor of approximately two every centuries. Moreover, the introduction of new primary sources of energy, their appearance on the market, and their prices seem to be linked rigidly to these cycles, adding a further dimension to the forecast in the field of energy systems. The concept of a society that learns, with all its implications on the ecological equation of Volterra, constitutes a potent tool for organizing social behavior, and hints at the possibility of a unified theory of genetic evolution, of ecology, of sociology, and of economics. In the cycle that now has come to an end, material culture, both in theory and in practice, has experienced an epiphany that it is not possible to describe in detail here. Nevertheless, some of the names that marked the cycle are worth recalling, starting with Sigfried Giedion (*Space, Time, and Architecture* at the beginning of the cycle in 1941) and those of the first

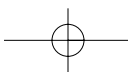
Designing is destined, increasingly, to mean taking note of limitations and standards (whether imposed from outside or self-imposed) even before tackling the challenge in hand, rather than merely verifying overall suitability after the event.⁹

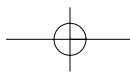
As we know, this practice has a significant fallout effect on the time to market, in other words, on the time lapse between the decision being made to tackle a new product and the moment when it is launched on the market. Automobile manufacturers, for example, have cut it from fifty-four to twenty months in a handful of years, introducing and contributing to the diffusion of the method of concurrent engineering that provides for parallel rather than sequential collaboration between the various main actors in the design process. This calls for a much broader scope of knowledge on the part of all those who contribute to the design process while, at the same time, generating new organizational solutions both within and outside enterprises.

Faced with this (and other) perspectives of change (many of which are already taking place), everyone—designers, enterprise, and even consumers—acknowledge that there is an evident loss of experience,¹⁰ in the sense that the past no longer seems to have much to teach the future, and that, on the contrary, it appears to be an increasingly frequent cause of errors—sometimes serious errors—which only are detected with the wisdom of hindsight, when it is too late to do anything to correct them. There is, therefore, a need to make a move as soon as possible, to start thinking and encouraging others to think about the diverse conditions around us, about how to act to accelerate the accumulation of new experience—which, at least in part, corresponds to the description of possible new scenarios—and about how to monitor the signs of change and the responses given step by step by the system and by its active and passive protagonists (if there are any of them left).

It is worth remembering that the best explanations for the loss of experience, at least for the moment, seem to be found in the thesis of the existence of “long cycles”: those cycles that, identified using a variety of techniques and interpretations, tend to connect all the phenomena of growth and development (which are not actually the same thing) through a curve of experience that is exhausted in something over fifty years.¹¹

Thus, the last cycle would have taken place between the outbreak of the Second World War (the second part of the first) and 1994; hence a predictable new cycle lasting until 2048. The first quarter of the future cycle therefore should be complete before 2010, by which time the cycle will have identified its order, while the halfway stage (the moment of maximum growth) should be situated before 2025. This would leave us with a decade of great maneuvers, whose result would be favorable only to those who are ready when the time comes, having acquired the necessary experience (and the





necessary excellence). For the others, the only alternative might be to abandon the market.

If we accept the premise that industrialization has made us aware of the importance of invention, the thesis of cycles maintains that the inventions (and the decisive resources) that appeared in the previous cycle are translated into innovations (and into new typical resources) with effect from the initial phases of the next cycle—and with a sequence dominated by the principle of *first-in/first-out*. Nor is this of secondary importance, such as to render it superfluous to mention it here, since the greatest invention of the last cycle was information technology in general (and we have only seen its first stumbling innovations so far), with a series of evident consequences. The first of these unquestionably can be recognized as the adoption of it as a system-related innovation, rather than one prevalently related to specific products: the latter are more correlated to the former than vice-versa.

We shall no longer see any particular goods starring on the scene in the traditional sense (in the last cycle, these were certain materials, such as plastics, and the automobile, for example), but the starring good may be information itself, especially in its systemic applications. This certainly does not mean that individual products will not feel its influence, sometimes quite profoundly: computerization, in the broad sense, will be responsible for thorough upheavals in the structure and performance of goods—we need go no further than to quote today's widespread appearance of control functions (and especially of self-control) in goods—but such functions are destined to be increasingly not only possible, but necessary for the network system to be fully economical, as we have already seen in the application of satellite links for means of individual and collective transport.

Moreover, such users are beginning to perceive product job enrichments as values of which the products, themselves, are only vectors, thus continuing the march towards *tertiarization* that is making software into the starring good, reducing products to servants of services (and also giving the illusion of an improbable dematerialization). And it should be noted that, if there is any one thing that denotes "*ophelimity*"¹² with respect to objective utility, it is the exquisitely subjective nature of services: some even are afraid of this; nor should we forget one of Camus's rare verses: *Ici vit un homme libre, personne ne le sert* ("Here lives a free man, nobody serves him").

This Heraclitean/neo-Darwinian evolutionary process is well known now.

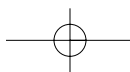
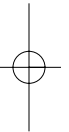
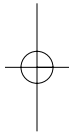
The graduation thesis of a French engineer, Gilbert Simondon,¹³ already contains two valuable concepts that are worth quoting here. The first is that the passage of time and repeated design processes make technical objects undergo successive modifications that develop them from a more abstract to a more concrete state, in

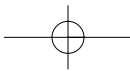
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phase until 1955 (Murdoch, Leroi-Gourhan, and K. Polanyi), while the mastery of Fernand Braudel (1902–86), which made its appearance between two successive cycles, reached maturity exactly half way through the last one (1967), with the subsequent contribution of the Polish school. For the second phase, it is worth mentioning—outside the specific ethno-anthropological context, but within the bounds of studies of design—Gilbert Simondon, Lewis Mumford, Lynn White Jr. and Tomás Maldonado, to name but a few. Since the beginning of the last cycle, material culture has tended, on the one hand, to specialize, while, on the other, to translate into a critique of everyday life also (and often primarily) through the practice and critique of industrial design; although some authors (such as La Cecla, Rome, 1998) recently have asserted that the notion of material culture tends to lose its relevance as a result of the "dematerialization" related to teleinformatics, which will end up bringing it full circle to the more general idea of "culture."

12 This term was used by the Italian economist V. Pareto to identify an aspect of utility, specifically the value of a thing as determined by the feeling, impression or sensation that an individual associates with its use. It permits, therefore, a discussion of the subjective as well as the objective aspect of utility.

13 Gilbert Simondon, *Du mode d'existence des objets techniques*, (1958), edited by John Hart and Yves Deforge (Paris: Aubier, 1989).





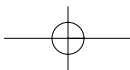
other words, from a performance structure that could be described as self-referential—disconnected from the context—to one that is hetero-referential—gradually more contextualized in a process of reciprocal adaptation. Nothing could be closer to the truth in the case of the automobile, as Simondon himself demonstrates with specific examples such as how the various cooling techniques affect the structure of the motor, or the inclusion of the self-starter after the power circuitry had been added so that the vehicle could light its own way in the dark.

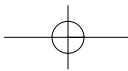
Through this “way of existing,” technical objects behave like biological species, in other words a *philogenesis* takes place; and this, while justifying our use of the terms *genotype* and *phenotype* outside of the strict bounds of biology, has relevant implications in the conception of the development of the objects of material culture. This is because that conception not only hypothesizes that man equips the world with a second “nature” parallel to the mineral and biological one, but—as a result of the interconnection between objects and the context—also that the two “natures” (the natural one and the artificial one), while distinguishable, cannot remain reciprocally estranged: the “ecological” implications are, therefore, quite relevant, also in principle. On the pragmatic plane, the idea of the continuity of development (which does not mean that it must necessarily be linear or deductive) institutes a close analogy between innovations and the biological mutations that originate genres, species, and families of individuals, such that they are subject to the same processes of competition and replacement that affect “artificial” goods.

The second concept, which is related to the first, concerns the fact that the process involved in designing goods develops along a route that leads towards the more complex; that, in substance, the solution of complexity is a phylogenetic aim, as the examples quoted for the automobile demonstrate.

Nevertheless, the complexity that has been explored in recent years is not an unequivocal concept, but one that scholars and schools of design interpret differently: it is quite evidently an abstract and universal concept that tends to escape closed definitions in each of the many disciplines that concern it, often meaning different things, for example, for an engineer or an artist; and even, in the case of an artist-engineer, according to the point of view he chooses (differences also could be found vis-à-vis an engineer-artist).

If complexity is correlated for both of these with something whose components must be “made to stay together,” the engineer will be more interested in the selective analysis of the objective facts that he or she considers are connected to the problem to be solved, with a view to an innovative, economic reconstruction (design), while the artist will be more interested in giving complexity the meaning of meta-complexity, i.e., in representing the many com-





plexities that the recipient (the “user”) can recognize in it and, in point of fact, often several more. For the engineer, the design project thus tends to be more concrete, interpreting the “solution” of complexity as something that gives nothing more than what is or seems to be necessary; while the artist will tend towards abstraction and interpret the solution of complexity as something that gives nothing less but, on the contrary, opens the recipient to broader complexities. Of course, complexity is not the opposite of “simplicity”—they are connected to each other as simplex and complex—while both are antitheses of complication: that which is complicated can be simplified, but it is not simple.

The representation of something very complex actually may turn out to be simple, on the other hand, as can be verified by attempting to define something considered simple, or when products with a high design quality also are “enjoyed” aesthetically. In this sense, the aesthetic quality is the perception of a complexity that has been resolved. It can be said that that which is complicated only admits to addition, while that which is complex admits at least to multiplication: complexity and its relations multiply among themselves the effects of the simultaneous presence of parts (synergies) and configure the system as *Gestalt*, so that the sum of the parts is different from the whole: only when there is truly synergy is the sum of the parts less than the whole; and if the system is not coherent and the object of the study breaks down into several parts.

This notion of complexity enables suitable subsystems to be isolated within any system, a matter that concerns both the design process and relationships with the suppliers of sub-systems: if a system has one or more elements with a lesser number of relationships with the others, it can be identified with one of the borderlines of a subsystem that can be treated as a “black box”; in other words, it can be treated, without running the risk of making any great mistakes, as a single element of the overall system.

At the Hochschule für Gestaltung in Ulm—not by chance the most important school of design of our age, which functioned from 1954 to 1967—Abraham A. Moles, who passed away several years ago, drew a distinction between functional complexity (whose elements are actions) and structural complexity (whose elements are physical parts), using the same unit of measurement, Wiener-Shannon’s *nega-entropy*:

$$S = \sum p_i \log_2 p_i$$

where p_i is the frequency of the element i (when $0 < i < n$), i.e., the number n of the elements of one type expressed as a ratio of the total of those in the system. This resulted in the construction of the *Chart of machines* (1961), in which the two forms of complexity (structural on the x-axis and functional on the y-axis) placed prod-

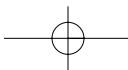
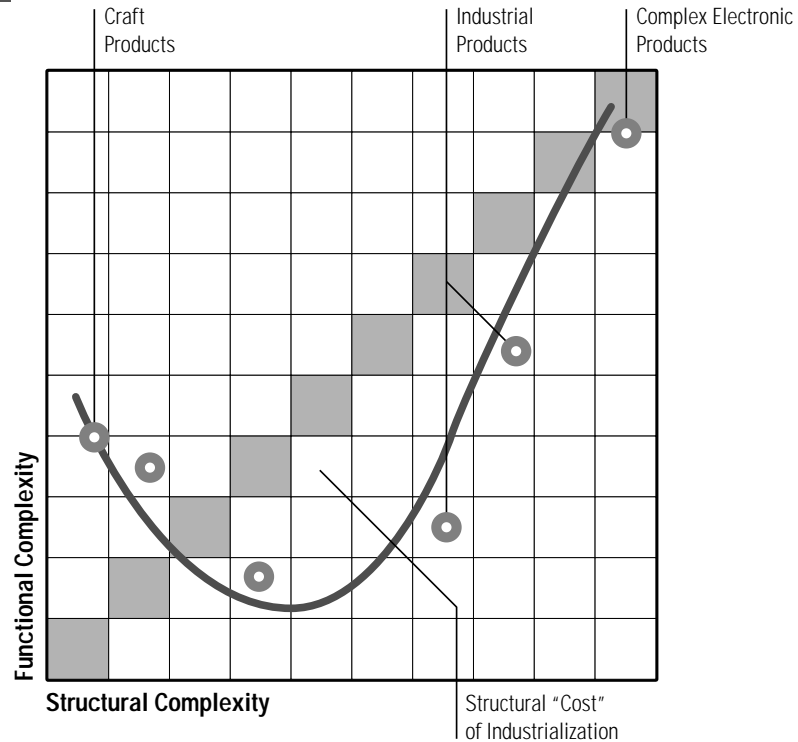


Figure 1
 Chart of Machines.
 Abraham A. Moles, 1961.
 Elabor A. Morello, 1984.



ucts either above or below the diagonal the marked the prevalence of the one or the other.

Moles himself pointed out that various products would be plotted also quite far from the diagonal, but that, as their complexity increased (as in missiles and calculators), they tended to come back into balance.

Later on (1980–84), the undersigned pointed out that craft products could more often be found in the area above the diagonal, and industrial products in that below; hence an “air-pocket” that could be interpreted as a structural cost of industrialization, which now is being reduced drastically, in particular, as a consequence of the application of electronic technologies.

And so we are now very close. But the “technological landscape” is not just computerization, although it obviously is included everywhere: it also consists of intelligent materials (among many others), of lasers, of prospects for new sources of energy, and of many other headings, not least of which—although it is not imminent with its extraordinary and so disquieting developments—is that of biotechnologies and genetic engineering.

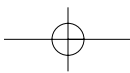
Names that crowded the vocabulary of the mechanical technician—such as pincers and hammers—undergo mutation as they are adopted by laser techniques in their micro- and nano-applications; a host of slave robots at the service of humanity—ever more

reluctant to do repetitive work—looks like a widespread possibility in the near future; while, among process/product technologies, fuzzy logic is starting to make its appearance, with its practices that abandon the principle of “three is a crowd,” giving products the ability to adapt to the user’s personal inclinations and even to progressive learning. And we also can expect even the most everyday products to adopt the same criteria quite soon.

The technology push cannot fail to exert impressive effects on the society pull, which, in our world, passes and will continue to pass necessarily through the market pull. But these latter also will have effects on the former, as can already be glimpsed in the form of the enormous tension that is building up between the quest for what is objectively new and the requirements of unprecedented *ophelimity*.

Meanwhile, in a world in which space is (as it were) rendered null and void by the speed of communications, time—time as a flow and time as duration—is becoming increasingly important. The length of a product’s life cycle curve—which looked as though it was getting gradually shorter, only to increase again during the period of the recent crisis (in fact, generating a critical situation for those enterprises that were hit hard by a drop in demand for replacing phenotypes)—could start getting shorter again: but this time not through the conventional channel of buying and replacing, but through that of hiring, renting, and leasing. From an economy (and sociology) of property, we may be on the threshold of one of possession and temporariness, with consequences whose description are beyond the scope of this essay, but which would have major fallout effects on the humanized configuration of the products themselves, i.e., on their semiology and symbology, which are different when the object is possessed temporarily than when it is permanent property and, above all, a stimulus to our memory of our past. But it also will no longer be possible to elude the criticism of the “ugliness” of our surroundings that is heard from many sides—and generally with good reason. In effect, the cycle that recently came to a close was marked by the specific attention that was paid to objects, to the extent that, even when they are quite admirable in themselves, they have brought about, when all combined together, a context that borders on the unbearable, not only for environmental, but also for semantic-aesthetic reasons.

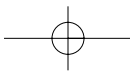
Is there hope, therefore, that we shall be able to witness the passage from the semantic of objects to the syntax of the context? In order to achieve this result, the forms of competition would have to change profoundly, so as to give society back a habitat with such a level of coherence that a form can be attributed to it; although it does not look as though the competitive opposition between individual proposals makes any provision for this. All the more because of the permeability of markets, their closeness in time, and their real and virtual accessibility, which enable them to be invaded by even



more mutually incoherent and estranged goods and services. In this case, we would be heading towards an increase in the cultural contaminations of which Far Eastern societies already are victims, because of the schizo-cultures induced by a production system oriented primarily towards global markets, but reflecting fatally on domestic markets; or certain societies in Latin America, which defend local cultures so strenuously that they have been refusing to admit any non-local technologies for years, producing cultures that could be defined as paranoid.¹⁴ It could be said that the tendency to make culture dependent on the economy is the main cause.

