55 Étude sur le mouvement d'art decoratif en Allemagne(A Study of the Decorative Arts Movement in Germany)

Charles-Edouard Jeanneret. Étude sur le mouvement d'art decoratif en Allemagne(A Study of the Decorative Arts Movement in Germany). *Design Issues*, Vol. 23, Number 2 (Spring 2007), pp. 55-65

66 Secularism, Islamism, Emblemata: The Visual Discourse of Progress in Turkey

Gökhan Ersan. Secularism, Islamism, Emblemata: The Visual Discourse of Progress in Turkey. *Design Issues*, Volume 23, Number 2 (Spring 2007), pp. 66-82

Introduction

As diverse as the articles in this issue may seem, they share a common theme—innovation, which they explore and analyze in different ways. The opening article by Jack Ingram, Elizabeth Shove, and Matthew Watson seeks to broaden the possibilities for thinking about design by considering theories from related fields, notably anthropology and science and technology studies (STS). The authors' focus is on how products enter the social milieu, a process they divide into six categories that range from the acquisition of single new objects to the ways that things become configured into what they call "domains of consumption."

The authors relate their model of product innovation and use to a wide range of scholarly sources, arguing that the role of products in society has been little studied in comparison to the process of designing itself. Their aim is to introduce a general theoretical model of relations between humans and objects rather than account for the complex cultural factors that must be considered in individual situations.

The specifics of two particular cultural situations are the subject of Javier Gimeno Martínez's article on how women designers were invited to contribute to a competition for cooking utensils that Alessi sponsored in Italy and how two female curators organized an exhibition of contemporary furniture in Spain. Martínez complicates more general notions of culture by closely examining the gender politics of the two events. In both cases, women were working in traditionally patriarchal cultures where they made impressive contributions but did not have equal footing with men. Read in relation to the opening article by Ingram, Shove, and Watson, Martínez's account helps us to understand how competitions and exhibitions contribute to a climate that influences the way products are introduced to the market and received by consumers.

Emmanuel Bankole Ojo continues the cultural theme in his discussion of how the design and production of traditional hand woven fabrics called *Aso-oke*, driven by the demands of cultural and economic modernization, are changing in western Nigeria. Ojo describes the shift from a group of local craft cultures, each with its own methods and characteristics, to computer-driven production for international markets. Among the values at stake in this shift is the retention of traditional symbols and motifs within a new process that relies on advanced computerized methods of transferring patterns to cloth.

Whereas Ingram, Shove, and Watson look to anthropology and science and technology studies to enhance and deepen theories of design practice, Jennifer Whyte considers theories of evolution as a way to better understand the development of new products and their social reception. She claims that such theories are better at explaining "longer-term changes across design families" but may be less useful in clarifying "design practices within particular projects." She makes the point that designers work in the realm of the artificial rather than the natural; hence theories of evolution must be approached cautiously. But she finds precedents in economic and technology theory for adopting concepts from evolution and argues that design too, may benefit from evolutionary theory if it is applied appropriately.

Gökhan Ersan's close reading of the conflicts behind the introduction of a new emblem for the city of Ankara addresses the debates about modernization in Turkey based on a clash between secular and Islamist ideologies. Ersan skillfully deconstructs the Ankara emblem as he explains why its visual elements carry such a high emotional charge. If Ojo recounts a successful attempt in Nigeria to synthesize traditional and contemporary values in the production of textiles, Ersan, by contrast, describes how the design of a graphic emblem in Turkey can invoke contrasting attitudes towards modernization that are difficult to reconcile.

The theme of innovation is also evident in the document we are publishing in this issue—the introduction and conclusion of Swiss architect Le Corbusier's 1912 study of German decorative arts. Commissioned to undertake the study by the École d'Art in La Chaux-de-Fonds, his hometown, Le Corbusier analyzed the reasons why the Germans came to terms with industrialization more successfully than the French. He noted the paradox of France's leadership in the fine arts but argued that the Germans were better organized to create a successful industrial culture.

Robert Swinehart's review of a small book about Lester Beall portrays his subject as one of the first American graphic designers to adopt the techniques devised by artists and designers of the European avant-garde, while Raiford Guins' photo essay documents the small mosaics based on cutting-edge video game characters that the French artist known as "Invader" creates at unexpected sites in Los Angeles.

Bruce Brown
Richard Buchanan
Dennis Doordan
Victor Margolin

Products and Practices: Selected Concepts from Science and Technology Studies and from Social Theories of Consumption and Practice[1]

Jack Ingram, Elizabeth Shove, and Matthew Watson

1 "Designing and Consuming: Objects, Practices and Processes" is a research project involving Lancaster University, Durham University, and Birmingham Institute of Art and Design. It runs from January 2005 to December 2006, and is funded by the UK's Economic and Social Research Council/Arts and Humanities Research Council *Cultures of Consumption* research program. Award No: RES-154-25-0011. The project Web site is www.durham.ac.uk/designing.consuming.

2 E. Shove, *Comfort, Cleanliness and Convenience: The Social Organisation of Normality* (Oxford: Berg, 2003); E. Shove and M. Pantzar, "Consumers, Producers and Practices: Understanding the Invention and Reinvention of Nordic Walking," *Journal of Consumer Culture* 5: 1 (2005): 43–64.

Introduction

Models of the design process tend to be essentially linear, reflecting the time-based pressures of project management and notions of goal-directed problem solving. Most models of new product development end where consumption begins; that is, with the launch of a product in the marketplace (Figure 1).

However, the reverse sequence is equally valid: consumption practices, and their component materials, symbols, and procedures, develop over time, generating new product opportunities.[2] Design activities and design processes frequently are initiated by perceived opportunities of this kind, perhaps more commonly than by definitions of specific design "problems" (Figure 2).

By joining these two sequences together, we arrive at a cyclical model of designing and consuming: one indicating that consumer practices stimulate design; and that new products stimulate new practices (Figure 3).

Traditionally, the training and employment of designers has provided them with only limited understanding of consumption, use, and material culture. Indeed, Margolin goes so far as to

Figure 1

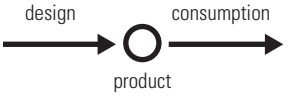


Figure 2

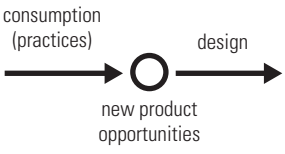
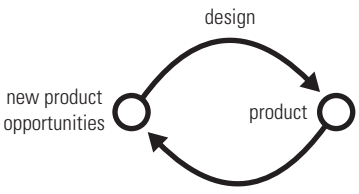


Figure 3



conclude that "We have no theory of social action that incorporates a relation to products, nor do we have many studies of how people acquire and organize the aggregates of products with which they live their lives."[3] Designers work with tacit as well as explicit ideas about actual and potential users, and it is important to appreciate that not all design "knowledge" is contained in design literature. That said, designers and design theorists rarely examine the circuits of product development in which their work takes place, and to which it contributes. For the most part, processes of consumption and use fall outside the normal frame of reference. In this paper, we review concepts and theoretical resources that bring these issues back into view, and that help in developing a more comprehensive understanding of the design-consumption cycle. We begin by offering a digest of concepts that deal explicitly with the relation between things and people, and that have the potential to bridge between design and social theory.

Design research and practice often have been influenced by concepts and methods borrowed from the social sciences. Developments in psychology and semiotics have, for example, made their mark in human factors research, in applied ergonomics, and in areas such as product semantics and emotional design. Techniques of user-centered design frequently include aspects of anthropological method, and there have been important moments of exchange, particularly in the field of human-computer interaction. In this paper, we explore possibilities for further cross-fertilization, this time between design, science and technology studies (STS), and sociological theories of consumption and practice. We do this on the grounds that, despite their different intellectual roots, these diverse traditions have the potential to contribute to a better understanding of how designed artifacts shape and are shaped by the contexts in which they are used. It probably is true that sociologists have had more to say about moments of consumption than about processes of use,[4] however, this is not the whole story. As demonstrated by the examples to which we refer below, many also have been concerned, sometimes centrally so, with the relation between material objects and social practices. Can design research exploit and appropriate this rich seam of theoretical resources?[5] In addressing this question, we begin with what is a necessarily brutal process of simplification and abstraction. In what follows, we take a selection of concepts out of the sociological and anthropological debates from which they have evolved in order to identify points of connection, difference, and relevance for design.

We focus on six themes—acquisition, scripting, appropriation, assembly, normalization, and practice—all of which offer potentially important insight into the symbolic significance of physical objects and the relation between products and practices. Although presented one after the other, these concepts do not fit together to form a seamless theoretical whole. As we explain, each has its own intellectual

3 V. Margolin, *The Politics of the Artificial* (Chicago: University of Chicago Press, 2002), 52.

4 Ibid.

5 M. Berg, "The Politics of Technology: On Bringing Social Theory into Technological Design," *Science, Technology, and Human Values* 23 (1998): 456–490; and V. Margolin, *The Politics of the Artificial.*

ancestry. Even so, there is some logic to the sequence in which they are introduced. We start by reviewing a range of sociological explanations as to why people acquire consumer goods. Grouped together under the heading of *acquisition*, these ideas represent different ways of thinking about what things are for, how they fit into, and how they extend existing regimes of meaning and significance.

The concept of *scripting* takes us into conceptual territory in which products and objects are accorded a measure of agency. Depending upon how they are designed, things permit and prevent certain courses of action. To use the sociological jargon, they "configure" their users. In this analysis, objects are addressed as material rather than symbolic entities. What matters is the relation between things, on the one hand, and the actions of their users and consumers on the other. In writing about *appropriation,* we explore the other side of this coin. The literature that we draw together under this heading recognizes the situated nature of consumption, and makes much of the point that attributions of meaning and purpose are culturally and situationally specific.

Terms such as "scripting" and "appropriation" generally are used to describe interactions between people and discrete objects; be they computers, bottle banks, or fridge-freezers. In contrast, the rather less developed notion of *assembly* refers to the ways in which suites or complexes of artifacts relate to each other, sometimes at the design stage, but more commonly when put to use. Under this heading, we think about how systems of material interdependence develop, and we consider the processes involved in "orchestrating" materials in domains or consumption "junctions" including the kitchen or the office.[6]

We then turn our attention to the dynamic nature of products in use. As many scholars have recognized, there is a difference between invention and innovation. We use the term *normalization* to refer to processes through which new objects and arrangements become established, and through which new expectations and forms of competence emerge. The sixth concept, *practice,* embraces aspects of the other five in that it offers a framework within which to analyze the co-constitutive relation between objects, images, and forms of competence.

We do not claim that these ideas can be immediately plugged into design research and practice, nor do we suggest that this is necessarily desirable. As we notice along the way, each has certain limitations. However, we contend that theoretical resources of this kind are required to illuminate the hidden or "dark side" of the cyclical processes of which industrial design is a part. In the concluding section of the paper, we take stock of what already has been achieved, and of the problems and possibilities of developing theories of material culture and consumption that are of relevance and value to design research and practice. We begin, as promised, with a discussion of acquisition.

6 R. S. Cowan, "The Consumption Junction: A Proposal for Research Strategies in the Sociology of Technology" in *Social Construction of Technological Systems: New Directions in the Sociology and History of Technology,* W. E. Bijker, T. P. Hughes, and T. J. Pinch, eds. (Cambridge, MA: MIT Press, 1987); O. De Wit, J. Ende, J. Schot, and E. van Oost, "Innovative Junctions: Office Technologies in the Netherlands 1880–1980," *Technology and Culture* 43:1 (2002): 50–72.

Acquisition

Why do people acquire new consumer goods? This is an important question for product designers for whom achievement is at least partly measured in terms of retail success. Theorists of consumption also are interested in motivations for acquisition, but for different reasons. In this field, the challenge of understanding the "desire for the new"[7] relates to the more general task of analyzing and comprehending escalating patterns of demand in contemporary society. Is consumers' pursuit of novelty simply driven by producers' economic requirement for innovation and profit? Design researchers frequently wonder about their role in fueling processes of product variation and specialization, and often are anxious about the part they play in promoting unsustainable patterns of consumption.[8] There are, however, other more sociological accounts of what drives people to acquire novel products and technologies. In reviewing some of this literature, Shove and Warde[9] isolate a number of generic mechanisms believed to be involved. Very briefly, these include:

Social Comparison

The core proposition here is that lower social classes seek to imitate higher-status groups. By implication, demand will not cease until the lower classes have the same possessions as their superiors. Meanwhile, the higher classes constantly seek new items through which to maintain a measure of social distinction. The popular notion of "keeping up with the Joneses" is one very simple formulation of what has become a much more elaborated set of arguments about the part objects play in signaling status and identity.

The Creation of Self-identity

In selecting goods and services, people transmit messages to others—they manipulate and manage appearances and thereby create a "self-identity." Objects, and the meanings associated with them, constitute resources used in the definition of self.

Mental Stimulation and Novelty

Social-psychological accounts of consumption suggest that the experience of novelty has attractions of its own: trying out new items and learning new tastes are ways of averting boredom; hence there is an infinite demand for novelty.

Matching or the "Diderot Effect"

Diderot was given a new, red gown as a present. Because it made other items in his study look shabby, he progressively replaced his desk, curtains, and carpet so that they went

7 C. Campbell, "The Desire for the New: Its Nature and Social Location as Presented in Theories of Fashion and Modern Consumption" in *Consuming Technologies,* R. Silverstone and E. Hirsch, eds. (London: Routledge, 1992), 48–66.

8 P. Sparke, *Consultant Design: The History and Practice of the Designer in Industry* (London: Pembridge Press, 1983).

9 E. Shove and A. Warde "Inconspicuous Consumption: The Sociology of Consumption, Lifestyles and the Environment," in *Sociological Theory and the Environment: Classical Foundations, Contemporary Insight* R. Dunlap, F. Buttel, P. Dickens, and A. Gijswijt, eds. (Lanham, MD: Rowman and Littlefield, 2001).

with his new robe. McCracken[10] uses this story to identify a process of ratcheting, in which replacement of one element or item sets off a further round of acquisition.

Specialization

As the range of activities in which one might participate increases, so does the range of specialized products, each targeted at a specific group of practitioners. The separation of once-similar activities into increasingly specialized fields fosters the production and consumption of ever more precisely differentiated goods and services.

Attempts to design and target products for niche markets are frequently informed by conventional techniques of marketing and lifestyle analysis, many of which tap into apparently similar interpretations, particularly of the significance of social comparison as a driver of consumer demand. There are, however, crucial points of difference. Rather than taking consumer "needs" for granted, or supposing that they reflect some innate feature of human existence, including the need for status and distinction,[11] the sociological literature focuses on how demands for visible items of conspicuous consumption are constructed and reproduced. The design literature has yet to really engage with the social processes involved in *making* need, and this certainly is an avenue for future development. It is, nonetheless, important to recognize that the sociological explanations sketched above are limited and partial. Although they emphasize the social and cultural attribution of symbolic meaning, and the semiotic significance of acquisition and ownership, they have little or nothing to say about how objects actually are used in practice.

We return to the relationship between acquisition and use later in the paper. For now, it is enough to notice that much of the extensive literature on consumption and material culture addresses artifacts as carriers of meaning, distinction, and value. As a consequence, practical questions of action and utility take second place. By contrast, these are central themes for those who work in science and technology studies. Again, this is a huge field. In picking our way through it and in picking out concepts specifically relevant for understanding the relation between practices and products, we begin with the concept of "scripting."

10 G. McCracken, *Culture and Consumption: New Approaches to the Symbolic Character of Consumer Goods and Activities* (Bloomington, IN: Indiana University Press, 1988).

11 A. H. Maslow, "A Theory of Human Motivation," *Psychological Review* 50 (1943): 370–396; L. Tiger, *The Pursuit of Pleasure* (London: Little and Brown,1992); P. Jordan, *Designing Pleasurable Products* (London: Taylor and Francis, 2000).

Scripting

Scriptwriters in drama, film, and television define the actions and practices of the human actors who follow their lines. The idea that designers have a similar role in scripting the actions and practices of those who use and consume the products they make has become common currency in social studies of science and technology. As Madeleine Akrich puts it, technical objects "define a framework of action together with the actors and the space in which they are supposed to act." [12] Scripts can be intentional (on the part of the designer) or not, they can be material or semiotic, and they can be relatively open (flexible) or closed (prescriptive).

Scripting is most obvious when objects are designed to configure the user in specific and practical ways. For example, Latour[13] discusses the design of hotel key fobs which are bulky enough to be an encumbrance. Simply being the size they are is enough to "tell" guests to return them to the desk. In this case, the message "leave me at the desk" is *inscribed* in the structure of the key itself. Another example can be found in the toilets of *Voyager* trains on the UK rail network. Above the toilet fixture is a sign indicating that the flush button is located behind the raised toilet seat. To carry out the thoroughly embedded practice of flushing the toilet, the user is obliged to adopt the less than universal practice of putting the toilet seat down after use.

Given the assumption that most users will flush the toilet, putting the button behind the toilet seat materially disciplines users. If they are to flush at all, they have no option but to lower the seat. However, the degree to which this script is, in fact, "closed" depends not upon the design of the seat, but upon contextually specific cultural norms. Given a user less accustomed to flushing the toilet, or actively resistant to being ordered to do so by a bathroom fixture, the script reopens as the user rejects the action-narrative inscribed in the flush button.

While "scripting" is not in the human factors lexicon, aspects of the concept are arguably central to well-established approaches in industrial design, ergonomics, and in studies of the interface between man and machine.[14] Designers often are faced with the challenge of deliberately constructing objects such that users comply with sometimes elaborate protocols and sequences of action.

Designers also are tacitly familiar with the possibility of what Latour writes about as "delegation" from human to nonhuman actors. In the example referred to above, the hotelkeeper "delegates" the task of disciplining the guest to the key, which then acts on the hotelkeeper's behalf. At first sight, man-machine systems design takes a similarly symmetrical view of human and nonhuman actors, treating both as elements to be deployed in the construction of complex systems. In systems design, the decision to rely on a human or a nonhuman component is based upon objective measures

12 M. Akrich, "The De-Scription of Technical Objects" in *Shaping Technology/Building Society: Studies in Sociotechnical Change,* Wiebe Bijker and J. Law, eds. (Cambridge, MA: MIT Press, 1992), 208.

13 B. Latour, "Where Are the Missing Masses? A Sociology of a Few Mundane Artifacts" in *Shaping Technology/Building Society,* W. E. Bijker and J. Law, eds. (Cambridge, MA: MIT Press, 1992), 225–258.

14 W. T. Singleton, *Man-Machine Systems* (Harmondworth, UK: Penguin, 1974).

of relative performance, such as those encapsulated in "Fitt's List."[15] According to these criteria, humans have certain advantages over nonhuman components, including an ability to deal with the unpredictable and to degrade "gracefully" when overloaded. New technologies—for instance, electronic devices for pattern recognition—have encroached upon what previously were uniquely human areas of expertise, but for the purposes of the present discussion, the issue of exactly what humans and nonhumans are "good for" is less important than the point that systems routinely are treated as self-evidently hybrid combinations of human and machine.

In addition, and again without any philosophical fuss, designers have a long history of analyzing and deliberately configuring the human/nonhuman interface. The notion of developing human and nonhuman components in parallel; of constructing more or less passive roles for the human-operator; and of explicitly analyzing points of contact and relations between the two "teams" are central to what used to be called "man-machine interface design." In this environment, physiological and psychological research, for example, into the direction of motion stereotypes or natural biodynamics is important if designers are to predict performance, minimize error, and increase accuracy on the part of the man-like cogs with which they deal.

As this last comment indicates, similarities between man-machine systems design and social scientific concepts of scripting do not run as deep as might at first appear. For a start, the literature on sociotechnical scripting seeks to develop a much more subtle understanding of the mutually constitutive relation between users and technologies. Humans are not treated as (relatively) predictable components of a hybrid machine, but as social agents capable of resisting, as well as complying with, embodied and materialized inscriptions. Even the most prescribed artifacts remain open to resistance (or "anti-programs") when exposed to the social realities of use and practice. Second, sociotechnical scripts often are multiple. In the example of the *Voyager* flush button, the possibilities are clear: either the user will comply and put the seat down, or resist and leave it up. More commonly, technologies afford multiple uses, meanings, or practices, and processes of scripting are correspondingly—and simultaneously—diverse. Third, the sociological literature attends to contextual, practical, and semiotic—and not only psychological or physiological—factors involved in description (i.e., in how users and consumers in fact respond).

In short, scripting is a concept born of reflexive sensitivity to the social and cultural specificity of everyday life. Although it might inspire significantly new ways of thinking about designers' roles in making and shaping the material artifacts with which we share our lives,[16] this concept is of little use in generating universally valid predictions of consumer response, or in designing reliable man-

15 P. Fitts, *Human Engineering for an Effective Air-Navigation and Traffic-Control System* (Washington: National Academy of Sciences, 1951), cited in W. T. Singleton, "Systems Prototype and Design Problems," *Ergonomics* 10 (1967): 120–128.

16 H. Molotch, *Where Stuff Comes From: How Toasters, Toilets, Cars, Computers, and Many Other Things Come to Be as They Are* (New York: Routledge, 2002).

machine systems. As we explain in the next section, concepts of scripting do not preclude the possibility that consumers will appropriate and configure objects in all manner of situationally-specific ways themselves.

Appropriation

Although scholars of science and technology studies also have been active in this field, most of the literature on appropriation, customization, and domestication has been developed by people writing within the rather different intellectual traditions of material culture and consumer research. Whatever their lineage, and whatever the subtleties involved in defining each of these terms, such analyses are as one in highlighting the active part that users play in fitting technologies and commodities into existing ways of life, frameworks of meaning, and contexts of practice.