What is the solution? In our opinion, the time has come to reflect on the paradox that, in a world dominated by consumerism, where the distinguishing trait is the ease of communications, nobody really bothers about training consumers. Those same consumers who, if they were to receive adequate training, would know not only how to evaluate what they buy and consume, but also how to carry out those “new” activities that, at present, escape them because they lack the necessary culture, and that make all of us stand in fear of the disappearance of our jobs. And the two things, as Keynes knew only too well, go together.

14 A. Morello, report on Design and the UN Index of Human Development, ICSID Congress, Toronto, 1997. Publication under preparation.



“An Educated Demand:” The Implications of *Art in Every Day Life* for American Industrial Design, 1925–1950

Carma R. Gorman

Footnotes for this article begin on page 64.

According to renowned industrial designer Raymond Loewy, before 1925, American consumers had been satisfied with “engineered as you go” objects that “betrayed this technique by their haphazard, disorderly look.”¹ Loewy stated that, rather than worrying about how a practical object looked, “Will it work? was the question” foremost in people’s minds.² However, like Loewy, many advertisers, manufacturers, designers, and other period writers claimed that this state of affairs dramatically changed in the late 1920s and early 1930s, and that consumers—whom they, as historians today do, usually understood to be female—suddenly and voraciously demanded “stylish” or “artistic” products.³ Women, these writers asserted, began to desire and expect beauty even in the “formerly artless industries,” which were defined by *Fortune* magazine in 1934 to include cars, washing machines, scales and balances, clocks, refrigerators, food packaging, and stoves, among other practical items.⁴ In response, manufacturers, who were dependent upon women’s custom, often hired industrial designers (members of a profession that had not really existed as such until about 1929) to restyle their products to appeal to women’s tastes.⁵ Well-known and highly successful examples of such redesigns include Loewy’s 1935 Sears Coldspot refrigerator and Henry Dreyfuss’s 1933 Sears Topoperator Washer.⁶

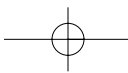
Commentators on the change in consumer tastes uniformly dated this “rise of style consciousness,” as industrial designers Roy Sheldon and Egmont Arens called it, to about 1925.⁷ Although they seemed to agree that it was indeed responsible for the rapid and distinctive changes in design that have been outlined by such writers as Jeffrey Meikle, they were unable to decide on its cause.⁸ Designer Harold Van Doren, for example, believed that “the constant change and improvement [a phenomenon of the 1920s] in the modern automobile have done more than anything else to make the masses appearance-conscious,” arguing that there had been a “lack of an educated demand for attractive appearance in years past.”⁹ Christine Frederick claimed in her 1929 bestseller, *Selling Mrs. Consumer*, that, “in the last five or six years...the lid has been

lifted off the color pot in America,” but credited the “mad avalanche” of color (and of consumer interest in beauty and artistry more generally) not to automobiles, but to the “color-in-the-kitchen” movement.¹⁰ She believed that the color-in-the-kitchen movement had “started the whole movement for ‘color in the home,’” and had, in conjunction with Americans’ increasing familiarity with modern art, ushered in “a creative revival of industrial and decorative arts.”¹¹ In contrast to Van Doren and Frederick, prominent advertiser Earnest Elmo Calkins did not even attempt to pin down a cause for the rise in consumer demands for beauty; he simply stated that “[t]he hunger for color and design in old familiar standardized articles...has arisen no one knows how.”¹²

Historians have tended to agree with the period observers’ contention that the late 1920s marked a watershed in the history of design, and like many of those earlier writers, often have tried to trace a single cause for ordinary consumers’ sudden interest after 1925 in the aesthetics of everyday objects. Many design historians have argued that the rise in women’s demands for what they understood to be attractive and colorful products resulted from their direct or indirect knowledge of the kinds of design displayed at the *Exposition Internationale des Arts Décoratifs et Industriels Modernes* held in Paris in 1925.¹³ Through the medium of reviews, periodicals, books, and subsequent exhibitions, these authors have proposed, American women learned about the Paris exposition and began to demand products based on the kinds of colorful, modernistic design and architecture that had been displayed there (which much later came to be called “art deco” in an abbreviation of the French term *arts décoratifs*).¹⁴

However, the influence of one Parisian exposition should not be considered the only or even the primary reason for a rise in American women’s “style consciousness.” Although a great number of women would have viewed examples of art deco-inspired design in magazines and advertisements, a much smaller number would have seen exhibitions of deco design at Macy’s or at the Metropolitan Museum of Art and only a tiny percentage of the American populace visited the *Exposition Internationale* in person. Exhibitions, magazines, and advice manuals indubitably were significant venues for the teaching and acquisition of taste, but given their self-selecting audience and what was, no doubt, often the casual nature of women’s perusal of them, such sources probably have received more credit than they deserve for reflecting and shaping the tastes of the average female consumer.

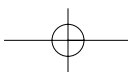
Neil Harris offers perhaps the most balanced and nuanced explanation for the changes in taste and style after 1925, though even it is incomplete. Harris, author of one of the most perceptive and widely read studies of American consumerism in the 1920s, argues that a number of developments within American popular culture—not just the Paris exposition, and not just magazines and



advertisements—had a profound impact on tastes. Harris outlines a number of such factors: the physical reconstruction of American stores (which he believed to be strongly influenced by the 1925 exposition); color advertising and improved photographic printing technology; rationalization on the part of the advertising industry; the film industry; the rise of industrial designers; annual automobile style changes; the large number of brands in any given object category; and the “institutional influences” exerted by museums, fairs, and “great retail establishments.”¹⁵ These developments were all certainly crucial ingredients of consumers’ style consciousness in the late 1920s. However, Harris’s analysis of the causes of “object consciousness”—although it is a valuable and influential one—is nonetheless limited to *informal* means of taste acquisition. That is, he notes influences on taste that were ubiquitous, but that were probably not consciously analyzed by most consumers. Harris does not mention at all the *formal* visual education that many young women received in vocational coursework in high schools and colleges.

Certain kinds of instruction were, however, consciously designed by educators to shape young women’s tastes. Related art, for example, was an offshoot of home economics that was concerned with the aesthetics rather than the efficiency of the household.¹⁶ The term “related art” was intended to contrast with the term “related science,” which was an alternate name in the early part of the century for what laypersons now still often call home economics (although professionals in the field rarely do).¹⁷ The word “related” was chosen to indicate these disciplines’ practical or applied nature, as opposed to the “pure” or creative arts and the “pure” sciences, both of which were increasingly marginalized components of the American curriculum in the teens and twenties.¹⁸ Related art thus was not art instruction as such, but a kind of consumer education in which young women (young men were very rarely enrolled, for reasons that will be discussed below) were required to learn and perform formal analysis, to understand the “principles” of design, to solve “design problems,” and to cultivate a “scientific,” assessing gaze and attitude, ostensibly in order to judge the merits of costume, the decorative arts, and architecture (and to select and arrange such artifacts wisely).

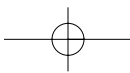
Such formal instruction is important in the formation of tastes because, as art historian Michael Baxandall explains, “The skills we are most aware of,” and that we most enjoy using, “are not the ones we have absorbed like everyone else from infancy, but those we have learned formally, with conscious effort: those which we have been taught.” Formally learned skills, such as the exercise of “good taste,” as it was taught in related art courses, have “rules and categories, a terminology, and stated standards, which are the medium through which they are teachable” and learnable. “These two things—the confidence in a relatively advanced and valued skill, and the availability of verbal resources associated with them



[sic],” Baxandall argues, make learned skills “particularly susceptible to transfer.”¹⁹ Young women who were enrolled in courses that included related art training, no matter their level of internal motivation, would have been required to internalize the principles of “good taste” and the vocabulary of formal analysis, at least to an extent that would allow them to pass the class. They learned a set of skills and a way of looking and thinking that thus was readily transferable to the judgment of the “formerly artless industries” (and to other arenas as well), and that probably had an impact on their tastes equal to or greater than that of more passively absorbed popular culture influences such as those that Harris has outlined. The kind of looking and analyzing that young women performed as part of their studies was a far more active, engaged, and invested type than was the primarily un verbalized and untheorized looking that they had previously been accustomed to level at popular visual culture.

Young women who received related art schooling, I believe, thus constituted a skilled, critical audience that had decided visual proclivities to which the newly professionalized industrial designers had to cater to in order to sell more products. Since women’s tastes determined, to a great degree, the ways in which products would look,²⁰ by examining the ways in which good taste was taught in schools through the medium of related art textbooks such as Harriet and Vetta Goldstein’s *Art in Every Day Life* (1925),²¹ we can arrive at a greater understanding of why “an educated demand” for design arose when it did and in the way it did.²² Further, through analyzing texts such as the Goldsteins’, we also can gain a better sense of the degree and kind of importance that U.S. educators and citizens believed design education—and design itself—to have.

Harriet and Vetta Goldstein, sisters and professors of art in the Division of Home Economics at the University of Minnesota from 1910 and 1914, respectively, to 1949, were trained in a fine arts and art education tradition.²³ Harriet had attended the school of the Art Institute of Chicago, and she and her sister received diplomas from the New York School of Fine and Applied Art in 1916 and 1917.²⁴ The school was, at that time, under the direction of the renowned interior decorator Frank Alvah Parsons, after whom the institution was later renamed. Parsons, recently arrived from Teachers College at Columbia University, had, in turn, been trained there under the auspices of Arthur Wesley Dow, author of the influential 1908 book *Theory and Practice of Teaching Art*.²⁵ Parsons shaped the school’s curriculum to forward the philosophy and echo the organization to which he had been exposed at Teachers College, and it was in such a milieu that the Goldsteins were educated. According to Beverly Gordon, author of an important study of the



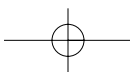
Goldsteins, “The curriculum and philosophy expressed at both [Teachers College and Parsons] was clearly echoed in the Goldsteins’ later work.”²⁶

Dow, for example, believed that artists were not necessarily the best-qualified persons to teach art to others. This belief underlay his 1908 book, which stressed “appreciation,” rather than the development of artistic skill, as the proper aim of art education. The epigraph to the first chapter of his book, in fact, stated that “[t]he true purpose of art teaching is the education of the whole people for appreciation.”²⁷ The method by which Dow hoped to achieve this goal was a quasi-scientific one based on the study of the “principles” of art and design. His approach, according to Gordon, “was adopted almost universally in art teacher training programs, although the training in fine arts departments (i.e., for practicing artists) still stressed life drawing rather than principles or rules.”²⁸

The divide between appreciation and practice that characterized Dow’s work, which was a book intended for art educators rather than their pupils, was one that was preserved and further codified thirteen years later in the Goldsteins’ 1925 book *Art in Every Day Life*, the first related art textbook.²⁹ Its content, however, was not only an extension of the teachings of Dow and Parsons, but also the distillation of more than a decade of debate in the American Home Economics Association (AHEA) and the *Journal of Home Economics*, to which Harriet Goldstein was a frequent contributor.³⁰ In the book, the Goldsteins made it clear that their teachings were directed not at creators of art, but at those people who wanted or had to be able to purchase and arrange consumer goods tastefully. The purpose of the book, the authors avowed,

is to show the principles of art as they are seen in familiar works of art, and as they are related to every day problems, such as house design and decoration, store decoration, costume design, advertising, and city planning. In each of these fields, one works with sizes, shapes, colors, and textures, which must be selected and arranged in accordance with principles of beauty. These principles are fully explained, and they are applied in so many various fields that even the person without native ability can learn to apply them to any problem (p. vii).

The focus of the book thus was less on the creation of new designs than on the wise selection of preexisting ones—that is, on appreciation and judgment. The Goldsteins acknowledged that many people would not even consider their everyday activities to be art: “One may say that he is not really concerned with art, because he never intends to make a hat, a dress, or a table.” However, they noted that although “[t]his may be true...he [sic] is likely to select such things and perhaps help someone else select them, and after they are purchased they have to be related to other things. Solving these



problems of purchasing and arranging requires the same knowledge of the principles of art as goes into the creation of objects. The original idea, and the actual process of making are all that the purchaser does not have to supply” (pp. 4–5). In other words, the Goldsteins suggested that art appreciation and consumption were, by no means, pursuits inferior to art creation, although this was a point that most persons of the era likely would have disputed.

However, even if the Goldsteins did not forthrightly acknowledge the widely held cultural bias that celebrated creation over appreciation and selection, their book nonetheless served the purpose of gendering the acts of making and purchasing (which, in effect, meant acknowledging and accepting that bias). The Goldsteins stated in chapter one, for example, that “[t]he woman who selects beautiful furnishings for her home or the clerk who chooses the right hat and dress for a customer has done a piece of work that calls for much the same kind of knowledge as the man who designs and paints a picture.” (p. 4) The clerk in this example is of indeterminate sex, but the consumer is clearly defined as female and the artist as male. Given the authors’ otherwise quite consistent use of masculine pronouns throughout the book, their gendering of artistic roles in this example seems indicative of their assumptions about men’s and women’s roles more generally. Further, the second half of the book, the section in which the principles learned in the first half were applied to specific problems, was dedicated almost entirely to what would have been considered feminine pursuits—seventy pages to dress design; 163 to interior design (which dealt only with the home, not the workplace or the shop window); and a mere seven pages to city planning. So, despite the Goldsteins’ claims that their book could be used as “a text-book for students of art, of home economics, and of salesmanship, and...[as] a helpful reference book for salesmen, store decorators, advertisers, and homemakers” (p. viii)—some of whom would presumably be male—it is clear that they not only assumed their audience to be female, but that they also believed that those young women were more likely to need skills as consumers than as creators.

In their gendering of consumption, and in their insistence that young women needed instruction in it, the Goldsteins coincided with the then-current educational philosophy of vocationalism or social efficiency (the two were closely related), in which young members of society were trained to perform the jobs that they were most likely to take up as adults.³¹ The Goldsteins apparently felt that good taste in consumption was so important a life-skill for young women, that all of them should be required to take it. One of Harriet’s goals as a chair of the Related Art Section of AHEA, according to Gordon, was to legitimize the discipline of related art and to institute it as “an essential curriculum component for all students enrolled in home economics teacher training

programs, and by extension, for all [female?] students enrolled in public schools.”³² Vocationalists, like proponents of social efficiency, construed education as “above all a process of getting ready for adulthood,” which entailed “specialization of function” in order to train “the next generation directly in the efficient performance of the activities that define[d] their social role.”³³ It was, thus, a conservative and highly gendered type of education that tended to perpetuate the status quo; boys received manual and industrial training to prepare them for the workplace, and women received education in home economics and occasionally in merchandising and advertising, as they did in *Art in Every Day Life*, to prepare them for lives as homemakers (for it was assumed that any woman, even if she worked, nonetheless would be responsible for a home).³⁴ There were other kinds of vocational training open to both men and women such as stenography, typing, and shorthand, but these, despite huge demand for courses on the part of students, were not supported by the 1917 Smith-Hughes Act, which mandated and provided funds for vocational teacher training in universities for the purpose of providing vocational education teachers for high schools.³⁵ It is tempting to suggest that the reason business training was not funded by legislators was precisely because it was not gendered, and thus did not preserve the conservative ideal of the woman in the home.³⁶

As a result of the interest in vocationalism in the 1920s, the high school and college audience for *Art in Every Day Life*, or at least for related art generally, was a rather large one. High school principals’ interest in increasing the number of vocational offerings, combined with the funding provided by the Smith-Hughes Act, meant that the percentage of high schools offering home economics (and thus often some related art training as well) jumped from fifty-three percent in 1915–17 to ninety-five percent in 1930–31, and that the number of female vocational teachers (read “home economics teachers”) more than tripled between 1918 and 1930.³⁷ Despite these astonishing figures, the percentage of high school students enrolled in home economics courses rose from 12.9 percent in 1915 to just 16.5 percent in 1928. Nonetheless, this means—assuming a fairly equal sex ratio in the schools—that roughly a third of female high school students received at least some home economics training, and in certain schools, much more than that. In the town of Stanford, Illinois (population 600), for example, a three-year sequence of home economics was required for all young women, in which the third year focused on the home, and no doubt included instruction in related art.³⁸ In larger and more specialized institutions such as the Milwaukee Vocational School, young women were taught as part of their home economics coursework “how to shop wisely...judge the quality of goods, acquire ‘good’ taste in color and design, and select suitable goods in personal dress and in the furnishing and decorating of the home”—exactly those skills that

fell within the purview of related art education.³⁹ Although related art was probably most often combined with the home economics curriculum in high schools, rather than taught as a separate subject as in many university courses of study, a significant portion of the female population would have been exposed to at least basic principles of “good taste” in home and dress, particularly after *Art in Every Day Life* made its appearance, and teachers trained in universities would have been exposed to its scope and methods, which made the systematic teaching of good taste seem important and feasible.