As most commentators recognize, scripting is but one aspect of the process through which objects and users configure each another. Even so, it sometimes is useful to oppose scripting and appropriation, if only as a means of characterizing what is an otherwise seamless process of co-determination. It is in this context that writers including Jelsma[17] have investigated cases in which users actively develop and implement "anti-programs" in response or resistance to those inscribed in the objects themselves. This kind of appropriation may take the form of direct technical intervention, such as when self-closing doors are propped open to provide ventilation or easy access. More commonly, alternative scripts and unnoticed affordances emerge as users and consumers position objects—symbolically and materially—within existing complexes of possession and practice.

In demonstrating how videos and computers are accommodated within the home, Silverstone, Hirsch, and Morley[18] show how prior routines and patterns of life structure the way in which these new technologies are viewed and used. Going further, they suggest that such processes give material artifacts shape and form, determining what they "are" and what they might become in different social and domestic situations. Kaufmann's wonderful study of couples and their laundry provides another fine illustration of the complexity and density of social and practical arrangements into which a new appliance such as a washing machine is inserted, and through which it is defined and given meaning.[19] Changing scale, anthropological studies of how potentially "imperialistic" global commodities are, in fact, positioned and consumed make use of remarkably similar ideas. This is exemplified by Miller's[20] work on the appropriation of the archetypal global brand "Coca-Cola," as an ethnically differentiated national drink of Trinidad.

17 J. Jelsma, "Philosophy Meets Design, or How the Masses Are Missed (and Revealed Again) in Environmental Policy and Ecodesign" in *Consumption, Everyday Life, and Sustainability, Reader for ESF Summer School 1999, Lancaster University* (Lancaster, UK: Centre for Science Studies, 1999).

18 R. Silverstone, E. Hirsch, and D. Morley, "Introduction" in *Consuming Technologies,* R. Silverstone and E. Hirsch, eds. (London: Routledge, 1992).

19 J. C. Kaufmann, *Dirty Linen: Couples and Their Laundry* (Middlesex, UK: Middlesex University Press, 1998).

20 D. Miller, "Coca-Cola: A Black Sweet Drink from Trinidad" in *Material Culture: Why Some Things Matter,* D. Miller, ed. (London: UCL Press, 1998), 169–187.

Such thoroughly social analyses of material objects have yet to find their way into the design literature. This is, perhaps, not surprising. After all, design is of little or no relevance to the *process* of appropriation, and it is this process that is at the heart of the sociological debate. There is, however, evidence of interest in the more basic observation that consumers are ingenious and creative. For example, Fulton-Suri's[21] photographic study "Thoughtless Acts" illustrates the apparently unconscious exploitation of material affordances as people put objects to new and varied uses in different situations. In addition, design researchers have used the concept of domestication as a tool with which to carve out new areas of inquiry, for instance, looking at how designed objects are valued, and at what actually happens to them in the home.[22] As this work demonstrates, it is possible to develop such an agenda within design, and to do so without necessarily challenging foundational ideas about the theoretical status of objects and their role in social life. As befits the idea, concepts of appropriation can be appropriated!

Assembly

Having established that products and technologies are incorporated into existing regimes and ways of life, the next question is: "How?" What are the conventions and "rules" of appropriation, and what is it that is achieved and maintained as a result. Although relatively little has been written about this as an issue in its own right, a number of authors have made relevant observations about modes of integration, and about the work involved in assembling the material and symbolic ingredients of daily life.[23]

In writing about how households use domestic appliances, Silverstone[24] suggests the existence of a "higher" level temporal order—a time style part public, part private—that families reproduce through the distinctive ways in which they piece together tools, technologies, and practices. The idea here is that things are appropriated in a manner that is consistent with a vision or imaginary template of how family life should be organized. Similar arguments can be made about the ways in which understandings of health, hygiene, and well-being inform many practices at once.[25]

At the macro level, orchestrating concepts of normal practice are important forces for coordination. The notion of a "lifestyle"—though contested—points to other conventions of order. Various commentators have argued that things are, for example, acquired and combined to form complete lifestyle packages. Hence it would be strange if someone rich enough to own a large house and several cars did not also have an adequate heating system. Notions of symbolic coherence are equally important, driving sequences of "upgrading"—as when the acquisition of a new carpet prompts the purchase of a new sofa or a round of redecoration.[26] In addition, what goes with what may be determined by questions of technical

21 J. Fulton-Suri, *Thoughtless Acts?* (San Francisco: Chronicle Books, 2005).

22 I. Koskinen, "Design and Domestication," paper presented at *Design and Consumption: Ideas at the Interface* (Durham University, January 2006).

23 M. Hand and E. Shove, "Orchestrating Concepts: Kitchen Dynamics and Regime Change in *Good Housekeeping* and *Ideal Home 1922–2002," Journal of Home Cultures* 1:3 (2004): 235–257.

24 R. Silverstone, "Time, Information, and Communication Technologies in the Household," *Time and Society* 2:3 (1993): 283–311.

25 E. Shove and M. Pantzar, "Consumers, Producers and Practices: Understanding the Invention and Reinvention of Nordic Walking."

26 See the "Diderot Effect" discussed above; and G. McCracken, *Culture and Consumption: New Approaches to the Symbolic Character of Consumer Goods and Activities.*

interoperability. Many products and technologies are designed to be compatible with others, thereby creating systems or networks of interdependence: for example, between computers, printers, and digital cameras; or between textiles, washing machines, and detergents.

Authors such as Cowan[27] and de Wit, et al.[28] remind us that the "work" of integration and assembly is situated, and that locations of conjunction and coordination matter. In writing about consumption junctions, Cowan acknowledges that the kitchen is a place in which streams of material, ideology, and culture converge. De Wit, et al. take up this idea and show how co-location has affected the detailed coevolution of office equipment: the role of the fax, for instance, being redefined in relation to that of the printer and the computer next to it.

Symbolic and material forms of integration obviously coexist. Understanding how these modes operate together, and how sociotechnical "regimes" emerge as a result, remains important for social theory.[29] But what does this mean for design and design research?

In some situations, consumers do much of the integrative work themselves, selecting from a repertoire of isolated products (for example, shirts, socks, shoes, jackets, coats, handbags, etc.) in constructing what is for them a coherent whole. In other cases, designers and manufacturers produce what are, in effect, preassembled bundles of products and technologies (for instance, offering a complete kit of fishing equipment or coordinated suites of office furniture). In between these two extremes, designers and manufacturers routinely take note of the settings in which "their" products are to be used. This is a somewhat limited response to the substantial theoretical challenge of understanding and intervening in the coevolution of complex product ecologies, and surely there is scope for taking these ideas forward within design research. In so doing, it will be important to consider the temporal aspect of the relation between people, products, and practices. As we go on to show, this is an important and relatively well-documented theme in the social scientific literature.

Normalization

Sociologists of consumption and of technology have developed different theories and models to explain how novel arrangements become normal. Some concentrate on the "diffusion" of new products, arguing that these percolate through the strata of society and that fashions develop as people and social groups emulate each other. Although Rogers[30] does not relate the propensity for risk-taking to social class or status, his suggestion that the practices of "early adopters" in time are taken up by more cautious members of society, and finally by reluctant "laggards," invokes a similarly

27 R. S. Cowan, "The Consumption Junction: A Proposal for Research Strategies in the Sociology of Technology" in *Social Construction of Technological Systems: New Directions in the Sociology and History of Technology.*

28 O. De Wit, J. Ende, J. Schot, and E. van Oost, "Innovative Junctions: Office Technologies in the Netherlands 1880–1980."

29 A. Rip and R. Kemp, "Technological Change," in *Human Choice and Climate Change: Resources and Technology,* S. Rayner and E. Malone, eds. (Columbus, OH: Battelle Press, 1998).

30 E. M. Rogers, *The Diffusion of Innovation* (New York: Free Press, 1983).

infectious theory of social change. These accounts take the status of the new product for granted: all that matters is how it is introduced and disseminated.

In contrast, other writers focus on the changing *relation* between artifacts and their environments. Studies of innovation have, for example, shown that new technologies often develop within protected "niches," safe from the rigors of established markets. The process of moving from the "nursery" to the wider world is described as one of making alliances and forging new relations between things and people along the way.[31] In this account, artifacts and technological systems are constantly redefined during the course of a "journey" that never really ends. The concept of "innofusion," a combination of innovation and diffusion, captures the idea that, for all intents and purposes, things change as their status and positioning within the wider environment (or market) evolves, and as they become normal.[32] This is a dynamic enterprise, and one in which new products also have consequences for the environments into which they are introduced. In becoming *normal*, certain "radical" innovations disrupt and challenge previously established skills, institutional arrangements, expectations, and conventions.[33]

In an article explicitly linking analyses of innovation with theories of consumer behavior, Pantzar[34] pays serious attention to the evolving character of meaning as novel technologies and products become normal. Tracking the symbolic trajectories of a range of commodities (including the telephone, the computer, the car, and the television), he suggests that such items go through distinctive phases of redefinition. Starting their collective career as fashionable objects of desire, the next stage is one in which acquisition is legitimized in rational or functional terms. According to Pantzar, this is followed by a period of routinization. By this point, the items in question have become so ordinary that their acquisition needs no justification at all.

This process is perhaps paralleled by transitions in the role and contribution of design. For example, Liddle[35] has suggested that designs are simplified as products move from the "enthusiast" stage to the point where they become normal commercial goods. Once a mass market has been established, new design problems arise, usually having to do with differentiation and competition within a product type.[36]

With hindsight, it is easy to trace product careers as they move from one "stage" to the next. However, it is important to realize that (re)attribution of meaning and the redefinition of practice are both part of a typically unstable dynamic of innovation *and* of normalization. Many products fail along the way, and many potential practices never take hold. Conversely, some become deeply entrenched. In his classic article "Clio and the Economics of

31 R. Kemp, J. Schot, and R. Hoogma, "Regime Shifts to Sustainability through Processes of Niche Formation: The Approach of Strategic Niche Management," *Technology Analysis and Strategic Management* 10 (1998): 175–195.

32 W. Bijker, "The Social Construction of Fluorescent Lighting or How an Artifact Was Invented in its Diffusion Stage" in *Shaping Technology Building Society*, W. Bijker and J. Law, eds. (Cambridge, MA: MIT Press, 1992).

33 W. Abernathy and K. Clark, "Innovation: Mapping the Winds of Creative Destruction," *Research Policy* 14 (1985): 3–22.

34 M. Pantzar, "Domestication of Everyday Life Technology: Dynamic Views of the Social Histories of Artifacts," *Design Issues* 13:3 (1997): 52–65.

35 D. Liddle, "Connecting Value" (Keynote Address presented at *7th International Forum on Design Management Research and Education*, Stanford University, 1995).

36 H. Petroski, *The Evolution of Useful Things: How Everyday Artifacts—from Forks and Pins to Paper Clips and Zippers—Came to Be as They Are* (London: Pavillion Books, 1993).

QWERTY," Paul David[37] discusses the social and economic processes that together result in forms of "path dependency," such that the design of the typewriter keyboard becomes "locked in" and resistant to change. These ideas raise a number of specific questions for design research. How do products and types of product design change (or reinforce) what people do, and what does this mean for trajectories of innovation and for future avenues of product development?

Practice

The simple observation that consumer goods are important not for their own sake but for the practices they make possible has potentially far-reaching implications for our discussion. Such an observation prompts us to think again about the tools, toys, equipment, and resources required to accomplish what people believe to be normal, ordinary, and acceptable ways of life. This is not a one-way relationship. As indicated above, artifacts and practices coevolve. In this final section, we comment briefly on the conceptual implications of putting the emergent "doing"—that is the practice itself—center stage.

For Reckwitz[38] and for Schatzki,[39] practices emerge from, constitute, and make sense of "forms of bodily activity, forms of mental activity, things and their use, background knowledge in the form of understanding, know-how, states of emotion, and motivational knowledge."[40] In the view of these authors, practice cannot be reduced to any one of these elements alone. This is in contrast to those who take the individual or the artifact as the unit of analysis and enquiry, or who are concerned with the distribution of competences between objects and operators (as is the case in some of the man-machine systems literature).

From a practice theoretic perspective, the alternative is to conceptualize people and things as the "carriers" of practice (and of many different practices that are not necessarily coordinated with one another), and therefore the carriers of certain routinized ways of doing, understanding, knowing, and desiring. These aspects are necessary attributes of practices in which individuals participate, and which in part are shaped by the material world—but they are *not* qualities of human or of nonhuman actors. Building on these ideas requires a subtle but significant shift of orientation. Among other things, it suggests that we could and should consider how practices are sustained by provisional networks of practical knowledge, including that which is embedded in material objects. In such an analysis, objects—whether designed to do so or not—figure as "knots of socially sanctioned knowledge," [41] and as entities that "bind human actors and participate in developing specific forms of social order because they allow for common practices to develop." [42]

37 P. David, "Clio and the Economics of QWERTY," *American Economic Review Papers and Proceedings* 75 (1985): 332–337.

38 A. Reckwitz, "Towards a Theory of Social Practices: A Development in Culturalist Theorizing," *European Journal of Social Theory* 5:2 (2002): 243–63.

39 T. Schatzki, *Social Practices: A Wittgensteinian Approach to Human Activity and the Social* (Cambridge: Cambridge University Press, 1996).

40 A. Reckwitz, "Towards a Theory of Social Practices: A Development in Culturalist Theorizing": 249.

41 A. Preda, "The Turn to Things: Arguments for a Sociological Theory of Things," *Sociological Quarterly* 40 (1999): 347.

42 Ibid. 351.

There is much more that could be said but, for the time being, it is enough to point out that this literature provides a potentially useful and relevant way of analyzing objects as constituents of practice, and as entities through which knowledge and social order are carried and reproduced.

Issues for Design and Design Research

The selection of positions outlined above gives an indication of the potential for theoretical exchange and development between science and technology studies, social theories of practice and consumption, and design research. In outlining a range of conceptual resources with which to investigate the half of the design consumption cycle that is routinely missing from design theory, we have sought to identify points of commonality, contention, and challenge.

To start with the commonalities, notions of emotional design, high value added, and the "X factor" evidently resonate with certain theories of acquisition. Questions of how values are invested in products are, in addition, of growing interest to theorists of design and consumption alike. As already discussed, the idea that objects script user action and experience has parallels in the practical ambition of "designing the user experience"[43] and in "interface design." Notions of appropriation also are apparently consistent with the recognition that not even the most farsighted designer can realistically anticipate how products will be perceived, valued, and utilized by producers, merchants, and ultimate users. At its most basic, the concept of assembly is embedded in the coordinated design of product ranges and families; and concepts of normalization have a certain resemblance to theories of product evolution. There is interest across the board in the temporal dimension, as well as in the ways that products and practices feed each other.

Our review also has identified a number of opportunities and challenges. For example, could the ambition of making things that are "fit for purpose" be elaborated so as to take note of the point that things also make the purposes for which they are fit? Rather than following simplistic interpretations of Maslovian development, design researchers might draw upon the sociology of consumption in constructing more subtle and more convincing theories of demand. Perhaps related to this, we might imagine an extended model of design process that reflects consumer practice as a major source of design opportunity (see Figure 3). This would make it possible to examine the continually evolving relationship between features and values embedded by design and those that subsequently are acquired.

Design practice and design education champion a creationist approach in which the creativity of the designer is promoted as the major driving force in forming new products. Although evolutionary accounts of the development of product types (and of forms within a product type) have yet to be elaborated on any scale, there is much

43 J. Ingram, "Designing the User Experience—A Design Methodology with Educational and Commercial Applications" (Paper presented at *Design: Science: Method,* the Design Research Society International Conference, Portsmouth Polytechnic, 1981).

anecdotal evidence, even within design, that product development proceeds through meta-level processes of selection and variation. Perhaps less contentiously, professional design organizations are taking notions of consumer-influenced product evolution increasingly seriously. While companies such as Interval Research,[44] IDEO,[45] and Philips[46] have been in the forefront of promoting design methodologies that purport to address the dynamic relation between product and practice, such techniques have, to date, not been adopted within conventional design processes. A more thorough appreciation of the conceptual challenges at stake almost certainly would generate significantly different ways of conceptualizing and managing strategic design policy within manufacturing organizations. For example, discussions about the passive or sovereign status of the consumer appear in a rather different light when we acknowledge that consumers, designers, and producers all are involved in coproducing the practices through which objects and materialized forms of knowledge have meaning.

In conclusion, we might rephrase Latour's observation that "students of technology are never faced with people, on the one hand, and things on the other: they are faced with programs of action, sections of which are endowed to parts of humans, while other sections are entrusted to parts of nonhumans."[47] This statement works just as well if we put "designers" or "design researchers" in place of "students of technology." Although they use different terms, Kelley and Littman propose an apparently similar approach. As they explained, the challenge is to "think of products in terms of verbs, not nouns: not cell phones but cellphoning."[48] Taken seriously, practice-oriented approaches to product development demand that attention be paid to the continually coevolving relation between human and nonhuman actors (objects) jointly implicated in the process of "doing"—whether that be cellphoning, fishing, or whatever.

As these brief examples illustrate, there are more extensive possibilities for cross-fertilization between design and social science than at first might appear. Douglas and Isherwood's famous observation that goods are "needed for making visible and stable the categories of culture"[49] has tended to be interpreted as a statement about the significance of symbolic distinction, taste, and the somewhat abstract role of artifacts as markers and carriers of meaning. It is, however, clear that social science has much to say about the pragmatic and practical role of goods, and about how objects stabilize culture though use, competence, and know-how, as well as through exchange and display. What is required and what we hope to have initiated is a considered interdisciplinary conversation about the relevance of these ideas for design and design research.

44 D. Liddle, "Connecting Value" (Keynote Address presented at *7th International Forum on Design Management Research and Education*).

45 J. Fulton-Suri, *Thoughtless Acts?*

46 P. Jordan, *Designing Pleasurable Products.*

47 B. Latour, "Where Are the Missing Masses? A Sociology of a Few Mundane Artifacts" in *Shaping Technology/Building Society*, 254.

48 T. Kelley and J. Littman, *The Art of Innovation: Lessons in Creativity from IDEO, America's Leading Design Firm* (New York: Currency/Doubleday, 2001), 47.

49 M. Douglas and B. Isherwood, *The World of Goods: Towards an Anthropology of Consumption* (London: Routledge, 1996), 38.

Women Only: Design Events Restricted to Female Designers During the 1990s

Javier Gimeno Martínez

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Introduction

In order to explore the promotion of gender in the practice of design, this paper will analyze two case studies in detail, specifically a contest and an exhibition in which participation was restricted to female designers. The Creole Project/Memory Containers Contest was organized in 1990 by Centro Studi Alessi (Alessi Research Centre-ARC) in Milan.[1] The exhibition was *La casa que ríe* (The Laughing Home), which represented Spain in the 1994 *Abitare il Tempo* furniture fair in Verona, Italy. These two examples were not organized by feminist-related organizations and, consequently, the promotion of female designers was not their principal goal. It is precisely for this reason that they are extraordinary examples for illustrating the mainstreaming process of originally feminist demands in the practice of design.

This article seeks to study the "marriage of convenience" between feminist rhetoric and the language of both marketing strategies and national representation. To achieve this goal, I will first explore the difficult negotiation between the "ideal" and the "real" reasons for this union, and, secondly, the cohesive element that made this fusion possible. As I will argue, only an "experimental" allure could link these two concepts. The aim of this research is to study the implementation of positive inclusion, as well as to analyze it as a "symptom" of a new social sensibility regarding the gender issue, without defending or condemning it. The question of whether or not the application of affirmative action policy is suitable will not be evaluated in this article. That discussion might be relevant when addressing "which" strategy is best for promoting gender equality. In this case, however, what is being addressed is "how" this normalization process is evolving.

The main purpose of this article is to extend the debate on feminism from the theory to the practice of design through a detailed examination of these two examples, in the hope that it might bring about further research on this topic in the future. In other words, this is not a revision of the history of design from a feminist point of view, but rather an evaluation of how feminism has acted as a springboard for female designers during the 1990s.[2] This article will

1 In 1998, the ARC moved from Milan to the village of Crusinallo, the location of the Alessi Company headquarters.

2 Recent revisions of the history of design have been undertaken by, for example, I. Anscombe, *A Woman's Touch: Women in Design from 1869 to the Present Day* (London: Virago, 1984); J. Attfield, "Form/FEMALE Follows FUNCTION/Male: Feminist Critiques of Design" in J.A. Walker, *Design History and the History of Design* (London: Pluto, 1989); C. Buckley, "Made in Patriarchy: Toward a Feminist Analysis of Women and Design," *Design Issues* 3 (1986), 3–14; P. Sparke, 1995 (see note 5); *Design and Feminism: Re-visioning Spaces, Places, and Everyday Things,* J. Rothschild, ed. (New Brunswick, NJ: Rutgers University Press, 1999); *Female Designers in the USA 1900–2000: Diversity and Difference,* P. Kirkham, ed. (New Haven, CT: Yale University Press, 2000).

consider general approaches along with personal experiences. It is a multilevel study whose aim is to take a more "on the ground" analysis of the phenomenon.