Oddly enough, though home economics—and thus related art—was funded by the Smith-Hughes Act, it was not particularly vocational in nature, at least not in the sense that instruction in it led obviously and directly to a paying job. Instruction in it therefore had to be justified by means other than increased employability for students.⁴⁰ Senator Carroll Page (R-Vermont), a member of a 1914 congressional commission charged with reporting on the future of vocational education, argued for the inclusion of home economics in the Smith-Hughes Bill on the grounds that “Without this knowledge, thousands of homes will be wrecked, thousands of lives ruined, and hundreds of thousands made unhappy for no other reason than that the homekeepers of our country have no adequate training in that most important of all duties, the making of a well-regulated, intelligently-conducted household.” He continued by stating that “we must give to our girls a training different from that with which we now provide them if crime, disease, divorce, and race suicide are not to continue to increase.”⁴¹ Clearly, this kind of justification primarily was social; home economics, the Senator implied, was essential to the smooth functioning of society, and if it were vocational, it was simply because “homekeeping” was considered the proper job of womankind.

The Goldsteins, although they did not resort to the alarmist rhetoric of Senator Page, also justified related art’s usefulness as primarily social rather than vocational. First, they argued that instruction in taste was important “For the sake of economy as well as beauty,” stating that those who chose well would “be satisfied to live with [their] things until they are actually worn out” (pp. 1, 5). Second, they argued that “When beauty is expressed in our surroundings, it becomes a part of our life and our personality”—that is, that the “quality of things” (which they said was “as difficult to define as personality in an individual,” making the link between the two quite explicit) shaped one’s personality or character (pp. 1, 321). “It would take an unusually strong character to remain true to high ideals of truth and sincerity if dishonesty were the keynote of the home surroundings,” they stated, for “mere things have a tremendous influence in forming character” (p. 321). In fact, the Goldsteins seemed to imply that taste and character were almost synonymous, an assertion that is supported by their statement in

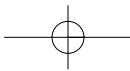
The captions provided below are in quotation marks because they are taken verbatim from the list of illustrations in the front of the Goldsteins' book, and it should be clear that these are their words, not the authors. All images are from Harriet and Vetta Goldstein, *Art in Every Day Life* (New York: The Macmillan Company, 1925).

the caption to their figure 2 (fig. 1), that the room illustrating poor taste "would have a bad influence upon the people who might live in it, for it would tend to dull their sense of beauty" (p. 3, caption to fig. 2). Third, the Goldsteins further justified the teaching of good taste on the grounds that costume and interior design not only shaped, but also expressed, one's personality. "When a person chooses something to put into his house," the Goldsteins claimed, he is doing two things: first, he is gratifying some need or desire and, second, through the qualities which that particular object possesses, he is stating to everyone who can interpret the meaning of such things what sort of person he is. Through his clothes, his house, his pictures, books, furniture, and other accessories, a person proclaims himself; his sincerity or insincerity, his egotism or his modesty. The person who makes an effort to understand what different patterns and colors denote makes a deliberate effort to express his best personal qualities through his choices (p. 321).

In other words, the Goldsteins suggested that one inevitably would be judged by one's possessions, and that it was thus wise to make choices that would reflect favorably upon oneself. By presenting

Figure 1
"A living room which shows poor taste"
(from Goldstein, fig. 2, p. 3).

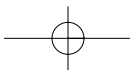




good taste as a skill that fostered good economy, shaped the family character, and expressed personality, the Goldsteins probably did succeed in convincing many students and administrators alike that related art was worth studying, even if it did not help young women get a job in the same way that business training, for example, did.

The Goldsteins, then, both helped to articulate the uses of instruction in taste and to make the goal of widespread instruction in it more feasible through the creation of their book. As the first related art textbook, co-written by the acknowledged leader of the field, *Art in Every Day Life's* authority and influence were unparalleled. It was not only the text that future related art teachers were likely to have used in their own university studies, but also was the model for (if not the very text used in) their teaching of good taste to both high school and college students.⁴² *Art in Every Day Life*, reprinted numerous times every year, existed in four different editions (the last of which was revised in 1955, and was printed annually until at least 1966) and sold more than 249,000 copies.⁴³ Within the ten years after its 1925 publication date, several more textbooks in the field were written, most of which emulated the structure and methods of *Art in Every Day Life*.⁴⁴ Its impact on subsequent authors, and on the field as a whole, was enormous.

The claims the Goldsteins made for their book also were large, although its audience and scope were, in reality, quite limited. Not only did the Goldsteins state that their book would be of use to a surprisingly wide audience (as discussed above), but they also claimed that their methods were applicable to “any art problem” (p. 221). Since they defined good taste as “the application of the principles of design to the problems in life where appearance as well as utility is a consideration” (p. 1), they could, in theory, have discussed just about any kind of object. However, the examples they illustrated were limited to a rather narrower scope: decorative arts (furnishings, bibelots, flower arrangements, etc.), fine arts, house facades, textiles and costume, room arrangement, shop windows, and advertising layouts. This choice of examples perhaps was their nod to vocationalism, for, as has been noted, most young women’s future employment was assumed to be homemaking (or, occasionally, marketing, window dressing, or advertising, as the last two examples make clear). This choice of examples not only marked the Goldsteins’ attempt to be vocational in focus, however, but perhaps also was their way of avoiding encroaching on the territory staked out by home economists. The Goldsteins avoided any discussion whatsoever of the kitchen and the bathroom (those two rooms most dear to home economists’ interests), did not discuss the appearance of machines or appliances (which one could call evidence that, as of 1925, such items were not considered by most people to be objects in which “appearance as well as utility is a consideration”) (p. 1), and did not so much as illustrate a floor plan, perhaps for fear that



their own discipline—based on aesthetics and meant to develop good taste—would be confused with the floor plan-obsessed discipline of home economics, which was modeled more directly on science, and which was intended in contrast to cultivate efficiency and hygiene.⁴⁵ The extent of the Goldsteins' avoidance of the practical problems of function and efficiency was such that they barely even mentioned the uses to which furniture was put; they justified their placement of chairs and tables in one illustrated living room (fig. 2) solely on aesthetic grounds, with no mention at all of such practical concerns as creating usable conversation spaces (though conveniently enough, the chairs they placed at angles in the corners of the room “for the sake of variety” also served the purpose of making a usable conversational grouping with the sofa on the opposite wall) (pp. 31–32).

Even if they drew most of their examples from costume, certain rooms of the home, and window displays, what the Goldsteins taught in *Art in Every Day Life* was not limited in application to those arenas. What they taught was a way of thinking about design and “design problems” that, at least in theory, allowed any young woman to acquire good taste through diligent study, and to consciously apply it to any design problem until the “wished-for time is reached when the right thing is done unconsciously.” (p. 3) For the Goldsteins, learning how to be tasteful did not entail, as it did in many home decorating advice manuals before and after, the

Figure 2

“Rearrangement of the room in Fig. 22” (from Goldstein, fig. 23, p. 31).



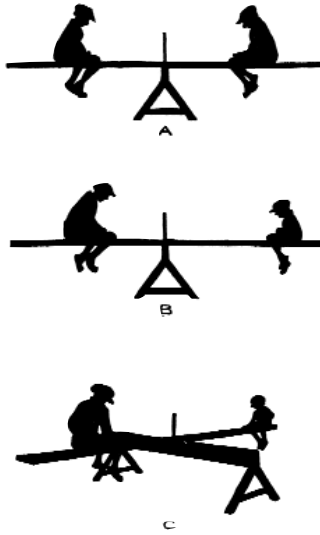


Figure 3
 "The see-saw used to illustrate balance"
 (from Goldstein, fig. 70, p. 84).

study of period styles of furniture or the memorization of seemingly arbitrary "do's" and "don'ts"; rather, it meant acquiring skill at formal analysis and use of specialized vocabulary and concepts, which were considered "objective," even "scientific."

In order to hone the eyes of their students, the Goldsteins illustrated their book copiously enough that students could see differences in design quality for themselves, rather than merely reading about them. There were so many illustrations—more than 285—that the authors could suggest that "it is possible quickly to review the facts contained in the book by studying the illustrations," which were "fully described in the legends." (p. vii) Their teaching method throughout the book depended on using these carefully chosen illustrations (many of which were photographs taken by Vetta) to show both good and bad taste in clothing, linens, furnishings, picture frames, and the like. The detailed captions and the body of the text both explained why, in each case, the tasteful objects were tasteful and the others were not. And, as Baxandall has noted, when text is paired with an image, there is a "sharpening to-and-fro," a "reciprocal reference between the word and the object."⁴⁶ Pedagogically, the Goldsteins' method certainly was an advance over that which characterized most previous books on good taste in dress and furnishings, for most only included illustrations of "good" objects and ensembles.

In addition to illustrating their points copiously so that they would be easily grasped by students, the Goldsteins also organized their book in such a way that simple ideas and tasks gradually progressed to more complex ones. They broke design down into clearly articulated components and, as Baxandall points out, it is through such a system of "rules and categories, a terminology and stated standards" that a body of knowledge becomes teachable.⁴⁷ The very first categories the Goldsteins defined (after dealing in chapter one with "The Importance of Good Taste") were those of structural and decorative design. The Goldsteins, taking an Arts-and-Crafts-like stance, came out strongly in favor of structural design, and explained that, in order to be tasteful, decorative design should be kept to a minimum, and that when it was present, it must relate to the structure of the object it adorned and be conventionalized rather than naturalistic. In chapters three through seven, they defined what they considered to be the five fundamental principles of design: harmony, proportion, balance, rhythm, and emphasis. The Goldsteins demonstrated the principle of balance, for example, by illustrating such everyday things as children on a see-saw (fig. 3); house facades (figs. 4, 5); advertisements (fig. 6); shop windows (figs. 7, 8); furnishings (fig. 9); and costume (figs. 10, 11)—all real-life design problems to which students presumably could relate. In these early chapters, the Goldsteins not only taught specialized vocabulary and concepts, but also argued that students who made use of these seemingly objective and absolute principles would

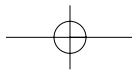


Figure 4
"A house which is balanced bisymmetrically"
(from Goldstein, fig. 79, p. 92)



Figure 5
"A house which shows occult balance"
(from Goldstein, fig. 80, p. 93).
(from Goldstein, fig. 87, p. 100).



Figure 6
"Two advertisements showing the appropriate use of formal and informal balance"
(from Goldstein, fig. 82, p. 95).



Figure 7
"A window display showing several objects in occult balance"
(from Goldstein, fig. 86, p. 99).

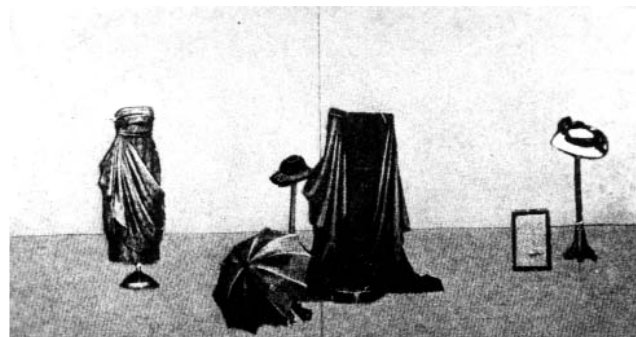


Figure 8
"A window display which is unbalanced"
(from Goldstein, fig. 86, p. 99).

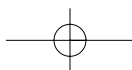
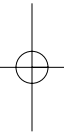
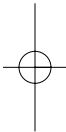
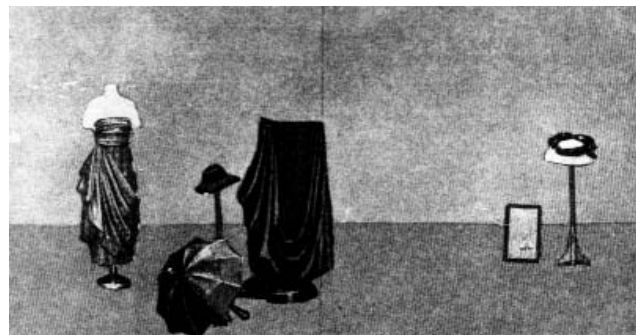




Figure 9
 "A decorative arrangement showing
 bisymmetric balance"
 (from Goldstein, fig. 92, p. 105).



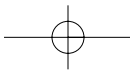
Figure 10
 "A dress which is formally balanced"
 (from Goldstein, fig. 99, p. 112).



Figure 11
 "A dress which is informally balanced"
 (from Goldstein, fig. 100, p. 113).

naturally select simple and conservative styles in furnishings and dress, and prefer low contrasts and restrained patterns to bold and gaudy patterns and colors. Students also were given carefully justified explanations for why the golden rectangle was the perfect proportion; why either formal or informal balance was acceptable, and when each should be used; why a clear center of emphasis should be present in any design or arrangement; and why Greek and Japanese art, design, and architecture were the pinnacles of good taste, different in nature and appearance through they were. After the discussion of the five fundamental principles and these "corollaries" to them came two chapters on color, which took the reader to the midpoint of the book, and which were astonishingly technical in nature, teaching students up-to-date scientific nomenclature in both the Prang and Munsell systems.⁴⁸ All of the information from the first half of the book—whether about structural and decorative design, the five principles, their corollaries, or color theory—indeed was of the sort that could be applied not only to the analysis of furniture and clothing, but also to venues that the Goldsteins did not explicitly address, such as the "artless industries."

The sections on problem-solving and design creation, which constituted the second half (almost exactly) of the book, also would have been easy to apply to other venues. This is in part because the Goldsteins' problem-solving technique itself had been borrowed from another discipline—as the Goldsteins noted, it was "based upon the generally accepted steps in solving a problem," namely, the scientific method (p. 221). Students were told that, in order to solve an "art problem"—in fact, even to define something as an art problem—they first had to decide whether the object would repay

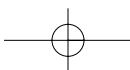


the time or money invested in procuring it; whether the object should be made or purchased; how much money should be spent on it; and what materials would be durable and easy to maintain; etc. Once these parameters were set and the nature of the problem was established as a related art one, it could be solved by:

- 1 Recognizing the problem, which is the setting up of a definite aim or purpose to be accomplished.
- 2 Making a plan for carrying out the problem, which involves collecting all the information related to it.
- 3 Carrying out the plan.
- 4 Testing the results and making a final judgment of the success or failure of the plan before accepting it or discarding it to make another (p. 222).

The second half of the book thus showed students how to apply, with the help of the scientific method, the principles they had learned in the first half of the book to real art problems they would encounter in their lives; their first example of “Solving an Art Problem” was the homely one of choosing a suitable rug for a dining room.

In the second half of the book, the Goldsteins not only solved art problems, but also discussed the “meaning” of design, a topic they had almost completely avoided in the first half. By this term, the Goldsteins seemed to mean the way in which “every picture, every piece of furniture, or drapery pattern speaks its note of sentiment or sentimentality, social ambition or friendly domesticity, vulgarity or fineness”—in other words, they seemed to imply that the meaning of objects lay in what they could reveal about their owners (p. 322). The goal of each student of interior design, the Goldsteins made clear, should be to have “the furniture express the kind of person that its owner would like to be.” (p. 323) In solving interior design problems, then, the woman of good taste would not only be concerned with the form of objects, but also would pay attention to their “meanings.” One of these was the “gender” of furnishings. According to the Goldsteins, women’s rooms should be “feminine” in quality (expressed through “a little lighter type of furnishing,” a “smaller, finer pattern in the drapery material...a little more grace in the lines of the furniture and other objects”; “a delicacy in the details,” fine textures, and lighter colors such as pale blue or light pink) (pp. 323–5). Similarly, men’s rooms were supposed to be “masculine” (expressed through “no appearance of ‘daintiness,’” a “forceful bit of dark and light or color,” “sturdiness,” “a more severe line,” and “a little larger-scale”) (pp. 324–328), and guest rooms “impersonal” in quality, which meant that they should be gender-neutral so visitors of either sex could be comfortable in them (pp. 323–4). Other kinds of “meaning” to which the Goldsteins urged their readers to attend were “domestic” and “social” qualities. The Goldsteins defined the former as informal and unpreten-



tious in spirit (expressed, for example, through informal balance and through neo-Tudor and neo-Jacobean styles in architecture and design), and the latter as formal and grand (expressed through formal balance and through classicizing and Italian Renaissance styles in architecture and design). The Goldsteins also implied that colonial furniture and architecture were both formally and morally good, and (oddly enough, given their interest in structural design) that mission furniture and bungalows were bad, though neither of these latter preferences was expressed as a design theory as such, but rather inserted surreptitiously into the illustrations.

Similarly, the Goldsteins also promoted the idea that design choices in costume revealed personality, and further suggested that costume could be used to counteract “defects” in one’s figure or personality: “A woman any of whose proportions vary from the normal will select dresses with lines designed to direct the eye away from the unusual feature, and she may still further conceal her defect by building out some other part of her dress.” (pp. 75–76) However, physical “defects” were not the only problems that dress could supposedly correct; although the Goldsteins recommended that “the quiet person will need to select clothing that is not conspicuous,” they believed that “she should wear some accent in color, or light or dark, in order to supply some of the sparkle which her personality lacks.” (p. 252) In other words, “she must have in mind constantly that her dress [and, by extension, all her possessions] should be an expression of her [desired?] personality, and that all the lines, colors, and textures should be chosen to that end.” (p. 251) That objects could be used both correctively and expressively perhaps was the most important lesson the Goldsteins taught, both in terms of its impact on industrial design and its implications for students’ understanding of their world.

One might argue that the skills that the Goldsteins developed in students were foremost those of performing formal analysis and articulating and ordering their thoughts about design for purposes of both description and assessment. The Goldsteins indeed did teach students to compare two objects and to make value judgments about the quality of the design in each, a valuable sort of training for consumers who were faced, as Neil Harris has noted, with a great number of brand choices (meaning that they had to narrow down their purchase not only by price and quality, which often were similar from brand to brand but also by design characteristics, which were often used to distinguish one label from another). However, I would argue that even more significant is the fact that the Goldsteins taught their students that design had social importance, which even the captions to their first two illustrations immediately made clear (figs. 12, 1). Not only did they state in the first chapter of the book that design shaped character in the home, but also that it revealed “personality”; they believed that it was a signifier for character, since “the possessions of each person...reflect

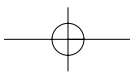
Figure 12
 "A living room which emphasizes
 the importance of good taste"
 (from Goldstein, fig. 1, p. 2).



his personality because he [can] not help surrounding himself with things which [reflect] him." (p. 331) In the belief system the Goldsteins promoted, a person who knew how to analyze design thus also had the skills to assess people.

For those who held such a worldview, it was imperative, then, to be certain that one's own personality, as revealed through design, was not an unflattering one. Design, the Goldsteins made clear, could be used to highlight good points and hide "defects," whether those be a stout figure or a tendency to either introversion or brashness. The Goldsteins thus ultimately taught that personality was malleable and subject to self-control, but that it was goods and products that made change possible, or at least that expressed change in a way that others could see. So even if the Goldsteins' rhetoric often was one of conservatism and economy in the deployment of goods, what they nonetheless encouraged was construction of the personality through design and the judging of others through that same means. If students were, at base, taught that good taste and good character (or at least good personality) were the same thing, that was surely an incentive to consumerism. It also was a philosophy that endowed products with almost magical powers. The Goldsteins encouraged, intentionally or not, a fetishistic understanding of products, whereby any ill was believed to be correctable if only the right product or object could be invoked.

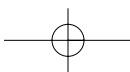
With educators defining this kind of role for design—considering it a means both to judge others and to define the self—it is clear that it would be in any young woman's best interest to be certain that all of her possessions, not just the "artful" ones, made a positive statement about her and her family. Thus these young women's skills in formal analysis—taught in such a way as to be easily transferable and pridefully employed—were ripe to be turned

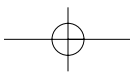


on design of all sorts, even the “formerly artless” kinds. The lessons of related art instruction—both formal and social—were, I believe, in large part responsible for consumer demand for designs such as Loewy’s and Dreyfuss’s. These are objects—to a much greater degree than their predecessors—in which the use of color, structural and decorative design, proportion, and balance, etc. conforms to the standards of good taste laid out in related art courses. Their appearance was of the sort that many young women not only would have been trained to appreciate on formal terms, but also, as a result of the “meaning” they were led to believe objects had, to greatly desire.

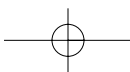
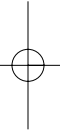
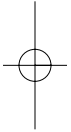
Related art is, of course, not the only, and probably not even the most important, factor in the rise of consumers’ “object consciousness” in the late 1920s and 1930s, but the effect of *Art in Every Day Life* and of women’s vocational training more generally should not be ignored as a potentially significant factor in this sudden change. However, the broader significance of related art training lies not in design itself, but in social relations. That the kinds of lessons discussed above were taught within the context not of advice manuals, or advertisements, or films—though they certainly were present there as well—but in government-sanctioned, so-called vocational courses for women in high schools and colleges, implied that society as a whole, or at least those in power, wished to promote the ideas that women were properly consumers (in the home) not creators (in the workplace); that one’s possessions were signifiers of one’s character; that good taste or good form in objects or persons was equivalent to good “character”; and that one had to consume in order to define, refine, and communicate one’s identity to others. The related art writers’ instruction can be considered less an attempt to broaden students’ horizons or to instigate positive social change than it was a forthright form of social control, co-opted from the theory of scientific management, which was designed to perpetuate efficiently the contemporaneous form of the polity by reinforcing gender roles and furthering the “incorporation of America” by encouraging consumerism.⁴⁹

Thus related art educators such as the Goldsteins, although at times they touted the opportunities for personal growth and life enrichment that their teachings afforded women, were nonetheless participants in a pervasive, essentially conservative educational reform movement that unfortunately is one that still plays a prominent role in educational theory today. The related art theorists did not even pretend to fit students for a dynamic, option-filled future; instead, they taught them to accept and ennoble their fated lot, even if that meant finding beauty “in straw, in eggs, in cabbages.”⁵⁰ Although they did, to some degree, define related art as a path to personal fulfillment and enjoyment (the Goldsteins claimed in the third edition of their textbook that “we study art mainly for the happiness it will bring into our lives,” p. 3) the pleasure that the



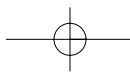


study of art could bring to an individual for its own sake was never the emphasis of *Art in Every Day Life* as it was, for example, of John Dewey's writings.⁵¹ Instead, the Goldsteins and other related art educators were aligned with education "efficiency" proponents such as Joseph Mayer Rice and Arthur Wesley Dow in positing that "[a] training [such as art appreciation] that calls for a very direct exercise of the critical powers, developing judgment and skill, is a training that will increase the individual's efficiency [not pleasure!] whatever his calling may be."⁵² Related art, which taught young women to appreciate, select, and tastefully arrange well-designed objects—and gave them compelling reasons for doing so—thus was a government-sanctioned form of vocational training that fitted young women specifically and efficiently for perpetuating the existing power structure, while simultaneously ensuring their feeling of importance—and actual relative powerlessness—within it.

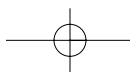
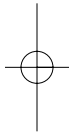


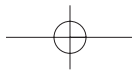
- 1 Raymond Loewy, *Never Leave Well Enough Alone* (New York: Simon and Schuster, 1951), 11.
- 2 Loewy, 11.
- 3 See, for example, Jeffrey Meikle, *Twentieth Century Limited: Industrial Design in America, 1925–1939* (Philadelphia: Temple University Press, 1979), 14–15 and 106–108. Christine Frederick stated in 1929 that “students of the subject” estimated that women dominated eighty percent of household expenditures, and she herself believed that the figure was closer to ninety percent. Frederick, *Selling Mrs. Consumer* (New York: The Business Bourse, 1929), 12–13. Designer Norman Bel Geddes wrote that the “influence of the feminine point of view on sales” was “tremendous,” and that, “with regard to most purchases, the influence of women is paramount.” Geddes, *Horizons* (Boston: Little, Brown and Company, 1932), 77. For other examples of period commentators’ assumptions that consumers were female, see Carma R. Gorman, “An Acquired Taste: Women’s Visual Education and Industrial Design in the United States, 1925–1940” (Ph.D. dissertation, University of California, Berkeley, 1998): 175–180.
- 4 “Both Fish and Fowl,” *Fortune* (February 9, 1934): 98.
- 5 Meikle notes that “The term ‘industrial design’ first appeared in 1919, but its meaning bore little resemblance to the profession that began evolving ten years later,” Meikle, *Twentieth Century Limited*, 19.
- 6 These examples are taken from Meikle, who discusses the ways in which “success” was measured after such products were redesigned. Meikle states that “According to *Forbes*, Sears sold 20,000 Toperators in six months and precipitated a ‘stampede’ for new designs among other manufacturers,” *Ibid.*, 102. According to Arthur J. Pulos, sales of Loewy’s 1934 Coldspot were double those of its predecessor, and subsequent models’ sales climbed to 65,000 units and later to 275,000 units. Pulos, “Nothing Succeeds Like Success: Raymond Loewy: The Thirties and Forties” in *Raymond Loewy: Pioneer of American Industrial Design*, edited by Angela Schönberger (Berlin: International Design Center and Prestel Verlag Munich, 1990), 80–81.
- 7 Roy Sheldon and Egmont Arens, *Consumer Engineering: A New Technique for Prosperity* (New York: Harper and Brothers Publishers, 1932), 77.
- 8 Meikle, in fact, states that “Businessmen rarely agreed on how to introduce beauty into their products, but most recognized the factors that made the public demand it,” Meikle, *Twentieth Century Limited*, 14. I would dispute this contention, given that nearly every writer states different “causes” for the demand for beauty, as should be clear in the text above.
- 9 Harold Van Doren, *Industrial Design: A Practical Guide* (New York: McGraw-Hill Book Company, Inc., 1940), 43.
- 10 The color-in-the-kitchen movement was the change in the 1920s from ubiquitous white, gray, and buff color schemes on walls, appliances, built-ins, and cookware to bright, “cheerful” color finishes. See Frederick, *Selling Mrs. Consumer*, 355. Also see Meikle, *Twentieth Century Limited*, 14–15, for a discussion of the influx of color in design in the 1920s. The contention that Frederick’s book was a best-seller comes from Sarah Stage and Virginia B. Vincenti, “Who Speaks for the Consumer?” in *Rethinking Home Economics: Women and the History of a Profession*, edited by Sarah Stage and Virginia B. Vincenti (Ithaca: Cornell University Press, 1997), 234.
- 11 Frederick was “proud to say that I had something to do with the ‘color-in-the-kitchen’ development,” which she believed had been initiated in large part by her introduction of colorful French cookware to American department stores. Frederick, *Selling Mrs. Consumer*, 355–357.
- 12 Earnest Elmo Calkins, in his introduction to Sheldon and Arens, *Consumer Engineering*, 6.
- 13 These scholars include Jane N. Law, who states that “The sophisticated styling of many of the products displayed at the 1925 *International Exposition of Decorative Arts and Modern Industry* in Paris had impressed American visitors. Before long, American advertising agencies began to urge their clients, the manufacturers of consumer goods, to make their wares more appealing to the buying public by giving them a more enticing appearance.” Jane N. Law, “Designing the Dream” in *Streamlining America: A Henry Ford Museum Exhibit*, Fannia Weingartner, ed. (Dearborn, MI: Henry Ford Museum and Greenfield Village, 1986), 18–36. Similarly, Dianne H. Pilgrim, one of the curators for the 1986–87 Brooklyn Museum exhibition *The Machine Age in America, 1918–1941*, claims that “The catalyst for change in awareness and interest (in modernistic art and design on the part of ordinary Americans) was the *Exposition Internationale des Arts Décoratifs et Industriels Modernes*.” Dianne H. Pilgrim, “Design for the Machine” in Richard Guy Wilson, Dianne H. Pilgrim, and Dickran Tashjian, eds., *The Machine Age in America, 1918–1941* (New York: The Brooklyn Museum in association with Harry N. Abrams, Inc., 1986), 277. Karen Davies states that “The 1925 Paris *Exposition Internationale des Art Décoratifs et Industriels Modernes* stimulated a new interest in modern design in this country.” Karen Davies, *At Home in Manhattan: Modern Decorative Arts, 1925 to the Depression* (New Haven: Yale University Art Gallery, 1983), 16. Donald J. Bush writes of the year 1927 that “The interest in modern styles and motifs [was] induced by the Paris Exposition of two years earlier . . .” Donald J. Bush, *The Streamlined Decade* (New York: George Braziller, 1975), 16.