Mainstreaming Feminism

The word "feminism" and its derivatives did not appear in either the catalog of the *Creole Project* or in *The Laughing Home,* even when the positive inclusion on behalf of women could be interpreted as a consequence of originally feminist demands. To explain this omission, one might point to the traditionally male-dominated cultures of both Italy and Spain as the main reasons. However, hiding the feminist origin of the events or just softening them is not unique to these two projects. In a recent article, Judith Attfield mentioned that the Women's Press insisted on deleting the word "feminism" from the title of the second edition of her book *A View from the Interior: Feminism, Women, and Design* in 1995.[3] This fits in with the general trend described by the same author as the debilitation of the political aim of feminism in its encounter with postmodernism.[4]

Penny Sparke summarizes the scholarship on feminism and postmodernism as follows: "Most agree that while the challenge to cultural authority opened up a space, the lack of a political agenda in post-modernism meant that it could not ultimately be harnessed by feminists seeking to overthrow hegemonic culture, and to inject their own culture into the gap."[5] Postmodernism questioned hegemonic discourses, but did not present any alternative. Neither feminism nor any other peripheral discourse made any attempt at hegemony. Instead, they remained as peripheral as they always had been, and only partly validated their discourse. Consequently, they gained visibility, but had to adapt themselves to political correctness. The result was a new stage in feminism, called either post-feminism or Third Wave feminism.

The late 1980s and early 1990s are considered to be the beginning of post-feminism. This new stage of feminism is described as a reaction to 1970s feminism. Janice Winship has defined post-feminism as a popularized, de-politicized, common-sense version of feminism.[6] Tania Modleski has defined post-feminism as the appropriation of feminist ideas for non-feminist ends, and it is this definition that most certainly would seem to be applicable to this analysis of how the *Creole Project* and *The Laughing Home* articulate feminist discourse.[7] Feminism at the beginning of the 1990s called Third Wave feminism,[8] like post-feminism, makes reference to a mainstreaming of previous feminist theories. Imelda Whelehan has portrayed this generation as those who "feel obliged to construct their own identities in opposition to what they see as the worst sins of Second Wave feminism—stridency, man-hating, joylessness, and

3 Jacinda Read deals with similar omissions in her article "Popular Film/Popular Feminism: The Critical Reception of the Rape-Revenge Film" on the critical reception of the films *The Accused* (Jonathan Kaplan, 1988) and *Thelma and Louise* (Ridley Scott, 1991). [Accessed in April 2005. Available from: www.nottingham.ac.uk/film/journal/articles/popular_feminism.htm].

4 J. Attfield, "What Does History Have to Do with It? Feminism and Design History," *Journal of Design History* 16:1, (2003) 77.

5 P. Sparke, *As Long as It's Pink: The Sexual Politics of Taste* (London: Harper Collins, 1995), 224.

6 J. Winship, "A Girl Needs to Get Streetwise: Magazines for the 1980s" *Feminist Review* 21 (1985): 25–46 and J. Winship, *Inside Women's Magazines* (London: Pandora, 1987).

7 T. Modleski, *Feminism without Women: Culture and Criticism in a "Postfeminist" Age* (London, Routledge. 1991).

8 See *Third Wave Feminism: A Critical Exploration,* S. Gillis and R. Munford, eds. (Basingstoke: Palgrave, 2004).

bad clothes."[9] These authors agree that post-feminism is the result of the mainstreaming of an originally political theory, the doctrine of which has now been depolarized.

This mainstreaming can be interpreted as either a failure of the "real" 1970s feminism or a natural evolution of feminist principles. The first account is reflected in comments such as this one by Summer Wood: "The result has been a rapid depoliticizing of the term and an often misguided application of feminist ideology to consumer imperatives, invoked [...] for the right to buy all manner of products marketed to women, from cigarettes to antidepressants to diet frozen pizzas. It seems that, if you can slap a purple or pink label that says 'for women' on a product, choosing to buy it must be a feminist act."[10] Instead, Charlotte Brunsdon, considers post-feminism simply to be post-1970s feminism rather than non-feminism.[11] Both positions convey the controversy surrounding the current status of feminism, and suggest that feminism is not rigidly fixed or easily identifiable. This often leads to contradictory and contested territory: on the one hand, a perception of post-feminism as the failure of feminism's original ideals, and, on the other, as the logical consequence of a mature stage of feminism. My general position is that the popularization of feminism, that is, the dissemination of feminist ideas into all dimensions of ordinary life, is a welcomed phenomenon.

Before going further, some analysis should be made of the idea of stereotyping feminism, which might easily be associated with "extremist" theories, something similar to that expressed in the earlier quote on the "worst sins of the Second Wave feminism." Like any stereotype, it ignores the various interpretations and evolution and, instead, bases itself on radical viewpoints. However, during the period in question, the 1990s, gender issues became increasingly widespread and visible in numerous fields, from politics to academics.[12] Gender studies, equal opportunity, and domestic violence became common terms when addressing diverse issues related to gender. Specifically in the field of design, different strategies to highlight the work of female designers were developed: organizations created exclusively for female designers, shops where items were exclusively designed by women, special issues in magazines, e-mail lists about female designers, and design groups composed entirely of female designers.[13] In this vein, feminism became Janus-faced, with one face being negative and referring to a more fanatic discourse, and a positive face that had an aura of progressiveness. Both the *Creole Project* and *The Laughing Home* had to deal with both inseparable senses. Moreover, the necessity of taking certain measures to achieve a gender balance had become increasingly widespread during the decade. Nevertheless, the beginning of the 1990s can still be considered a starting point.

9 I. Whelehan, *Having It All (Again?)* (Paper given at the Economic and Social Research Council [ESRC] seminar series on new femininities at the London School of Economics and Political Sciences [LSE], November 19, 2004.) [Accessed In April 2005. Available from: www.lse.ac.uk/collections/newFemininities/firstSeminar.htm].

10 S. Wood, "Freedom of 'Choice': Parsing the Word That Defined a Generation," *Bitch* 124 (Spring 2004). [Accessed in April 2005. Available from: www.bitchmagazine.com].

11 C. Brunsdon, *Screen Tastes: Soap Opera to Satellite Dishes* (London: Routledge, 1997).

12 For an analysis of the attachment of ethical values to consumer goods, see G. Williams, "The Point of Purchase?" in *Brand New,* J. Pavitt, ed. (London: Victoria & Albert Museum, 2000), 184–214.

13 See Association of Women Industrial Designers (AWID) [www.awidweb.com]; "Bust-ed: The Unusual Gift Shop" [www.bust-ed.co.uk]; *Inca* 2 (August 2000) [www.idsa-sf.org] Pixelsurgeon's issue on women in design [www.pixelsurgeon.com/pages/feature/womenindesign] or the creative group "The Women's Design + Research Unit (WD+RU)" composed by Teal Triggs and Sian Cook, founded in 1994.

Creole Project/Memory Containers

The first case study was carried out in 1990, and organized by the Italian design-led manufacturer Alessi. That year, the Centro Studi Alessi (Alessi Research Centre-ARC) recently had opened, and its director, Laura Polinoro, organized the first project called *Creole Project/ Memory Containers*. The contest was divided into two phases. In the first phase, one hundred and twenty-five female designers under the age of thirty were invited to present their reflections on the theme of "archetypes of the offering of food and the rituals surrounding it."[14] Afterwards, a jury selected some of these reflections to continue on to the second phase, in which the reflections and ideas were transformed into actual objects to be produced by Alessi.

Organizing a contest with international participants was not new for Alessi. In the 1980s, the company organized the *Tea and Coffee Piazza* project for a group of well-known architects, who were invited to create coffee sets to be later made in a limited-edition of ninety-nine, and exhibited in museums and art galleries.[15] Design-led companies have used the point of purchase and the museum indiscriminately as two places to promote their products. Guy Julier has described this phenomenon as the blurring of the distinctions between the design object, as curated in the museum, and the design object as displayed through retail.[16] This strategy has been inserted into a broader process of "historicizing" newly created design products, and has been implemented by other companies such as Vitra, Knoll, and Cassina.

But why a contest restricted to participation by only female designers? Alessi had never worked with female designers before, apart from the re-edition of Marianne Brandt's work into the "Bauhaus" collection. Alberto Alessi remembers, "We had a kind of responsibility to at least try to do something [...] we had also the feeling that a female sensibility could add some new faces to the projects, open to new softer and more discrete approaches. And also those females would be more prepared to design objects that at the end are mainly used by women."[17] Two remarks are useful for giving a wider focus to this argumentation. Grace Lees-Maffei locates the origin of these ventures in conversations between Alessandro Mendini and Alberto Alessi about "publicity and marketing for the brand."[18] In addition, Michael Collins recounts a turn in the commercial strategy of Alessi as a consequence of the 1987 recession. One of the objectives was an attempt to capture "the lower, youth cultural element of the market."[19] In order to achieve this, Alessi needed to add different values to their luxury products. As Collins points out, the actions taken by the company were: increased research, diversification of their material base (towards plastic, wood, and ceramics), compromises with the environment, and positive inclusion in favor of women.

14 Available from: www.alessi.it/special/container/text.htm (Accessed in June 2003).

15 In this project, Alessandro Mendini invited well-known architects to join him in designing coffee services. The project was started in 1981, and presented in 1983. The participants included Michael Graves, Hans Hollein, Charles Jencks, Richard Meier, Alessandro Mendini, Paolo Portoghesi, Aldo Rossi, Stanley Tigerman, Oscar Tusquets, Robert Venturi, and Kazumasa Yamashita.

16 G. Julier, *The Culture of Design* (London, Sage, 2000), 72.

17 Alberto Alessi e-mail to the author, June 17, 2003.

18 This project follows other occasional series by Alessi in which international talents were invited en masse to participate. In "Alessi d'après" (1972–1977), five European artists designed tabletop sculptures and, in 1980, the *Tea and Coffee Piazza* convoked twelve international architects to design tea and coffee services produced in limited editions of ninety-nine. Grace Lees-Maffei, "Italianità and Internationalism: Production, Design, and Mediation at Alessi, 1976–96," *Modern Italy* 7:1 (2002): 37–57, esp. 47.

19 M. Collins, *Alessi* (London, Carlton Books, 1999), 18.

Figure 1
Left: Cecelia Cassina's fruit bowl *Helmut* (Italy);
Right: Clare Brass's container *Kalistó*.
Photographer: Santi Caleca.

The main aims of this contest were to enrich the gender balance of the Alessi designers, and provide Alessi with a more suitable image to cope with the cultural shift of the 1990s. To achieve this goal, the *Creole Project* presented a package that included youth, gender, and multicultural aspects. These factors caused Alessi to distance itself from previous collaborations which were done exclusively with well-known architects in the 1980s.

Participants received a project briefing that put the accent on "creolization." This was meant to be an exploration of ancient cultures to create new products. The briefing invited the designers to explore "the primitive sense understood as a new spatial representation, extroverted forms, symbolic sense, the object understood in its magical projection."[20] Inspiration might come from geographical or personal memories.

From the one hundred and twenty-five submissions, only nine projects were selected to be developed: three bowls, one container, three trays, one chafing-dish, and one oven-to-table dish (Figure 1).[21] The designers were paid in royalties, and the projects were presented in an exhibition and a catalog in the spring of 1991. The catalog contained five texts written by the organizers, including Alberto Alessi and Laura Polinoro. While this was the first ARC project, the texts either presented the ARC or explored the symbolic and functional duality of objects, mainly through the analysis of old typologies. The catalog was illustrated in particular with aboriginal objects (mainly from non-Western countries) and a few 1950s Tupperware parties. While the illustrations seemed to compensate for the low representation of these countries among the participants, the Tupperware was paradoxically the only explicit reference to the feminine. Of the one hundred and twenty-five participants, one hundred and twenty-one (ninety-six percent) came from Europe, Japan, and the U.S., and only one from Turkey, one from Australia, one from India, and one from Argentina. Africa was not represented.

20 Project briefing *"Operazione: Contenitori di memoria"* (Internal documentation, before March 1990, first of eleven pages, in Archive Sandra Figuerola & Marisa Gallén).

21 Able (Lisa Krohn's) tray *Effigy* (United States); Clare Brass's containers *Kalistó* (United Kingdom); Cristina Capelli's and Laura Gennai's tray *Swing* (Italy); Cecilia Cassina's fruit bowl *Helmut* (Italy); Carla Ceccariglia's tray *Cri-cri* (Italy); Susan Cohn's (Workshop 3000) bowl *Cohncave* (Australia); Joanna Lyle's bowl *Chimu* (United Kingdom); Sandra Figuerola's and Marisa Gallén-La Nave's hot-dish holder *Diablo* (Spain); and Maria Sanchez's hotplate *Brasero* (Argentina).

This coincides with the major markets for Alessi products: its top market in terms of sales volume was Italy, followed by Germany and Scandinavia. Alessi sales are lower in France, Britain, and the United States. Australia has been a growing market for Alessi, but sales in Africa are negligible.[22] On the contrary, the participants' nationalities contrast enormously with the briefing, which aimed to explore geographic memories, explicitly the "African, oriental, Celtic."[23] This resulted in an "orientalist" view of remote cultures made by mainly Western designers.

The catalog explored many aspects: anthropology, semiotics, consumption, fetishism, Japanese culture, and even the Last Supper. Equally relevant as the issues explored are the topics that the text overlooked. From the two hundred and eighty pages of the catalog, only the Italian version of Laura Polinoro's text mentioned very briefly that the *Creole Project* was meant to showcase female designers.[24] This reference was lost in the English translation, generating the possibility that someone reading the English texts exclusively would never find any evidence that the project was restricted to female designers, apart from the female names of all of the participants. This gave the impression that this fact did not respond to a criterion, but rather to a coincidence. The same is still true today when visiting Alessi's Website. In contrast to the complete documentation that accompanies the other projects, the exclusive participation of female designers in the *Creole Project* continues to be omitted.

There are two possibilities for consideration: either showcasing only female designers involves an issue that does not deserve further explanation, or this fact of positive inclusion has somehow faded from sight. Concerning the first possibility, it can be pointed out that organizing this contest for only female designers already is a statement in itself. Indeed, it represents a great opportunity for young female designers worldwide to achieve recognition. In this vein, the organizers may have thought that giving further explanation was simply not necessary. We can compare this example to the *Tea and Coffee Piazza* exhibition in 1983. There, only male designers were invited, and yet no one felt it necessary to justify this fact. Why should this example be different? The *Creole Project* example indeed is slightly different. In the *Tea and Coffee Piazza* project, the designers were not invited because they were male, while in the *Creole Project*, the gender of the participants was a crucial point of the project. Subsequently, the lack of reflection on it deserves questioning.

A second explanation points to either a conscious or unconscious veiling of this issue. If we study this exhibition as a message, it appears to be a multilayered one. Multiculturality, symbolic values of objects, and gender are present, but not equally addressed. The first two are approached from a theoretical point of view, and positively included as the nucleus of the message. These two subjects are prioritized and act as a curtain for the feminist issue. Presumably,

22 Grace Lees-Maffei, "Italianità and Internationalism: Production, Design, and Mediation at Alessi, 1976–96," 51.

23 See Project briefing, 1.

24 *Rebus sic...* [cat. ex.], L. Polinoro, ed., Crusinallo, Fratelli Alessi Omegna (F.A.O.), 1991, 23.

the feminist issue remained visible to those who were "curious," but conveniently camouflaged for those not-so-receptive consumers. Alberto Alessi and the company's team have been friendly in answering my requests for documentation; however, they have repeatedly refused to provide any new information as to why the participation of female designers was omitted from the catalog.

Positive inclusion was present as a fact but not "verbalized" in the texts and, therefore, ignored as a substantial component of the project. The invitation to female designers, as explained by Alberto Alessi, was a way of compensating for the overwhelming percentage of male designers who had worked for the company.[25] It is surprising that the catalog evidently omitted mentioning that only women were participating. Even when mobilizing one hundred and twenty-five female designers worldwide, this feminist approach was not openly addressed. This fact combined a strange mixture of presence and absence.

Analyzing the construction of the feminine in this specific contest through the pieces would be arbitrary. The designers got a specific briefing related to the commission where materials, typologies, sizes, and inspirations were fixed. The typologies included: the bowl, the container, the tray, the chafing-dish, and the oven-to-table dish. The materials were stainless steel (thickness: 0.7–0.8 or 1 mm) and eventually plain glass, plastic, or oven ceramics as complements. The topic was "creolization" as explained above. The participants were not specifically asked to reflect on femininity in the same vein that the male designers of *Tea and Coffee Piazza* were not invited to reflect on masculinity and, therefore, searching for either female or male features would seem equally superfluous in both cases. The author does not believe that certain gender features are objectively identifiable in a design piece. And if they do exist, then this could be the central subject of another study. In the second example, *The Laughing Home,* the feminine is the topic of reflection and, therefore, it will constitute a better opportunity to analyze the construction of feminine images into the objects.[26]

The Diabolic Piece

One of the selected objects in the *Creole Project* contest will be studied here in order to provide a vision of the contest from the point of view of the participants. Among the nine selected pieces, the oven-to-table dish was designed by the Spanish duo of Sandra Figuerola and Marisa Gallén (Figure 2). It consisted of a cooking pot covered with a stainless steel cover, which was thought to solve a practical problem and to create a utensil which was suitable for both cooking as well as serving the meal. During the cooking process, the pot normally gets spotted. Consequently, the food normally would be moved from the cooking pot to another vessel suitable for serving at the table and, during the transaction, the food might get cold.

25 See F. Sweet, *Alessi: Art and Poetry* (Lewes: The Ivy Press, 1998).

26 There are culturally constructed elements which are regularly pointed to represent the feminine taste—certain colors, forms, and typologies. In many cases, they were the inspiration for the furniture pieces in *The Laughing Home* exhibition.

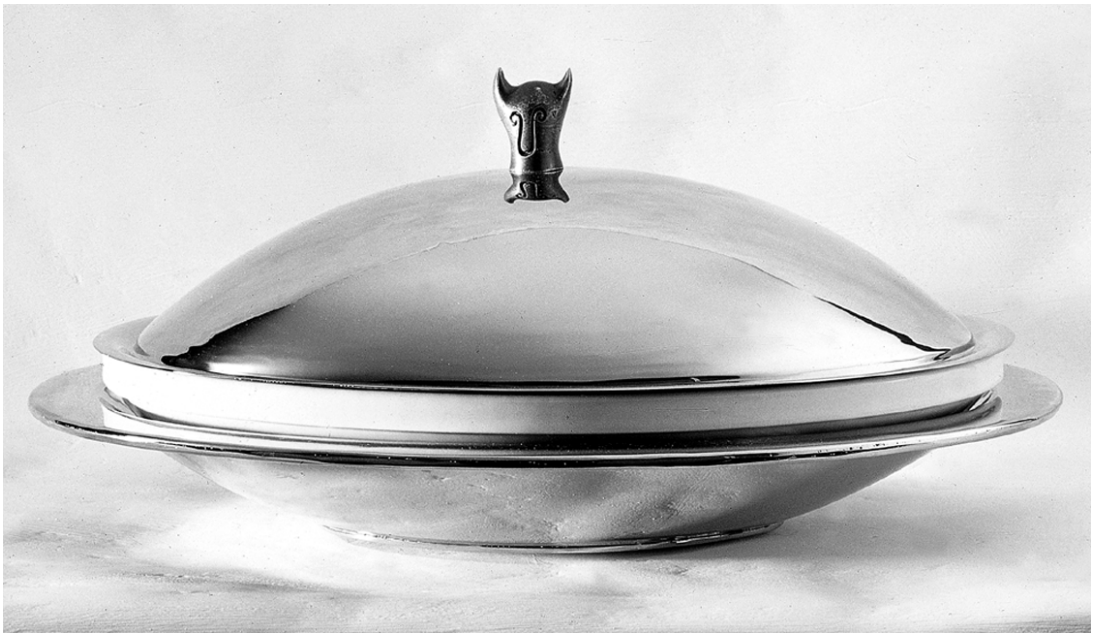


Figure 2
Sandra Figuerola and Marisa Gallén's oven-to-table dish *Diablo*.
Photographer: Miro Zagnoli

Figure 3
Sandra Figuerola's and Marisa Gallén's logo for Alessi Research Center.

In this example, the stainless steel holder covers the ceramic oven utensil, acting as a "second skin" which allows it to be sumptuously placed on the table and, at the same time, keeps the meal warm. The handle on the cover represented the head of the devil, and acted as the central concept of the project. The designers chose the devil because of its rich symbolic value in Western culture, embodying the sin of gluttony.

This experience definitively marked Figuerola's and Gallén's careers. In those days, the designers made up part of the group La Nave, which was composed of eleven people, only two of which were women.[27] Their proposal was presented as a small, carefully worded book. Texts on food and rituals accompanied the devil, which was transformed into all kinds of kitchen and tableware. Before submitting their proposal, the designers received contradictory opinions from their colleagues, who preferred a spectacular presentation in big panels as opposed to an intimate one in a little book. Finally, Figuerola and Gallén trusted their own judgment. The fact that their project was finally selected was much more than a professional victory for the designers. Sandra Figuerola remembers it as "one of the impulses on a personal and professional level which made me become conscious that we could also say something in the design world. It made me realize that we were doing it well."[28] Moreover, ARC's logo came out of this contest, even though this had not been planned. The organizers appreciated enormously the graphics of Figuerola's and Gallén's project, and the devil was spontaneously adopted as the ARC logo (Figure 3). In 1994, these two designers were asked to coordinate the next case study.

27 J. Gimeno, "La Nave: How to Run an Anarchical Design Company," *Journal of Design History* 15:1 (Oxford: Oxford University Press, 2002): 15.

28 Sandra Figuerola, interview with author, November 4, 1999.

The Laughing Home

The second case is the Spanish participation in *Progetti e Territori,* a cultural exhibition within the *Abitare il Tempo* furniture fair (Verona, Italy), where every participating country exhibited an original vision on design. The Spanish Association of Furniture Manufacturers and Exporters (ANIEME) commissioned Figuerola and Gallén in 1994 to act as curators of their proposal. After their Italian experience, the designers suggested putting on an exhibition composed of women only. The management board accepted the idea. As with any form of preferential affirmative action, the potential for negative reactions always exists. However, that did not happen on this occasion; neither the ANIEME board nor their colleagues or the press object.