- 14 The term "art deco" was first used by the *New York Times* on November 2, 1966. *Oxford English Dictionary*, 2nd ed., s. v. "art deco."
- 15 Neil Harris, "Museums, Merchandising, and Popular Taste: The Struggle for Influence" and "The Drama of Consumer Desire," both in *Cultural Excursions: Marketing Appetites and Cultural Tastes in Modern America* (Chicago: University of Chicago Press, 1990), 66–68 and 184–188.
- 16 The Related Art Section of the American Home Economics Association (AHEA) was established in 1922; Harriet Goldstein (a figure to whom we will return) was its first chair. Beverly Gordon, "Related Art: Aesthetic Education By and For Women" (paper presented at the College of Human Ecology, Cornell University, Ithaca, NY, February 1994): 8.
- 17 On the difficulty of choosing a satisfactory name for the relatively new professionalized field of home economics, see Emma Seifrit Weigley, "It Might Have Been Euthenics: The Lake Placid Conferences and the Home Economics Movement," *American Quarterly* 26 (March 1974): 79–96, cited in Stage and Vincenti, "Who Speaks for the Consumer?" 5. Other commonly used terms for related art were "household art" and "domestic art." See Gordon, "Related Art": 3.
- 18 Herbert Kliebard, *Schooled to Work: Vocationalism and the American Curriculum, 1876–1946* (New York: Teachers College Press, Columbia University, 1999), 122–125 and 160–162.
- 19 Michael Baxandall, *Painting and Experience in Fifteenth-Century Italy: A Primer in the Social History of Pictorial Style* (New York: Oxford University Press, 1972), 37–38.
- 20 See Gorman, "An Acquired Taste": 175–187.
- 21 The title *Art in Every Day Life* was changed to *Art in Everyday Life* in the 3rd edition (New York: The Macmillan Company, 1940).
- 22 The quotation is from Van Doren, *Industrial Design*, 43.
- 23 Esther Dendel, *Beauty and the Human Spirit: The Legacy of Harriet and Vetta Goldstein* (St. Paul, MN: The Goldstein Gallery, 1993), 8.
- 24 Dendel, 63.
- 25 Gordon, "Related Art": 11 and Arthur Wesley Dow, *Theory and Practice of Teaching Art*, 2nd ed. (New York: Teachers College, Columbia University, 1912; 1st ed., 1908).
- 26 Gordon, "Related Art": 11.
- 27 Dow, *Theory and Practice of Teaching Art*, 1.
- 28 Gordon, "Related Art": 11.
- 29 All subsequent references to this book, unless otherwise indicated, will be to Harriet and Vetta Goldstein, *Art in Every Day Life* (New York: The Macmillan Company, 1925).
- 30 Gordon, "Related Art": 7–8.
- 31 Herbert Kliebard, *The Struggle for the American Curriculum, 1893–1946* (New York: Routledge, 1991), 120–1.
- 32 Gordon, "Related Art": 8.
- 33 Kliebard, *Schooled to Work*, 120–1.
- 34 Kliebard, *Schooled to Work*, 120.
- 35 See Kliebard, *Schooled to Work*, 132–142, and Rima D. Apple, "Liberal Arts or Vocational Training? Home Economics Education for Girls" in *Rethinking Home Economics*, 79–95.
- 36 See Apple, "Liberal Arts or Vocational Training?": 84–85.
- 37 High school principals, when asked what changes they would like to make to their curricula, "gave the highest priority to adding more vocational, commercial, and home economics courses," according to Kliebard, *Schooled to Work*, 160. For enrollment and employment figures, see U.S. Department of Interior, Office of Education, *Program of Studies Bulletin*, No. 17 (Washington, DC: Government Printing Office, 1933), cited in Kliebard, *Schooled to Work*, 135; and National Advisory Committee on Education, *Federal Relations to Education, Part 2: Basic Facts* (Washington, DC: National Capital Press, 1931), 222, cited in Kliebard, *Schooled to Work*, 150.
- 38 John C. Chiddix, "School Surveys in the Smaller Communities Illustrated by a Survey of the Stanford (IL) Schools," *Normal School Quarterly* 23 (July/October 1925): 9–10, cited in Kliebard, *Schooled to Work*, 159.
- 39 Kliebard, *Schooled to Work*, 109.
- 40 For information about careers outside of the home that home economists sometimes entered, see the articles in the section titled "They Cannot All Be Teachers: Forging Careers in Home Economics" in Apple, *Rethinking Home Economics*, 123–184.
- 41 Senator Carroll Page, quoted in Apple, *Rethinking Home Economics*, 84.
- 42 Gordon believes that the book "was used by those who had learned with it in college when they went out to teach in high schools." Gordon, electronic correspondence with author, February 18, 1998. However, Delores Ford of the Goldstein Gallery at the University of Minnesota (a decorative arts collection formed by the Goldstein sisters' donated teaching materials) states that *Art in Every Day Life* "may have been used in high school[s] but as far as we know it was originally intended as [a] college text." Electronic correspondence with author, January 27, 1998. It is difficult to ascertain to what extent it was used as a high school text.
- 43 The sales figures are from Gordon, "Related Art": 18. I have not been able to verify these figures with the publisher.
- 44 Perhaps the best example of the influence of *Art in Every Day Life* can be seen in Mabel B. Trilling and Florence Williams, *Art in Home and Clothing* (Philadelphia: J. B. Lippincott, 1928); the authors include *Art in Every Day Life* in the bibliography for most chapters, and the book is structured very similarly to its predecessor.



- 45 The Goldsteins' aversion to floor plans and to discussions of the uses of objects was not one imitated by later writers such as Trilling and Williams, but perhaps this is because the latter were less instrumental in defining a scope for related art than the Goldsteins were. The Goldsteins fostered a way of looking very different from that of the home economists; they encouraged a two-dimensional, surface-oriented way of thinking about the world; rather than a three-dimensional, functional one—as if they viewed the world as a series of static “snapshots” like the ones in their book, rather than as a dynamic and interactive realm in which spatial relations were key.
- 46 Michael Baxandall, *Patterns of Intention: On the Historical Explanation of Pictures* (New Haven: Yale University Press, 1985), 10–11.
- 47 Baxandall, *Painting and Experience*, 37.
- 48 Both the Prang and Munsell systems identified colors through notations indicating hue, value, and chroma or intensity. The Prang system was devised by the chromolithographer Louis Prang (1824–1909), and was the simpler of the two (and the more familiar today): it was diagrammed as a color “wheel” in which blue and orange, red and green, and purple and yellow were defined as complementaries. The Munsell system was developed by Albert Henry Munsell (1858–1918), and was conceptualized not as a two-dimensional “wheel,” but rather as an irregular, three-dimensional globe-like structure showing a color’s “distance” from neutral gray, which was the origin or nexus of the three axes of hue, value, and chroma. Munsell’s objection to the Prang system was that equal amounts of the three primary colors did not produce a neutral gray; his more “scientific” system (constructed with the aid of modern instruments that measured light refraction) was designed to correct that flaw.
- 49 The phrase is from Alan Trachtenberg, *The Incorporation of America: Culture and Society in the Gilded Age* (New York: Hill and Wang, 1982).
- 50 Dendel, *Beauty and the Human Spirit*, 33.
- 51 Dendel, who taught with the Goldsteins at the University of Minnesota, provides an alternative view of the Goldsteins in her book as far more concerned with their students’ personal development than with their “efficiency.” Whatever their emphasis in their own classrooms, however, the textbooks they wrote seem dictatorial and patronizing rather than nurturing. The goals that the Goldsteins wrote for their personal use, which Dendel reprints—to teach students “to get pleasure from their surroundings, to appreciate the beauty that is all around them, and to have tolerance toward new ideas and other people’s points of view”—are not, I would argue, ones that the Goldsteins achieved in their text, no matter how inspiring they may have been in person. Dendel, *Beauty and the Human Spirit*, 14.
- 52 On Rice, see Kliebard, *The Struggle for the American Curriculum*, 20–24 and 89–122. The quotation is from Dow, *Theory and Practice of Teaching Art*, 1.





Emotion and Urban Experience: Implications for Design

Aušra Burns

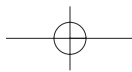
We relate to our environments emotionally. Though design theory sometimes fails to appreciate the complexity and the variance of human experience, for anyone concerned with design, cultivating the ability to recognize, listen, and respond to what people undergo and feel is vital. I aim here to draw attention to the discursive topic of the urban dimension of emotion. While I focus on experience of the city, I believe that the implications of my arguments are relevant to design on many levels, as it relates to explorations of diversity of human experience in general.

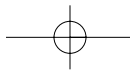
Emotional experience in the urban context has been discussed in various schools of thought and within the disciplinary circles of sociology, psychology, anthropology, and geography. Certain prominent themes and representations of emotional reactions to city life enrich the interdisciplinary dialogue and broaden our understanding of issues and modes of conceptualizing the contemporary urban condition.

My intention is to bring into design discussions centered on people's experience of, and reactions to, built environments, certain aspects of disciplinary knowledge arising from the social sciences and humanities. I will communicate some of the conceptual discourse surrounding my theme toward revealing *dialogical*, and more holistic, context sensitive ways of designing for the city—ways that use effectively knowledge generated in other fields of research and, accordingly, create paradigms for design action.

Introduction

There are many ways to approach and discuss the diversity of the city. Along with the transformations of modern history and the growth of Western metropolitan culture, visions of the city have come to be divided into spheres of disciplinary competence. The complex phenomenon of the city often is defined by architects as a depository of building styles and influences, by economists as a site for regularization of retailing practices, and by planners as a transportation node and mosaic of municipal bylaws. On the other hand, a single hegemonic conceptual framework cannot account for and recognize all the diversity and conflicting notions of urban culture, its forms, and social processes. Consequently, it can be argued that no one possesses all of the knowledge and wisdom required to understand and act responsibly in this world. "We need diversity





and alternative perspectives to keep alive the ongoing inquiry into ordering, disordering, and reordering that is the central enterprise of human culture.”¹

The changes experienced in contemporary Western cities over the past several decades—gentrification, suburban sprawl, physical and social fragmentation of the city, and its growing cultural and physical diversity—have been identified as dominant developmental trends. Searching for a narrative about the city and its economy “that includes rather than evicts” marginal economies and their representations in the city’s physical form, political economist Saskia Sassen establishes an intellectual interdisciplinary dialogue on the subject of race, gender, and representation in the city.² In so doing, she provides us with an example of theorizing in the critical space in between disciplines, where new knowledge and directions for constructive action can be fostered. The need to embrace new models of reflection on urban processes has, in fact, been voiced by many social theorists and practitioners.

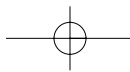
“Emotions” are the complex conjunction of physiological arousal, perceptual mechanisms, and interpretive processes; thus, they are situated at the threshold where the noncultural is encoded in culture, where body, cognition, and culture converge and merge.³

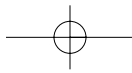
Why do I want to induce discussion on such a relativistic and seemingly unscientific subject related to urban experiences and emotions? My answer is that I think the potential benefits of this strategy outweigh the risks in terms of creating a better understanding of the phenomenon in question, and developing design strategies that work in specific socio-physical conditions. Through discussion of how we or others feel about city living—in various situations and differing circumstances—we can increase our ability to relate our aesthetic responses to perceiving the environment with the practical action we take within it. In terms of study of the subject and of theorizing, such an exchange may present us with the opportunity to critically analyze the standpoint of the researcher as a detached observer. In forums of discussion on how individuals or certain urban subcultures perceive their lives in the city, the researcher may become a more involved participant whose own stake in the issues at hand is raised and uncovered. Inevitably, when designers become more involved in the issues that concern people affected by design changes, they open themselves up to professional scrutiny and the challenges of self-definition. In order to follow and refine such a direction in professional and intellectual practice, one must identify the ontological, epistemological, and methodological aspects embedded in one’s theoretical orientation. Questions that could be asked in this context include: Whose interests are represented in the project? How are the results of the research or the physical changes to an environment going to impact on various

1 Richard Buchanan, “Branzi’s Dilemma: Design in Contemporary Culture,” *Design Issues* 14/1 (Winter 1998): 3–18.

2 Saskia Sassen, “Analytic Borderlands: Race, Gender and Representation in the New City” in *Representing the City: Ethnicity, Capital and Culture in the 21st-Century Metropolis*, Anthony D. King, ed. (London: Macmillan Press, 1996), 183–202.

3 Eva Illouz, *Consuming the Romantic Utopia: Love and the Cultural Contradictions of Capitalism* (Berkeley, CA: University of California Press, 1997), 3.





parties that share the common urban realm? Questions also could extend beyond the immediate concerns of the designer. For example: What will be the impact on future transformations of decisions made today?

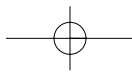
In the context of the city, the experiential realm is largely comprised of the places and objects of everyday life. Streets and backyards, and parks and monuments become situated not only in the realms of architecture or urban planning, but also in the realm of the human environment, where a distinct object, feature, or image is dissolved “into a world of perceptual experience” and can no longer be regarded as an “external location but as continuous with human life.”⁴ In this way, broader cultural aspects of the formation of emotional responses are grasped through research that goes beyond the study of the physical qualities of urban form: its colors, smells, forms, and textures. People’s emotional relationships with the environment are framed by attributes that may be evident from an external assessment of a situation—for example: skin color, class, gender and social status; and by those attributes that are not evident, such as those formed by individuals’ personal histories and life events.

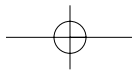
This position may represent an alternative to the traditional modes of framing experience in the designed urban environment. The tradition has been to view urban form as the static, axially oriented visual space of Western classicism. Throughout Western social thought, emotions are seen to be the very antithesis of the detached scientific mind and its quest for “objectivity.” The roots of this separation and the custom of repudiating the importance and integrity of emotional experience lie deep in the Western intellectual tradition that separates body from mind, nature from culture, reason from emotion, and public from private. Moreover, these dichotomies are not value-free. The hierarchy intends to establish the supremacy of reason. Progress and precision are held above emotional, private, subjective experience. This experience is located in the realm of urban spaces, and associated with femininity and “irrationality.”

Urban Experience, Its Conceptualizations and Representations

More reflective, culturally rich and dynamic articulations of our emotional relationship to the urban environment have been emerging from various disciplines of the social sciences and humanities for a number of years. An interest in the complexity of the social world and the positionality of knowledge and experience has evolved through the work of contemporary philosophers, geographers, anthropologists, psychologists and sociologists as part of a direction in social theory. Its aim is to develop an alternative to the positivistic and progressive view of the world as moving forward, in a linear trajectory toward, well, no one knows where anymore. Complementary calls have been made for radical transformations in the way we understand design as a professional activity. These calls

⁴ Arnold Berleant, *Art and Engagement* (Philadelphia: Temple University Press, 1991), 77.





come from those who believe that the models and modes of action exploited earlier in this century are no longer adequate. Designers and other professionals dealing with the production and modification of urban spaces, processes, and imagery are looking for new ways to approach culture as defined by conflicting values.⁵ To comprehend the “dynamics of individual and social behavior well enough to work efficiently and effectively in interdisciplinary teams” requires that design practitioners and theorists seek some common understanding of the social and cultural issues at stake, and deepen their awareness of contemporary intellectual discourses and research methods that can contribute to bringing design, the humanities, and social sciences together.⁶

The humanist tradition in philosophy and the social sciences has introduced the notion of emotional and experiential complexity in the perception of one’s surrounding world, and has challenged the more traditional model based on contemplative knowledge accumulation through passive spectatorship, objectivity, and rationality. Symbolic interactionists suggest that individuals are not just aware of their place in the world, they also are involved in group interactions, each of which is located within a particular social setting worthy of careful consideration.⁷ Many significant works produced within this theoretical orientation recognize the value of situated and reflective knowledge. Describing ways in which the space of inner-city Philadelphia was given meaning and made legible by street gangs through territorial boundary markers, David Ley shows how the realities of everyday life are negotiated by people in concrete contexts.⁸ From this study of city gangs and their territorial behavior, Ley infers that the space, and the emotional responses to it, are socially constructed. The sociological study of the partitioning of the city into numerous territorial worlds has been a major aspect of the Chicago school tradition. In the works of members of this school, the impact of the overall diversity of the city on urban dwellers is much reduced. The main arguments comprising the standpoint of the school rest on the assumption that the city is a mosaic of different social worlds which overlap and interact. People, therefore, create their own social and territorial niches in the city and, in this way, are able to develop a sense of identity and comfort in the modern metropolis.⁹

Attempts also have been made to articulate the conception of experience through close association of the space and the perceiving body. From this perspective, the environment that is perceived does not exist solely outside of the perceiver. It extends the “inner landscape of human beings into the world in ways that are comprehensible, experiential, and inhabitable.”¹⁰ The “active model” oriented on action, function, and response to one’s surroundings has been developed by the American pragmatic tradition and in European existential-phenomenological philosophy.¹¹

5 Buchanan, “Branzi’s Dilemma,” 19.

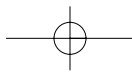
6 Jorge Frascara, “Information Design and Cultural Difference” *Information Design Journal* (1999).

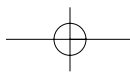
7 Following G. Herbert Mead, *Mind, Self, and Society: From the Standpoint of a Social Behaviorist* (Chicago: University of Chicago Press, 1934).

8 David Ley, “Behavioral Geography and the Philosophies of Meaning” in *Behavioral Problems in Geography Revisited*, G.R. Cox and R.G. Golledge, eds. (London: Methuen, 1981a.), 209–230.

9 For a discussion of the Chicago School tradition as it relates to urban experience, see Peter Langer, “Sociology—Four Images of Organized Diversity: Bazaar, Jungle, Organism, and Machine” in *Cities of the Mind: Images and Themes of the City in the Social Sciences*, Lloyd Rodwin and Robert M. Hollister, eds. (New York: Plenum Press, 1984), 97–118.¹⁰ See John Dewey, *Art as Experience* (New York: Capricorn Books, 1958); and Maurice Merleau-Ponty, *Phenomenology of Perception* (London: Routledge & K. Paul, 1962). For an interpretation of the phenomenological tradition, see K. C. Bloomer and C. W. Moore, *Memory and Architecture* (New Haven: Yale University Press, 1977)

¹¹ Berleant, *Art and Engagement*, 87.





Humanist geographers sought, through the philosophies of existentialism and phenomenology, to recover the essence of the experience of place. They propelled the shift toward recognizing the materiality of everyday life and the power relations that influence the emotional reaction to place. Nevertheless, as critics note, the humanists still haven't come to terms with the depths of subjectivity and intersubjectivity.¹² Another serious criticism comes from feminist geographers who remark on the lack of adequate theorizing on the broader social power relations structuring our experiences of place. One of the underlying reasons for this deficiency is that humanists assume masculinity as the implicit norm through a certain form of rationality that still considers objectivity as the touchstone of true knowledge. In a 1984 meeting of feminist geographers, it was argued that "humanists tend to show a general concern for the way in which ordinary people are subject to various forms of authority, rather than analyzing the specific forms of exploitation and oppression that occur."¹³

Turning to linguistic philosophy, we learn that the emotional realm is woven into the structure of communicative action and, therefore, open to contestation and argument. Intersubjective structuring, or communication between individuals of their subjective sensations through verbal and body language, becomes possible because emotion is publicly observable. It takes the form of actions made in response to certain circumstances. In other words, emotions can be conceived as meaningful responses to life situations.¹⁴

Some radical philosophers such as Marxists argue that people travel through a time-space life path while internalizing and interiorizing social relations. Human agency must be framed not only within the determinations (or power relations) of social structure, but within the *material* properties of time-space relations, and within the processes inherent in "personality." "Personality," in this case, signifies identity that is expressed through subjective reactions conditioned by the life history of each individual.¹⁵

In the work of behavioral geographers, mental processes and cognitive representation are of central importance. A more thorough understanding of human cognition was critical to establishing links between the mind and behavior. Mere descriptions of overt patterns of behavior were replaced by a search for, and explanation of, the reasons why people behaved in certain ways. But, as recent critics note, behavioral geographers failed to "recognize the mutual interaction between mind and environment" because they still operated in the realm of dichotomies such as those between the external and internal worlds, between the public world and the private world, between the subjective (perceptual) and the objective (phenomenal) world, and between mind and nature.¹⁶

Exploring different spaces of the contemporary city, feminists often reject the pursuit of generalizations and "complete" visions. Their work is more tentative. It is grounded in the details of

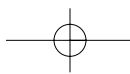
12 Steve Pile, *The Body and the City: Psychoanalysis, Space and Subjectivity* (London: Routledge, 1996), 62.

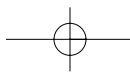
13 Gillian Rose, *Feminism and Geography: The Limits of Geographical Knowledge* (Minneapolis: University of Minnesota Press, 1993), 44.

14 For a brief discussion of these issues, see Ray Crozier, *Manufactured Pleasures: Psychological Responses to Design* (Manchester, UK: Manchester University Press, 1994), 19.

15 Nigel Thrift, "On the Determination of Social Action in Space and Time" in *Environment and Planning D: Society and Space* 1/1 (1996): 241–50.

16 For a critique of conceptualizations of the urban in behavioral geography, see Pile, *The Body and the City*, 43.





the everyday, and enables interpretation of social life and spaces in the city as heterogeneous.¹⁷ The strategies through which feminist geographers pursue their goals include undoing, subverting, and transcending the power-infused dualisms between dynamic and progressive time and static space; between the public and the private realm; between rational knowledge of, and the emotional responses to, the environment; and hierarchical dichotomies built on notions of masculinity and femininity. The “disorder” of urban life does not disturb women. The “socialization of women renders them less dependent on duality and opposition.”¹⁸ To many women, urban spaces simultaneously represent delight, a site of connection, and a place of danger and oppression—spaces that are lived, experienced, and felt.

Another important contribution to more reflexive and reflective theorizing about emotional responses to the city comes from geographers using psychoanalysis to reconceptualize the dialectics between the subject, society, and space. Each individual may be seen as “tied by the bonds of love and hate, in many directions, to numerous groups; each forms a sense of self in relation to different models of behavior; each has a share of many group identities.”¹⁹ These diverse relations are spatial, but originality and richness of experience, and the strength of ties between the individual and the environment, come from *within*, from the agent.

All of the nineteenth century founders of sociology touched on the topic of emotion. Among them was Max Weber, who wrote about the anxious spirit of capitalism that evolves in the modern metropolis, and the role of rationality and charisma in the formation of this new way of living and being a member of a capitalist society. Karl Marx developed a view of alienation as an inevitable consequence of class conflict that brought to Western urban centers resentment and anger toward capitalist exploitation. Georg Simmel believed that the emotional state of the modern individual being was profoundly shaped by a continuous bombardment of the stimuli of urban life.²⁰ Among the most evident reactions he points to is the “reserve” attitude one develops in order to survive in the saturated life of the city. This reserve attitude remains central in contemporary discussions regarding the reactions of the postmodern individual to the commodification of culture and her or his involvement in the collective consumption of fetishized commodities.

The attempt to establish scientific legitimacy in the discipline of sociology turned many researchers in urban studies toward explorations of social action, rather than of peoples’ perceptions or other “soft” images of the city.²¹ Despite this trend, Robert Park, a key member of the Chicago school, wrote:

The city is... a state of mind, a body of customs and traditions, and of the organized attitudes and sentiments that inhere in these customs and are transmitted with this tradi-

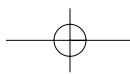
17 Rose, *Feminism and Geography*, 133.

18 Elizabeth Wilson, *The Sphinx in the City: Urban Life, the Control of Disorder, and Women* (London: Virago, 1991), 282.

19 Pile, *The Body and the City*, 118.

20 Georg Simmel, *Conflict and the Web of Group Affiliations* (New York: Free Press, 1955).

21 For further discussion of this direction, see Langer, “Sociology—Four Images of Organized Diversity,” 198.



tion. The city is not, in other words, merely a physical mechanism and an artificial construction. It is involved in the vital processes of the people who compose it.²²

From the perspective of the environmental psychologists, our rapid and largely unconscious decision-making process is influenced by the potential for functioning in the locale. Such pointers for potential functioning are perceived abilities: the ability to enter the setting, to acquire the necessary information about the environment or setting, and to maintain one's orientation.²³ Acknowledgment of the complexity of human emotions and their variance depending on the particularities of individual circumstances and cultural settings has brought psychologists' discussions closer to an understanding that "it is a person's experience of the world rather than the world's objective properties that counts."²⁴ Neisser's seminal book *Cognition and Reality* marked a transition for psychologists.²⁵ This more reflective and holistic conceptualization of psychological responses to one's environment caused psychologists to respond to, and gain interest in, research on cognition and the mental processes that underlie behavior. It has seemed to psychologists that "physiological processes, including variations in arousal levels, are not in themselves sufficient to discriminate between emotions, but that cognitions, beliefs, or attributions are also necessary."²⁶

Anthropology, on the other hand, embraced emotion in terms of how its conception and expression were subject to cultural production. The question facing anthropologists today is how best to integrate the subjectivity of those they observe into their analysis: in other words, how to redefine the conditions of representativeness to take into account the renewed status of the individual in our societies.²⁷ "The notion of material culture, developed by anthropology, initially due to the need to reconstruct social life through an analysis of extant objects, provides a conceptual frame for the understanding of how cultural models are promoted by material objects."²⁸

Urban Experience: Themes and Representations

Since my topic revolves around people's emotional experiences of the city, I would like to present a range of emotional responses and sensations that theoreticians from diverse fields of knowledge have identified, and later discuss how a broader knowledge of these themes and ideas can help designers in their professional work. While not representing a complete or exhaustive review of the subject, such discussion might lead designers to revisit or reevaluate our paradigms of action and theorizing.

One of the city's strongest aesthetic appeals is to the person as pedestrian, and "this appeal rests very much on its attraction to the moving body, its ability to entice one to follow along a street in relaxed and irregular rhythms."²⁹ Information derived from anthro-

22 Robert E. Park, Ernest W. Burgess, and Roderick D. McKenzie, *The City* (Chicago: University of Chicago Press, 1996), 1.

23 Rachel Kaplan, "The Analysis of Perception via Preference: A Strategy for Studying How the Environment is Experienced" in *Landscape Planning* 12/1 (1989): 174–5.

24 Crozier, *Manufactured Pleasures*, 75.

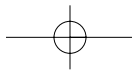
25 Ulrich Neisser, *Cognition and Reality: Principles and Implications of Cognitive Psychology* (San Francisco: Freeman, 1976).

26 Crozier, *Manufactured Pleasures*, 19.

27 For further discussion, see Marc Augé, *Non-Places: Introduction to an Anthropology of Supermodernity* (London: Verso, 1995).

28 Frascara, "Information Design and Cultural Difference."

29 Berleant, *Art and Engagement*, 101.



pology and psychology can support the argument that people enjoy “crooked streets” and the richness of urban experience, but they are most afraid of being lost. The intensity of this fear of being lost, disoriented, or confused by the monotony of the city suggests that designers (and urban planners and architects) should strive to produce “imageable” urban space by sufficient knowledge and through conscious manipulation.³⁰

Among the most powerful and brilliant descriptions of the emotional experience of individuals roaming the nineteenth century Western metropolis was presented by the social theorist and philosopher Walter Benjamin. Employing techniques of surrealism as well as avant-garde montage and cinema, Benjamin created the portrait of an urban drifter, the *flâneur*, whose daily experiences were embedded in the “novel kind of beauty in the streets,” through mundane activities of shopping, strolling, and socializing.³¹ The Paris *flâneur* was lured by the magnetism of the city streets, by the sensual power of crowds, by the erotic pleasures of window shopping, and offerings of sexual pleasures outside of the family circle. One of the important aspects of urban culture that Benjamin was able to relate through his narrative, and that still remains important in the contemporary city, was that experience was atrophying—that there was a rise of spectacle and spectatorship, and that interpersonal relationships were being replaced with the packaged messages of a commodified culture of spectacle and merchandising. Simmel argues that the individual is constantly presented with myriad possibilities in the dense and varied realm of the city. The person is continually confronted by strangers, and this makes it impossible to establish any deep personal relationships. The only reasonable reaction to this situation is the adoption of a posture of “reserve” and impersonality. The Chicago school sociologists stressed another aspect of urban experience. People’s ties, relationships, and attachment to their particular territorial niches in the metropolis were significant because it is in these niches that they “come to have some control,” where they “are able to develop the sense of identity and comfortableness that one large downtown world makes impossible.”³²

If we adopt a perspective that recognizes the city as a site of power struggles and, therefore, a site of diverse and situated experiences, we can see why it may matter “who is walking the streets and who is doing the looking, and why, it also matters which streets are being walked, and how the spatial regime of the visual is constituted.”³³ From the viewpoint of feminist geographers, the gaze of the urban drifter, as presented in literature concerned with issues of urban experience, often is accepted as universal, and is, in fact, a *masculinist* gaze embodying a relationship of an active onlooker and a passive object.³⁴ From this perspective, Benjamin’s *flâneur* appears to be in such a position of power. He is captivated by the movement and excitement of the urban modern, but out of fear holds to a safe

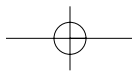
30 Kevin Lynch, *Good City Form* (Cambridge, MA: MIT Press, 1981).

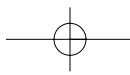
31 For an interpretation of Walter Benjamin’s literary images of the city as experience, see Wilson, *The Sphinx in the City*, 280.

32 Langer, “Sociology—Four Images of Organized Diversity,” 108.

33 Pile, *The Body and the City*, 231.

34 Rose, *Feminism and Geography*, 104.





proximity or distance. What stands beyond this distance is an “uncharted territory: women, masses, the city: a territory which was simultaneously psychic, bodily, spatial, and social; simultaneously real, imagined, and symbolic.”³⁵

Let’s turn for a moment and look at the city through the eyes of those who are being watched. Women often feel vulnerable in public because they are seen as properly belonging to the domestic sphere.³⁶ “Being in space is not easy. Indeed, at its worst, this feeling results in a desire to make ourselves absent from space; it can mean that ‘we acquiesce in being made invisible, in our occupying no space. We participate in our own erasure.’”³⁷ Rose recalls her personal emotions about being in everyday spaces of the city. “I have a strong sense of space as oppressive, for example, from being scared walking at night in the city in which I live.”³⁸ On the other hand, the city’s crowds and spaces make it easier for many men and women to become anonymous, to escape to a certain degree from the control of traditional hierarchies.

Power relations and their symbols are embodied not only in the actions and relationships of city dwellers, but in the spatial forms of the city, within the anchoring points of its architecture. The power of authority is displayed in the centrally located skyscrapers of contemporary cities, often housing the dominant economic, political, and state power of the city.³⁹ One of the important issues here is that this spatial organization seems to give an impression of intelligibility and transparency. Modern architecture’s abstract transparency alludes to the Utopian vision of a “radiant, egalitarian, dynamically open society,” while embodying the “reality of panoptic, hierarchical bureaucracy.”⁴⁰ What is lost or, more accurately, pushed away or erased, are the representation and acknowledgment of the subordinate, marginalized, less powerful cultures inhabiting the urban realm.

Where, then, is this marginality of the city embodied? How can we “excavate” this experience of the “other”? “Otherness” is embodied in the places of everyday: the homes, parks, and shantytowns of our cities. There is no homogeneous “other” behind this theoretical cliché of “otherness.” There are actual, flesh-and-blood others.⁴¹ Some of them: the sick, disabled, and elderly, find a certain degree of comfort, security, autonomy, and even freedom in sites of everyday life such as the home, the public park, and the department store. While the home, under certain circumstances, to some people, can be a source and site of oppression and violence (women and children in abusive families); to others, and in other circumstances, it can be a place that fulfills deep yearnings for empowerment and control over one’s life and place of community contact.⁴²

Many of us have experienced the devastating feelings of estrangement from one’s surroundings engendered in such places as shopping malls, large hotels, and transit points—places controlled by computer networks and personal credit card identification.

35 Pile, *The Body and the City*, 209.

36 Gill Valentine, “Images of Danger: Women’s Sources of Information About the Spatial Distribution of Male Violence” in *Area 24* (1992): 22–9.

37 R. J. Johnston quoted in Rose, *Feminism and Geography*, 143.

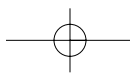
38 Rose, *Feminism and Geography*, 143.

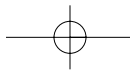
39 See Pile, *The Body and the City*, and Sassen, “Analytic Borderlands.”

40 Joan Ockman, “Mirror Images: Technology, Consumption, and the Representation of Gender in American Architecture Since World War II in” *The Sex of Architecture*, Diana Agrest, Patricia Conway, and Leslie Kanes Weisman, eds. (New York: Abrams, 1996), 205.

41 Mary McLeod, “‘Other’ Spaces and ‘Others,’” *The Sex of Architecture*, eds. Diana Agrest, Patricia Conway and Leslie Kanes Weisman (New York: Abrams, 1996), 21.

42 Chislaine Hermanuz, “Housing for a Postmodern World,” *The Sex of Architecture*, Diana Agrest, Patricia Conway, and Leslie Kanes Weisman, eds. (New York: Abrams, 1996), 235.