Nine female designers were invited to join the project. In addition, the designer of the catalog, its photographer, and the writer all were women. The organizers had little trouble choosing the participants, since the gender balance of Spanish industrial designers was overwhelmingly masculine. The participants designed twenty-one pieces of furniture, which clearly crossed over the borders of industrial design and craft. For the most part, they were unique pieces, and not produced on a large scale.[29]

This time, the focus on women was widely explained. One of the texts was even titled "Why Women?" The curators encouraged women to talk about an environment traditionally managed by women, but created by men: the home. The passive, traditional relationship of women as consumers was turned into an active, creative relationship as designers. Women were constantly handling masculine models. However, this exhibition was aimed at creating feminine models, which necessarily reflected the traditional knowledge of women within the home.

The exhibition was divided into living spaces. Instead of conventional, architectonical rooms, they responded to daily abstract necessities. The traditional codification of spaces was broken up to achieve more flexible results. This ideal dwelling was composed of seven spaces: receiving, playing, eating, beauty, loving, rocking, and reading (Figures 4–8). Indeed, the spaces made references to categories of secondary importance in contemporary functional architecture such as: sociability (receiving, loving), personal care (beauty), intimacy (reading), motherhood (rocking), and childhood (playing). Each contained three pieces of furniture that defined the room.

As mentioned above, here femininity played a central role in the exhibition. The designers were invited to reflect on it and, consequently, the pieces exposed the visions of the participants. The way the designers handled the feminine component ran in two, different directions:

29 Only the rocking chair designed by Nancy Robbins was produced on a large scale, after removing the feathers at the back side from the original design.

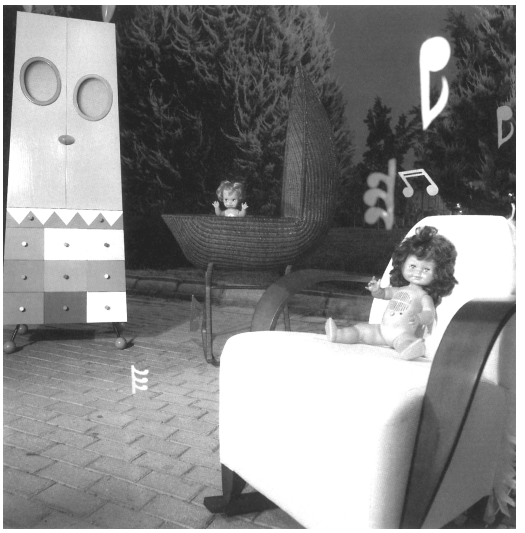


Figure 4 (top left)
Space for receiving: M. Gallén's occasional furniture; N. Tubella's hall-stand, and G. Ruiz's frame. Photographer: Concha Prada.

Figure 5 (top right)
Space for beauty: S. Figuerola's screen, M. Gallén's mirror, and M. Gallén's toilet chair. Photographer: Concha Prada.

Figure 6 (left) Space for loving: M. Durán's candle holder, G. Ruiz's sofa, and T. Tomás's vase. Photographer: Concha Prada.

Figure 7 (right)
Space for rocking: S. Figuerola's wardrobe, M. Durán's cradle, and N. Robbins's rocking chair. Photographer: Concha Prada.

Figure 8 (bottom right)
Space for reading: S. Figuerola's armchair, N. Robbin's lamp, and M. Durán's bookcase. Photographer: Concha Prada.

1. Celebrating the elements traditionally linked to feminine taste: colors (especially pink and red), motifs (flowers), typologies (toilet chair), and daily references to femininity (Figure 5). For example, the bookcase "A" takes its shape from the most feminine letter in Spanish (Figure 8). The majority of the feminine nouns end with an "a," as opposed to the masculine nouns ending mostly with an "e" or an "o."

2. Appropriating negative clichés of woman by transforming them in an ironic way. The original ideas behind the designs included prejudices, instability, body cultivation, and inactivity. For example, the weathercock, which is used in current language as metaphor for the ever-changing character of women, was placed in the middle of the installation (Figure 9). The hall-stand took the name "90-60-90" as a reference to the "perfect" measurements of the female body (Figure 4). The vase took the shape of a woman responding to a contemptuous Spanish expression "the woman-vase," which is used to describe women as decorative objects and meant to be beautiful but silent (Figure 6). The sofa by G. Ruiz is called "Broken Heart" ("Corazón partío") as a reference to the extreme sentimentality of women (Figure 6).

Figure 9
The different spaces formed a circle. The weathercock stood in the middle. Photographer: Concha Prada.

Both positive and negative visions of women were either celebrated or satirized. The celebration of the feminine features can be interpreted as an exercise in giving visibility to certain feminine features which design, and certainly modern design, had suppressed such as: decoration, colors, patterns, and craftsmanship. This is a reflection that already had begun with the postmodern designers at the beginning of the 1980s, and that here acquired a feminine character. Thus, from a stylistic point of view, femininity did not bring any novelty to ongoing, postmodern design. On the contrary, feminine forms comfortably occupied the place postmodern design had prepared for them. In other words, the feminine taste in the pieces lost its capacity for presenting a statement, which would have been potentially more controversial in other formal contexts, but not in late-postmodern design.[30] Likewise, the appropriation of the negative clichés about women shared the postmodernist preference for irony as a medium to digest dominant discourses. From a semantic point of view, the pieces exemplify Penny Sparke's description on postmodernism, and the impossibility of its ever substituting dominant cultural authority. In this vein, the mostly ironical furniture pieces constitute an attempt to overthrow dominant discourses by including them in a peripheral discourse, but without providing any alternative to occupy its place. Indeed, irony implies a "soft attack," which, on the one hand, exposes the dark sides of the enemy but, on the other hand, fails to annihilate it. Similarly, postmodern design

30 Indeed, if we compare *The Laughing Home* (1994) to its predecessor *Carmen* (1993) we notice the continuity between the two exhibitions concerning the celebration of craftsmanship and feminine motifs, even when *Carmen* had no post-feminist approach. See *Carmen* [cat. ex.], (Valencia, ICEX/ANIEME, 1993).

questioned modernism, but did not nullify its basic foundation. The organizers were more concerned with the written texts than the formal approach of the pieces. The conflicts appeared when those funding the project revised the catalog. A fragment from the opening text: "The Happy Home" was considered "inappropriate." It began by exploring the traditional relationship of women and the home, and followed more critically:

> [...] But besides, in a disturbing way, this "queen of the home" is also its prisoner. Reduced to the domestic environment, this world concerns too concrete a space, too straight, where human relations are limited and where there are no decisions to make beyond the routine.
>
> Enclosed in that world—often kind and rich but always oppressive and limited—only remains the window to be able to see, although from afar, more extensive horizons: lands that cannot be experienced with one's own body but that can always be traveled through with the imagination [...]."[31]

The institution that commissioned and funded the project, ICEX, decided to omit this fragment, arguing that it might export the "wrong" idea about Spanish women.[32] This description did not seem to fit the new image of Spain, which had experienced a new national branding since the beginning of democracy.[33] Presumably, a country so intimately linked to machismo as Spain should want to be represented with equality between the sexes. It appears an unavoidable collision between a politically correct national representation and a reflection on gender and domesticity. This fragment surpassed the political correctness of a postmodern critic and introduced a "controversial" political component into the celebratory event. Far from being a problem for the curators, they agreed that the fragment should be eliminated. This fact can be considered a Second Wave feminism "intrusion" into a Third Wave feminism initiative, which was consequently rejected unanimously.

The Feminine as the Extraordinary

In the examples mentioned above, the (post-) feminist approach involved some elements that proved unsuitable in the end. Positive inclusion inevitably points out a real, existing discrimination towards minority groups and, consequently, it had both a convenient and an inconvenient side. It contributed by offering a progressive halo for the projects but, at the same time, was the ultimate confirmation of a bitter social difference. The *Creole Project* and *The Laughing Home* were two celebratory occasions which could not have been eclipsed by any shadow of unease. There were two mechanisms for toning down the feminist component: first, both examples omitted the word feminism,

31 Unpublished original text. T. Simó, *La casa que ríe*, 1994. Archive Sandra Figuerola and Marisa Gallén.

32 Marisa Gallén e-mail to the author, June 13, 2003.

33 J. Hooper, 1995, 165ff.

and second, in the first example, positive inclusion became linked with other marketable values (multicultural character and youth). The "bitter" connotations of positive inclusion were filtered out.

Until now, we have stressed the aspects of discord that separate these two marriages of convenience. Now we will see the cohesive elements that made them possible. As we have seen in the *Creole Project,* the positive inclusion served to reach a wider sector of the market. In *The Laughing Home,* the proposal of the curators could convey the progressive, Spanish national identity. Reading Sparke also sheds some light on understanding other mechanisms that acted as cohesive elements:

> The very act of putting a mass-cultural object into a museum transformed it instantly into an item of high culture and, by implication, extended the modernist canon to include it. This process of masculinization expanded apace through the 1980s such that by the end of the decade, the postmodern design project had lost its power to validate feminine taste."[34]

Thus, the feminist demands were nullified in both cases. First, validation of feminine taste through design had lost its power at the end of the decade, and, second, the fine arts references injected the events with the anesthesia of the extraordinary. This recourse was widely utilized by Alessi, and reached an even higher point in the example of *The Laughing Home,* where the displayed furniture did not even have to wait to become a museum piece, but were already born as such. The aura of fine art acted as a cohesion factor but, at the same time, restrained the collaborations with women to the realm of the exotic and extraordinary.

Conclusion

Italy and Spain experienced a successful spread of postmodern design during the 1980s and, subsequently, a celebration of "feminine taste": ludicrousness, figurative forms, crafts, colors, and patterns, all of which called in question the maxims of modern design.[35] This fact, together with the increasing presence of ethical values in commodities (green products, Fair Trade goods, ethical investment funds, etc.) made the beginning of the 1990s the perfect formal and ideological period for launching these two events. A close examination of these two cases shows how the result is the product of the interaction of the different actors, namely organizers and designers, within the cultural context rather than the responsibility of any one of them.

Nevertheless, the particular achievements of these two initiatives cannot be ignored. Both experiences constituted real opportunities for female designers and respond entirely to the advances of feminist demands—even when the "source" was omitted. The *Creole Project* offered designers Figuerola and Gallén the opportunity to

34 P. Sparke, *As Long as It's Pink: The Sexual Politics of Taste,* 232.

35 P. Sparke, *Italian Design, from 1870 to the Present* (London: Thames and Hudson, 1988) and *As Long as It's Pink.*

reassert themselves over their more experienced colleagues. They experienced a great advance in their careers, and it later led to a new opportunity for female designers in 1994. Obviously, feminist demands had their effects.