These places of “supermodernity” erase senses of real communication and memory. The individual becomes a passenger, customer, or driver who is “possessed” by the “passive joys of identity-loss, and the more active pleasure of role-playing.”⁴³ But despite our worries about the changes that digital technology has brought to our cities, we have to face the fact that boundaries are becoming blurred between the social and the technological, and between the natural and artificial. The important question that is asked by many is: “what are the implications for human emotional experience of these new forms of technology and the various ‘hyperrealities’ they spawn?”⁴⁴ It can be argued that new forms of emotional intimacy, sharing, and meaning are beginning to open up as a consequence of these technological developments. “The computer network provides opportunities to get together with considerable personal intimacy and proximity without the physical limitations of geography, time zones, or conspicuous social status.”⁴⁵ Though the “intrusion of commerce and sophisticated technology into every crevice of daily life can hardly be considered cause for comfort, it is also the case that the built representations of postmodern society are no longer charged so heavily with dichotomous gender stereotypes.”⁴⁶

One of the themes that recurs in discussions about feelings and perceptions of the built environment is that of diversity and fluidity, of emotion’s dependency on context. Physical and virtual places appear to coexist and blend in the contemporary metropolis. This demands from designers, architects, and planners significant revision of design strategies and methods of work. Such changes involve recognizing the presence of marginality in social life and formal representation of the city, and working toward recovering the “informal life” in the city’s dominant representations. We need a radically new approach to cities if we are to see realized the city’s potential to offer freedom and autonomy to all individuals and groups.⁴⁷ In many cases, the recovery of marginality offers passages into mysterious human nature and, at the same time, provides confused “form givers” with some constructive understanding of what kind of city it is that people need these days, and of how that city is supposed to serve their needs and reflect their emotional yearnings in a just and responsible way.⁴⁸

Mere formal subversion of “otherness” in buildings as objects of art, and placing dominant value primarily on the physical features of the designs, is not sufficient or effective toward making contemporary cities better places to live. To adopt the position of an informed designer, one must pursue a deeper understanding and appreciation of the cultural issues and practices that converge in the body of the contemporary city. One of our valuable resources of creativity and skill is our ability to listen and learn from those for whom we design.⁴⁹ In the urban context, we should not forget that public space is the representation of a “public, as a living, acting, and self-determining community.”⁵⁰

43 Augé, *Non Places*, 103.

44 Simon Williams, “Emotions, Cyberspace and the ‘Virtual’ Body: A Critical Appraisal,” *Emotions in Social Life: Critical Themes and Contemporary Issues*, Gillian Bendelow and Simon J. Williams, eds. (London: Virago, 1998), 120.

45 Williams, “Emotions, Cyberspace and the ‘Virtual’ Body,” 124.

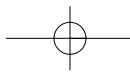
46 Ockman, “Mirror Images,” 208.

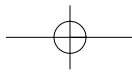
47 Pile, *The Body and the City*, 283.

48 Ann Cline, *A Hut of One’s Own: Life Outside the Circle of Architecture* (Cambridge, MA: MIT Press, 1997), 14.

49 Frascara, “Information Design and Cultural Difference.”

50 Susana Torre, “Claiming the Public Space: The Mothers of Plaza de Mayo” in *The Sex of Architecture*, Diana Agrest, Patricia Conway, and Leslie Kanes Weisman, eds. (New York: Abrams, 1996), 249.





As we develop a more profound sense of how different people live in the same city, we might not be surprised to find that “the public realm that can be some people’s heaven can be other people’s hell.”⁵¹ I would argue that professionals should become more prepared to accept and learn from the unexpected twists and turns of real life city events. Many spontaneous and informal practices are deeply significant to the engaged individuals and groups, and can be very revealing to such professionals as designers. An example of such a practice is that of Latin American dwellers of the Bronx constructing, in the “vacant” land between apartment buildings, little houses that remind them of their “home” country. These “casitas” are filled on summer nights with the bustle of people enjoying comradery and the night.⁵² This example also reminds us of the fact that a sense of security and enjoyment of public spaces such as a park or a street depends on matters that extend beyond demands for sufficient lighting or smooth paving. Many ideas that transform our lives and are of greatest significance derive from non-architectural sources. Don’t we often find ourselves perceiving the city, our daily journeys, and our inner thoughts and routines as one inseparable physical-emotional-mental landscape? Aren’t our impressions of city sites and experiences of sightseeing subordinated to our daily worries and thoughts as we walk or drive along familiar streets?

While this does not mean that many traditional disciplinary skills and artistic imagination are obsolete to the designer of urban spaces, images, or products; it does suggest that the issues relevant to a designer’s professional competence require serious scrutiny and expansion. One of the critical aspects of this revised picture involves the transcendence of static and oppressive dichotomies between male and female, between reason and emotion, and between the rational and subjective. It means that space and time should be redefined, and seen as interrelated. “We need to conceptualize space as constructed out of interrelations, as the simultaneous coexistence of social interrelation and interactions at all spatial scales, from the most local level to the most global.”⁵³

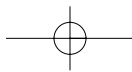
Along with accepting the fluidity and diversity of concepts we operate with in our daily practice, it is necessary to adopt a flexibility in our methods of work and research. As architect Denise Scott Brown remarks, it is a sense of professional responsibility that moves her to accept the diversity and temporality of social agendas and meanings attached to designed spaces and buildings in the city. Instead of following the rigid directives of dominant ideologies, Scott Brown, in her daily work, chooses the more difficult route of negotiating mutually accepted agreements between parties involved. She admits, however, that “ideologies come and go and functional needs change with time, yet our buildings may remain.”⁵⁴ As difficult as it is to concede, we might never be able to determine the ultimate method or the perfect methodological pack-

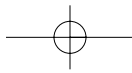
51 Cline, *A Hut of One's Own*, 53.

52 *Ibid.*, 21.

53 Doreen Massey, *Space, Place and Gender* (Cambridge, UK: Polity Press, 1994), 264.

54 Denise Scott Brown, “Through the Looking Glass” in *The Sex of Architecture*, Diana Agrest, Patricia Conway, and Leslie Kanes Weisman, eds. (New York: Abrams, 1996), 215.





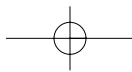
age that would free us from continuous self-questioning, end our creative search, or address all the transformations in our working context. Cities, places, societies, and the emotional responses of people will change. "Each situation demands specific responses, and all that methods can do is help us approach each new situation with a more sensitive and efficient eye."⁵⁵

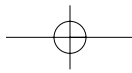
Urban Experience and the Design Practice

While I have been exploring the role of emotion in urban life, I hope that the reader has been encouraged to adopt a critical position with regard to the information and the complementary or competing ideas presented. As I asserted earlier, there is no one correct answer to all our problems of urban living and, therefore, there is not one set of criteria according to which the design process, under the current conditions, is supposed to develop. Nevertheless, I argue that, through informed selection and thoughtful consideration of some leading ideas offered by philosophers, geographers, sociologists, and anthropologists, designers may be encouraged to reconsider the paradigms they traditionally identify with. Beyond adopting greater moral responsibility for their actions, a more profound awareness of contemporary social conditions, and enhancing their knowledge of methods, designers can embrace the diversity of human experience, fundamentally shifting their standpoint within the profession. The key to making this transition, I believe, is to adopt theoretical and action paradigms that enable designers to influence social change through interpretation and negotiation. This stands in marked contrast to design practice based on authorship and the imposition of opinions and expertise.

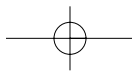
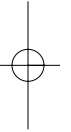
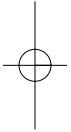
The diversity of these concerns does not signify to me a loss of direction in design, nor a retreat to formal experimentations. As a designer working on urban design issues, the complexity I discover in conceptualizations and perceptions of the city serves to encourage me to continuously revise and adapt my working methods to the contextual criteria of each design situation, and to assess the forces shaping people's attitudes and actions. In this context, then, I contend that knowledge gained through work on design projects does not accumulate in an absolute sense; rather, it transforms us and leads us to more informed insights. Since much of this approach is linked to postmodern paradigms, it also can be defined as inherent in the wisdom of everyday living. Isn't this the way we, as human beings, gain life experience and life skills: moving from one experience to the next, from one life lesson to another? What accumulates, of course, is not a catalog of events defined by frequency or location of occurrence, but images, sensations, and perceptions of the critical links and relationships. This accumulation becomes a wide web of practical knowledge which cannot easily be labeled as "true" or "false." Knowledge can only be revealed through an understanding of the cultural discourses within which it

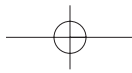
55 Frascara, "Information Design and Cultural Difference."





is embedded. In such an approach, whether the research and design transformations are concerned with peer relationships, work strategies, perceptions of images, or patterns of use in built environments, detached reflection based on a purely theoretical way of thinking is transformed into discussions and negotiations between the researcher and the user-participant.





Information and Persuasion: Rivals or Partners?

Katherine McCoy

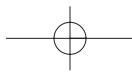
The best thinkers in graphic design have long held that information and persuasion were oppositional modes, representing the competing cultures of graphic design and advertising. But perhaps this long-cherished notion is no longer pertinent, especially for interactive electronic communications. So many other boundaries seem to be blurring these days including work and play, entertainment and information, and education and games; with commerce permeating everything.

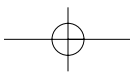
The conventional distinction between information and persuasion has to do with a piece's content, plus the sender's intention. Some content is understood as information and some content is labeled as persuasion, promotion, or even propaganda. In this scheme of things, information is noble. Note that Richard Saul Wurman, trained as an architect, has coined the term "information architecture" to describe the graphic design of his highly successful Access Press travel guides. This inspired the venerable graphic designer Massimo Vignelli to proclaim himself an information architect, too. This vision of communications fits well with the modernist ideal of objective, rational design. Within this paradigm, persuasion is distasteful, associated with the worlds of advertising and marketing—emotional, subjective, manipulative, and superficial.

But might there be an alternative to this tidy dichotomy? Perhaps information and persuasion are not an either/or opposition. More likely, they are modes of communication that overlap and interact.

The information/persuasion relationship involves more than the type of content and the sender's intention. The reader's motivation and the communications context—the situation in which communications happens—are important factors as well.

Consider two examples of what we might generally consider "information design," and how they interact with audience members at various motivation levels. An airport monitor would seem to be a purely informational condition. A traveler hurrying to catch a plane is highly motivated and will make full use of the flight monitor—no need to persuade this audience member. On the other hand, a stop sign also would seem to be highly informational with no promotional character. But when a driver in a hurry encounters a stop sign, the driver may make only a rolling pause in the intersec-





tion. Although the content is informational, this audience member has low motivation and ignores the message.

Even ostensibly informational content—factual, objective, even numerical—conceived with pure “informational” intentions of the sender—the airport or the local government—with no promotional intentions, must persuade many readers to pay attention, and to get involved.

Desire and necessity are part of the communications process here. Both affect the audience’s motivations. Even an audience member that “needs” some information (i.e., for traffic safety) also must possess the “desire” for this information to complete the communications loop. A message only becomes information when someone cares to make use of it.

Persuasion creates desire. A basic definition of persuasion is an attempt to shape or change a user’s behavior or attitude. Persuasion exerts a direct influence on behavior, and promotes a response. Promotional communications encourage behaviors.

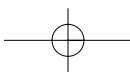
Seduction is a key tool for persuasion. A graphic design can seduce the reader/viewer into a useful encounter with its message. Seduction initiates the entry step in the communications process, promising a reward for the audience’s attention. Once drawn into the communications piece, the quality and relevance of its information takes over, engaging the reader on deeper levels. In these days of media saturation and multi-channeling, there is fierce competition for the reader’s attention, and readers have increasingly short attention spans. Seductive media can persuade a reader to pay attention, to get in bed with the message content and spend some time with it.

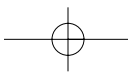
Persuasion and seduction seem especially relevant for the design of interactive electronic communications. Nonlinear messages make it difficult to orient and direct the reader with traditional graphic strategies conceived for linear message sequencing. An Internet site’s readers can choose their own paths, breezing by key content, and may be diverted by links to other sites on the Web.

Seductive communications strategies can direct and prompt the reader/user to follow comprehensible reading paths, and to make appropriate responses in software operation.

Thinking of seduction in this way, the smallest graphic moves—directing the user to the highlighted “OK” button, for instance—use persuasion to reduce effort and to channel the reader to useful paths through complex material and difficult software tools.

Three steps to seduction are outlined in an article by Julie Khaslavsky and Nathan Shedroff titled “Understanding Seductive Experiences.” *Enticement* attracts attention and makes an attractive promise. The *relationship* stage gives small fulfillments (or feedback) and promises more fulfillment. Finally, there is *delivery* on final promises, and the experience ends in a memorable way. The authors





note that effective seduction need not actually reach the third stage—that useful ongoing, long-term relationships can be based on incremental fulfillments. The sexual overtones to this process are both humorous and instructive.

In recent years, the Stanford Persuasive Technology Lab, directed by B. J. Fogg, has been exploring some of these ideas under the name “captology,” the study of persuasive media. Their focus is on software programs and smart products that encourage or change behavior in the fields of health, safety, environment, and personal management. For instance, they have studied the persuasive impacts on teenagers interacting with the “Baby Think It Over” doll in high school programs. This smart doll simulates the responsibilities of caring for a newborn with random crying every two and one-half hours, tracks the teenage “parent’s” behavior, and reports the student’s behavior to the teacher.

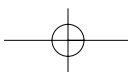
Beyond such practical applications, persuasion and seduction may be essential for all communications design, from traditional print to interactive media, and from micrographic “moves” to large-scale strategies. They can motivate disinterested or distracted audiences to focus on promotional, entertainment, and shopping Websites.

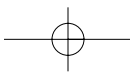
But persuasion/seduction also can increase productivity for motivated users in sites and software involving numerical/factual work and objective content in fields such as medicine and data management—for example, through the use of prompts and cues for the accurate use of spread sheet software. In product design, persuasion/seduction can clarify operation sequences for smart products, and enrich the user’s product experience. Persuasion can assist those constrained by unfamiliarity with the content, or a lack of competence for a software tool or a product’s operation.

Perhaps information/persuasion is not an “either/or” choice, but rather an “and/also” interaction between communication modes. There could be a complex interaction between the sender’s intentions, message content, the audience/user’s motivations, the communications context, and the designer’s strategies.

Rhetoric—the departure from normal language usage for the purposes of persuasion—holds promise for the expression of seductive messages. To identify graphic rhetorical moves for interactive electronic communication’s onscreen text, we can establish the non-rhetorical base of “normal graphic language usage” as the typewriter’s onscreen equivalent—the Wang word processor and VDT—low-resolution display of generic letterforms on a light-gray background. Compared to this, all recent graphical interfaces and screen design strategies are rhetorical devices to persuade the user/reader to use the software correctly.

Seen in this light, almost any piece of communications design uses persuasion. The red color of a stop sign is a persuasive rhetorical tactic to attract the attention of drivers, alerting them to

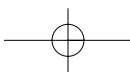
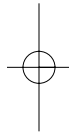
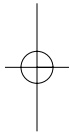




potential danger, promising safety through the avoidance of a collision, and fulfillment when cross traffic passes smoothly in front of them—the three steps of the seduction process. The Mac's smiley face when booting up promises a positive experience and effective operation, persuading us to wait patiently and happily for fulfillment.

Persuasive rhetoric is as simple as the boldface type highlighting a name when we scan a newsmagazine paragraph. But screen-based electronic media create both the opportunity and imperative for a far deeper application of persuasive rhetoric through interactivity, sound, and motion. These new design dimensions can generate smart persuasive character, attitude, and behaviors to persuade users/readers to make the right moves for effective operation.

Persuasion and seductive rhetoric can be developed as theories to explain and evaluate existing communications phenomena, expose and clarify current design strategies, and codify new design strategies for generalized application in communications design.



Symposium Review

African-American Designers: The Chicago Experience Then and Now

Anne Meis Knupfer

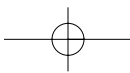
A Symposium, February 5, 2000,
DuSable Museum, Chicago

Not all scholars agree with literary critic Richard Bone that the Chicago Black Renaissance began in 1928 and ended in 1960.¹ Some scholars have argued that there was no “flowering” of the arts, but rather a grafting of creative endeavors from the early twentieth century. However, there is little disagreement that Chicago was a major, if not *the* major, urban locus for African-American art, theater, poetry and fiction, blues and jazz, and intellectual energy during the 1930s, 1940s, and 1950s. Indeed, by 1930, Chicago had the largest African-American urban population in the country. Confined to the city’s southside by restrictive covenants and realtors’ red-lining tactics, most African Americans, regardless of their social class and occupation, lived together. Despite deteriorating mansions, and crowded tenements and kitchenettes on the southside, African-American Chicagoans took great pride in their communities, especially their social and educational institutions.

Among these institutions were the South Side Community Art Center, the first African-American-owned art center to showcase African and African-American artwork. There also was Parkway Community House, a prominent social settlement established by University of Chicago-trained sociologist, Horace Cayton. The George Cleveland Hall Library, the first public library in Chicago’s African-American community, was one of the intellectual centers in Bronzeville, the most prosperous African-American business district in the city. Under the capable directorship of Vivian Harsh, the library showcased African-American art, poetry, stories, and music. Along with librarian Charlemae Rollins, Harsh organized reading circles, writing clubs, debates, children’s story hours, performances, essay writing contests, and art exhibits. In short, there was vibrant intellectuality and artistry, informed by a pan-African consciousness, as well as the syncretization of southern migrant and northern urban traditions.

Although scholars only recently have begun to analyze the music and literature of Chicago’s Black Renaissance, there has been little examination of its fine or design arts.² For this reason, the symposium “African-American Designers: The Chicago Experience Then and Now Symposium,” held at the DuSable Museum on February 5, 2000, was especially noteworthy in showcasing schol-

- 1 Robert Bone, “Richard Wright and the Chicago Renaissance,” *Callaloo* 9 (Summer 1986): 446–468.
- 2 See, for example, William Howland Kenney, *Chicago Jazz: A Cultural History 1904–1930* (New York: Oxford University Press, 1993); Samuel A. Floyd, Jr., *The Power of Black Music. Interpreting Its History from Africa to the United States* (New York: Oxford University Press, 1995); Bill Mullen, *Popular Fronts: Chicago and African-American Cultural Politics, 1935–1946* (Urbana: University of Illinois Press, 1999). One book which does feature the arts, literature, and music, as well as the political and social activism of Chicago’s Black Renaissance is Darlene Clark Hine and John McCluskey, eds., *The Chicago Black Renaissance* (Bloomington: Indiana University Press, forthcoming).



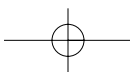
ars' work in design art from this period, as well as the accomplishments of first and second generations of African-American design artists in Chicago. This symposium, organized by Victor Margolin, professor of Design History and Fellow of the Institute for Research on Race and Public Policy at the University of Illinois at Chicago, was sponsored by the University of Illinois at Chicago, along with DuSable Museum of African American History in Chicago, the Illinois Humanities Council, and various corporations and foundations.

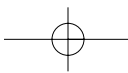
Keynote speaker Floyd Coleman of Howard University's Art Department, began the program by speaking on "The Broader Context for African-American Design." Although aesthetics often is the focus of design art—be it graphic, industrial, or interior—Coleman emphasized its political and social intentions. Accordingly, he focused on African-American craft design in the historical contexts of the Middle Passage, slavery, and migration, with particular reference to issues of power and patronage. Using kente cloth as a one example, Coleman elaborated on the aesthetic and spiritual significance of its various designs, as well as African Americans' renewed interest in celebrating a pan-African identity.

Indeed, the primacy of African retentions was one of the hallmarks of African-American craft design, evident in house structures, basketry, furniture, pottery, and metalsmithing. For example, the architecture of slave houses in South Carolina in the late 1600s replicated that of houses in Western Africa. Likewise, the slaves' shotgun houses in Virginia drew from ancestral Yoruban traditions. In their silversmithing and pottery, slaves utilized African motifs and designs. Despite the unearthing of many such African-American artifacts, Coleman stressed that more historical work needs to be done. Then, as today, the analysis of the production of such art design needs to be informed by race, gender, and social class, as well as issues of power and patronage.

Charles Branham, Director of Education with the DuSable Museum, covered 150 years of African-American history in Chicago in his brief presentation. Beginning with the African-American founder of Chicago, Jean Baptiste Point DuSable, Branham underscored the institutional basis for the promotion of cultural and community expansion. Especially during the 1890s, the African-American elite established political organizations, women's clubs, and businesses, many of which survived the Depression. This infrastructure supported the arts, music, and other cultural events, laying the groundwork for the Chicago Black Renaissance.

Victor Margolin, in "African-American Designers in Chicago: Themes and Issues," continued Branham's discussion of the rich tradition of African-American design and its support by African-American businesses and institutions in Chicago. However, because of politics, economics, and race, many doors of opportunity remained closed to African-American artists in commercial art,



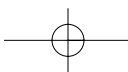


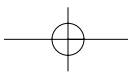
display design, cartooning, letter and sign painting, interior design, architecture, the design of industrial products, and advertising. To answer the critical questions of where African-American design artists worked and how they developed their own voices, Margolin elaborated on three types of discursive spaces: autonomous spaces, where African-American design artists could fully develop their artistic ideas; negotiated spaces, where they had to fight for a voice; and predominantly white discursive spaces, where they were allowed little or no voice.

African-American newspapers including the *Chicago Defender*, *The Chicago Whip*, *The Chicago Bee*, and *The Chicago Enterprise* provided autonomous spaces where artists could display their talents and polemics through advertisements, graphics, and cartoons. African-American magazines, especially those published by the African-American-owned Johnson Publishing Company were other outlets. In some cases, individual artists established their own business enterprises. Charles Dawson, a graduate of the School of the Art Institute in Chicago, started his own commercial art studio in the 1920s. Two other African-American commercial artists, C.E.J. Fouche and George Davenport, also established their own companies for illustration and sign painting during the same decade.

Perhaps the most salient examples of negotiated spaces in Chicago were the WPA and Illinois Art Projects, where African-American design artists were commissioned to create murals, sculptures, paintings, and other design art. Similarly, art exhibits, particularly the 1933 Century of Progress Exposition and the Diamond Jubilee Exposition of 1940, required African-American artists to negotiate the artistic and political expressions of their work because of white co-sponsorship and audiences. The original South Side Community Art Center was another cultural site of negotiated space. Originally funded as a federal arts project, the center eventually became an indigenous community center through its own fundraising efforts. Under the directorship of Rex Gorleigh, an African-American artist in his own right, the center became especially known for its African and African-American art exhibits.

The predominantly white discursive spaces which Margolin discussed were the prominent art schools in Chicago, including the New Bauhaus, the American Academy of Art, and the School of the Art Institute. Despite their training at these institutions, African-American artists often had difficulty finding employment in design art. Some did, however, break through the color line, such as cartoonist E. Simms Campbell. Designer Eugene Winslow, too, found work in the white community, but later established his own firm. Charles Harrison, who did his undergraduate and graduate study at the Art Institute, freelanced at Sears Roebuck. In 1961, he finally was offered a full-time job there. Clearly, Margolin noted,





these African-American artists' career paths were not continuous, but rather moved back and forth between various discursive spaces.

Adam Green, an historian at Northwestern University, continued Margolin's theme of discursive spaces, focusing upon African-American Chicago cartoonists during the 1940s. Green argued that cartoons were, perhaps, more expressive of African-American art than other genres. Of special note, he argued, was the work of *Chicago Defender* cartoonist Jay Jackson, known for his editorial cartoons with themes of social justice at home after WWII and the "Double V" campaign. (The latter theme highlighted issues of transnationalism and colonialism.) By capitalizing on the new action comic strip, Jackson was able to effectively combine his political viewpoints and aesthetics with cinematic techniques. Green concluded by emphasizing the need for scholars to more closely examine cartoons and other graphics in African-American newspapers because of their large readerships.

Pamela Franco, a lecturer in Art History at the University of Illinois at Chicago, next spoke about popular depictions of African Americans in Harlem during the 1920s. In particular, she examined the illustrations of Aaron Douglas, who "sold" a particular ideology about Harlem then. Douglas was encouraged by his teachers to explore "that inner thing of blackness." As such, Douglas utilized themes of spirituality to portray the difficult, yet rich, lives of migrants in Harlem. For example, in his painting *Prodigal Son*, the motifs of gin, loose women, cards, and trombones signified that Harlem was a kind of Babylon. However, in *Play the Blues*, Douglas looked at jazz clubs from another perspective. By focusing on the music, not the dancers' "immoral" behavior, he presented a kind of "sanitized" portrait. These visions may have been created in part to counteract the stereotypical negative images of Harlem, such as Van Vechten's *Nigger Heaven*. As Franco rightly noted, most Harlemites did not participate in black and tans, but rather organized rent parties to offset exorbitant rents.

The afternoon sessions shifted to presentations by the designers. Two panels featured the new and first generations of design artists in Chicago. Given emerging technologies today, there certainly are significant differences in the medium and design of the work of both generations. Likewise, there are more professional opportunities for African-American design artists today in both community and mainstream institutions. Two of the younger generation, Vernon Lockhart and Angela Williams, who worked for the Museum of Science and Industry and other institutions in Chicago, discussed how they created promotional materials, as well as exhibit designs, with an Afrocentric focus. Another panel member, Vincent Bowman, whose father was an offset printer, worked with a variety of materials in his designs of telephones, a film processor, x-ray machine, packaging, and bottles. The final speaker, Deborah Bennett, employed at a community development bank, adminis-

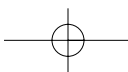


Figure 1

Offering thanks to those who came before them and a perspective on what it's like coming up in the profession today, a panel of four representatives of the new generation of Chicago's African-American designers was a highlight of the February symposium, African-American Designers: The Chicago Experience Then and Now. Shown here with panel moderator Philip Royster (far left), professor, departments of African-American Studies and English, and director, African-American Cultural Center, University of Illinois at Chicago (UIC), are (from left to right) panel members Vernon Lockhart, president, Art On The Loose, Inc.; Angela Williams, senior graphic designer, Chicago Museum of Science and Industry; Vincent Bowman, director of structural/industrial design, Lipson-Alport-Glass and Associates; and Deborah Bennett, director of cultural development, Shorebank Neighborhood Institute, and business manager, Studio Air.

All photos: Sisi Mosby



tered programs for children and youth in computer graphic design, business management, and entrepreneurial skills. Similar to the discussions of historians from the morning sessions, she emphasized how art and culture could contribute to social progress.

Perhaps the highlight of the symposium was the panel of first-generation African-American designers in Chicago. Victor Margolin moderated the panel with the following design artists: Vince Cullers, a graduate of the Art Institute, who established one of the first Black-owned advertising agencies in the United States; Charles Harrison, another graduate of the School of the Art Institute and the Institute of Design, who had been a senior industrial designer at Sears Roebuck for more than 30 years; Andre Richardson King, also a graduate of the School of the Art Institute, as well as the University of Chicago, who specialized in environmental design; Gene Winslow, a graduate of the Institute of Design, who had his own firm and also worked for various Chicago firms; Tom Miller, a graduate of Virginia State University and Ray Vogue School of Art, who worked at Morton Goldsholl and Associates for more than thirty years; Herbert Temple, a graduate of the School of the Art Institute who has been the senior art director at the Johnson Publishing Company in Chicago for almost fifty years; and LeRoy Winbush, who apprenticed with a sign painter after high school, and is known even today for the window displays in Chicago created by his firm, Winbush and Associates.

Several themes emerged in the first-generation artists' conversations. Despite their professional training and expertise, most experienced discrimination and difficulty in finding gainful employment. Cullers had begun as a fine artist when he was younger, then decided to be a commercial artist and pursued advertising. But at that time, there were no African Americans in advertising, and so there were no opportunities. Miller was one of the few African-American students at the Ray Vogue School of Art; he was also one of the few students who graduated without a job. Nonetheless, he pointed out, that didn't stop him, and eventually he

Figure 2

Seven of the city's African-American design pioneers. Shown here (from left to right) are Herbert Temple, art director, Johnson Publishing Company; Charles Harrison, retired industrial designer and design manager, Sears Roebuck and Company, and adjunct professor of industrial design, University of Illinois at Chicago (UIC); Leroy Winbush, Winbush Design; Eugene Winslow (seated), retired graphic designer; Andre R. King, Andre Richardson King Designers, Inc.; Vince Cullers, ceo and chairman, Vince Cullers Advertising, Inc.; and Thomas Miller, retired graphic designer.



found employment. Temple had noticed that his School of the Art Institute instructors only gave job leads to their white students. An administrator at the school, however, assisted him and gave him a listing of agencies on Michigan Avenue to which to apply. But all told him that he was “just a little too qualified.” The administrator then sent him to a place where several former students of the School of the Art Institute worked and they enthusiastically supported the management’s hiring of Temple.

Because of these discriminatory experiences, the first generation talked about providing opportunities for the next generations. Cullers spoke about how he not only fought for employment for himself, but to help open the door for other African Americans. Winbush agreed, pointing out that they, as professionals, had an obligation to the next generation to get them involved in design art. “We are just still in the beginning, even with what we have here,” he emphasized. His hopes, however, were otherwise: “[I] want to see us get a real force together.”

Most of the first generation talked about how they had gotten their own start from standing on the shoulders of other African-American artists in their communities. Temple became interested in the South Side Community Art Center, where he met many artists, including William McBride and LeRoy Winbush. When Temple saw McBride’s cartoons, it was the first time he had seen work by an African-American cartoonist. He tried to adapt his style to these cartoons, as well as to the magazine illustrations of African-American artists. King, too, met artist and cofounder of the South Side Community Center, Margaret Burroughs, and was greatly influenced by her. When Winslow discovered that “Black artists had nowhere to go,” he started a series of portraits of well-known African Americans, which he sold to the southside schools. He also designed cards for barbershops and other community businesses that supported him. Eventually, he became vice-president of



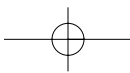
Figure 3

A call for all African-American designers in attendance to take the stage at February's African-American Designers Symposium: The Chicago Experience Then and Now resulted in this historic photo.

a new publishing company, AfroAm, which sold educational materials to the schools. These featured drawings and biographies of famous African Americans. Given the discrimination in mainstream society, Winslow and members of the African-American communities of Chicago created opportunities for the design artists to develop their autonomous discursive spaces.

Even as the first-generation design artists spoke of their experiences of racism and segregation, they emphasized the rich cultural experiences of their childhood and youth. As a young man, Winbush had worked at the famous Regal Theater's shop under the stage. He remembered it as "an exhilarating kind of experience." There, he met many famous African-American musicians including the Nat King Cole trio, Duke Ellington, Ella Fitzgerald, and Cab Calloway. One of the highlights of his career, he told the audience, was when Ella Fitzgerald sat on his lap. Temple spoke of "coming up" in a segregated society, where most African Americans had no contact with white society. Everything, he noted, was segregated: buses, streetcars, cabs, and businesses. As he explained, "You didn't go downtown. You had everything on the southside."

For some of the first generation, their first full exposure to racism was during WWII. As Temple explained, "[You] didn't understand the difference until you went into the army. Officers were white." King, too, spoke of how the painful memories of war gave him the motivation to do something for society. His war experience, he remembered, "affected his psyche." His father advised him to go back to Europe until he figured out "what to do with his life." For King, Temple, Harrison, and others, veterans' assistance provided them with an opportunity to seriously study design art. Such study provided a whole new way of thinking for these first-generation artists. Temple described his classes at the School of the



Art Institute, in contrast to his previous degrading job at the stockyard: "It was a new environment, talking about Will Durant, Machiavelli. I was introduced to new ideas." King, too, discussed his love of the study of architecture: "Architecture became something you could put your arms around. And fall in love with it." He eventually was involved in starting the new signing department at Skidmore, Owings, and Merrill, one of Chicago's leading architectural firms. Certainly, these artists were poised between the pain of discrimination and the determination and passion to create design art. Their conversations poignantly revealed the ways in which they navigated the discursive and public spaces in their professional lives.

To hear the life experiences of the first generation was a rare opportunity for the audience. As historians, scholars, artists, and community members, we have much to learn from them: from their words, their artwork, and their memories. On a larger note, all of the participants and organizers of the symposium should be commended for illuminating the complexities of this neglected history. Hopefully, there will be other opportunities to learn about such noteworthy lives and accomplishments.