What role did these two actions play? Were they a starting point in the participation of female designers in Italy and Spain? Or, on the contrary, were they a logical consequence of the extension of feminine taste during the 1980s? After years of technological predominance, the playful, colorful objects conquered the most visible place of Italian design in the 1980s. Inscribed in this wave, Alessi can be said to have epitomized the spread of postmodern design in Italy and abroad.[36] The 1990s brought a new sense that made Alessi change its commercial strategy: new markets, new materials, new designers, and new sales strategies. The *Creole Project* initially declared that one of these aims was to compensate for the gender imbalance of Alessi's designers, albeit with nuances. It was ostensible enough to catch the attention of press but, at the same time, eclipsed the fact that this contest was created for female designers. This ambiguity illustrates both the reluctance and enthusiasm awakened by the post-feminist accounts into the feminist framework.

Spanish design experienced a similar postmodern "feminization" during the 1980s. Therefore, the pieces in *The Laughing Home* offered little formal controversy: they fit perfectly into the formal vocabulary of the 1980s. On the contrary, the postmodernist Spanish female designers connected later to the more rational and unadorned style of the 1990s. *The Laughing Home* did not succeed in promoting a feminine style, and maybe this was never its intention. It followed the path already opened by postmodern design and, consequently, they faded away together in the second half of the 1990s. Hence, *The Laughing Home* can be considered a final expression of a period rather than a new future for feminine objects.

But on the other hand, positive inclusion has been the basis of further design initiatives. During the late 1990s and the beginning of the 2000s, similar initiatives have taken place. Two recent examples of positive inclusion on behalf of women are the Clara Porset Design Prize for Mexican design students which, in 2005, celebrated its twelfth presentation, and the show "Scenes from Home" at the Belgian "Interieur" Design Fair in 2004, which showcased the work of six female designers. In this vein, both *The Creole Project* and *The Laughing Home* certainly can be considered forerunners with regard to initiatives leading to the mainstreaming of feminist demands into the design profession.

36 Grace Lees-Maffei, "Italianità and Internationalism: Production, Design, and Mediation at Alessi, 1976–96."

Printing Contemporary Handwoven Fabrics (*Aso-oke*) in Southwestern Nigeria

Emmanuel Bankole Ojo

Introduction

Aso-oke (preserved cloth) is a Yoruba handwoven cloth made on a horizontal or vertical loom. Many types exist. The *Sanyan* type usually is woven from anaphe wild silk and cotton yarns. *Alaari* is woven with either synthetic or locally grown cotton and shinning threads, sometimes with perforated patterns, while the *Etu* type usually bears dark indigo colors with tiny white stripes noted for their simplicity. These three notable, woven cloths have flourished from time immemorial with virtually no innovations in their design. This is why a facelift is desirable if *Aso-oke* types are to match the challenges of modern fabric embellishments, and the demands of the international market. Modern motifs and patterns, such as those mentioned in this paper, also are desirable to enhance *Aso-oke* aesthetic values for the insatiable desires of consumers and sellers. A research effort by the author has led to handwoven fabrics decorated with silkscreened traditional motifs and designs to maximize their value.

Over the centuries, each locality where weaving is done in southwestern Nigeria has reserved the right to produce its own style of cloth. The woven pieces differ characteristically from one ethnic group to another. The general name for the types of fabrics they all produce is *Aso-oke* which, according to Okeke,[1] is the traditional cloth of the Yoruba people of southwestern Nigeria. The *Iseyin* people of Oyo State produce *Aso-oke* from locally obtained wild silk called *Tussah.* Research findings of Okeke[2] and Lamb[3] include recorded oral traditions, which linked the woven fabric *Iseyin* with *Akwete.* (*Akwete* is the name of traditional fabric woven by the *Akwete* people of the *Ndoki* clan in southeastern Nigeria.)

Okeke's research findings suggested that *Iseyin* and *Akwete* weavers exchanged technical weaving skills in the past when their trade contacts in palm produce flourished. Okeke has argued that, since both names are derived from their respective founders, the etymology of both *Iseyin* and *Akwete* suggests a common reference to palm produce.

1 C. S. Okeke, "Textile: An Art Form" (Paper presented at *International World Crafts Council,* Vienna, 1991).

2 C. S. Okeke, "The Development of Textile Design for Apparel Fabrics Used by Ålbos of Nigeria" (Unpublished M. Phil. thesis, University of Leeds, 1976): 61.

3 V. Lamb, *West African Weaving* (London: Duckworth, 1975), 612.

The *Aso-oke* cloth was produced mainly by the extra weft brocading technique, and is used for the most expensive traditional attire frequently worn by Yoruba men and women during ceremonies such as coronations, marriages, infant naming, and other religious activities.[4]

Among the principal features of *Aso-oke* though not necessarily characteristic of all examples; are long, narrow stripes that are four to five inches wide; brocade patterns obtained by extra wefting; floats of thick extra weft yarns floating between open work patterns arranged in diagonal, straight, or zigzag order on the right side of the cloth and open work patterns that imitate lace materials. The growing awareness in designing and loom manipulation has expanded the features of *Aso-oke* beyond those described above. The *Aso-oke* of the Yoruba now takes on multifarious appearances as a result of ethnic styles and the introduction of imported, colored yard and shining threads to brighten up the patterns.

The Yoruba-speaking people live in the Ondo, Oyo, Ogun, Ekiti, Lagos, and Osun States in southwestern Nigeria. These six states have a long tradition of weaving, and each represents a group of Yoruba which has retained individual characteristics of dialect and culture. *Aso-oke* has gained popularity, both locally and internationally and also has been the main source of clothing for many occasions. The making of the fabric, like other traditional crafts, has both economic and cultural values among the Yorubas. It provides job opportunities for the people at various levels of its production such as planting and harvesting cotton, spinning, weaving, laundering, and marketing.

The production, quality, woven structure, and tools used in weaving *Aso-oke* have remained the same for centuries. Recent Nigerian government policy, which placed an embargo on imported fabrics, brought a challenge to Nigerian textile designers. They have been asked to look inward with a view to improving various aspects of the locally woven fabrics. This includes such areas as the development of skills, technical know-how, and patterning and designing techniques. An assessment of the current status of the weavers' technical know-how can help in improving patterns and designs, which will bring about modernity and enhance the value and popularity of *Aso-oke*.

In spite of the popularity of the fabric, Adetoro[5] and Eicher[6] noted that the locally woven *Aso-oke* may not be suitable for casual or office wear. Furthermore, the increasing demand for the fabric for occasional wear in Nigeria, together with the insatiable tastes of fashion-conscious individuals to re-create the fabric for modern casual attire and dresses have encouraged designers to seek new techniques and methods of production. One of the problems with the traditional fabric is its heaviness and thickness, which make it uncomfortable to wear in warm climates. Nchowa[7] corroborated the identification of this problem, and stressed further that the inability

4 B. K. Nordquist and S. B. Aradeon, *Traditional African Dress and Textiles* (Washington, DC: Museum of African Studies, 1975), 90.

5 S. A. Adetoro, "Adire Eleko: Possibilities of Contemporary Productions" (Unpublished M.A. thesis, A.B.U., Zaria, 1972): 94.

6 B. J. Eicher, *Nigerian Handcrafted Textiles* (Ile-Ife: University of Ife Press, 1976), 12–22; 33; 65.

7 O. Nchowa, "Fashion Trends in Nigeria," *Nigerian Magazine* 81 (1972).

of *Aso-oke* to be adapted for casual wear and professional uniforms is a problem that should be addressed by weaving experts because, for quite a long time, the old skills in weaving and designing *Aso-oke* have remained the same.

Until recently, the fabric has encountered little competition in designing and patterning. This is coupled with the inability of consumers to apprehend the ethnic labels and styles of the varieties of patterns and designs woven by the Yoruba. Another major problem is the lack of acceptable substitutes for *Aso-oke* patterning and designing methods in the local and international markets that would help its aesthetic improvement in connection with twenty-first century fashion trends.

In view of the above, and given that many consumers are restricted to one type of *Aso-oke* design because of possible rigid cultural adherence and sentiments and the lack of innovation among weavers and designers the decorated woven pieces that this project has undertaken provides a higher degree of aesthetic relationship between the past and present art forms, and would support the expanded marketing of *Aso-oke*. Contemporary motifs and symbols, therefore, have been adopted as prints to enhance the aesthetic appearance of *Aso-oke* surface design. This method has not been used in Nigeria in the past.

Contemporary designs that structurally manipulate and combine animal and floral motifs into definite shapes of grids and geometry, suitable for computer design applications, are now used. These differ characteristically from the use of traditional designs, in which certain motifs are created from fables, and folklore is used as the basis for other types of Yoruba handcrafted textiles such as tie-dyed and batik. The presence of looms in Nigeria is a remarkable feat in boosting the weaving industry. Hodge[8] stated that the art of weaving on vertical broad looms, and indeed cloth-making, was introduced by the Yoruba during their migration to West Africa more than eight thousand years ago. It was widely speculated among Yoruba craftsmen in the old days that the Nupe Nobility of the Niger State of Nigeria probably introduced (through slavery) a type of vertical loom that was found in *Bida* (the largest city in Niger State) at the time of a war with the Yoruba. But Eicher[9] cited Nadel,[10] who reversed this theory, and said that Yoruba women who were married to Nupe chiefs during that period introduced the vertical loom to the Nupe community. The Nupe's long tradition of weaving notwithstanding, the vertical looms of both Nupe and Yoruba possess identical features with slight variations. They also produce similar types of cloths. (Figures 1 and 2)

Hodge has further asserted that the spread of weaving styles and techniques on the looms resulted from the expansion of Benin empirical nature and craftsmanship. Indeed, Benin woven cloth had influenced Warri weavers who live in the Delta State of southeastern Nigeria, and whose products were in demand along the Gold Coast

8 A. Hodge, "Nigerian Traditional Craft: A Survey" in *Ethnographic Arts and Culture Series* (London: Ethnographica Ltd., 1982), 27.

9 B. J. Eicher, *Nigerian Handcrafted Textiles* (Ile-Ife: University of Ife Press, 1976), 32–35, 53, 65.

10 S. F. Nadel, *A Black Byzantium: The Kingdom of Nupe in Nigeria* (London: Oxford University Press for the International Institute of African Languages and Cultures, 1942).

Figure 1
Example of the large size of woven cloth produced on vertical loom. Woven cloths from Owo Ondo State Nigeria.

Figure 2
Yoruba woven fabrics. Large pieces woven on vertical loom.

(now Ghana). The cloths were sold to freed slaves in Brazil. Polakoff[11] and Negri[12] corroborated Hodge's findings by saying that the spread of weavers to Ijebu from Benin showed a lot of promise, and that there were similarities in the patterns used by both groups of weavers even after Benin's weaving culture had died out. However, the type of cloth woven around the then Delta Region in Nigeria also was partly influenced by the native people's contact with Portuguese traders in the sixteenth and seventeenth centuries. The traders introduced real Indian Madras cotton and other fabric types from Asia to exchange for the African commodities they needed. Specifically, the evolution of weaving in southwestern Nigeria was a culmination of different trade contacts with foreign traders and neighboring states. Eicher[13] has noted that the influence of Kano woven cloth on the Yoruba woven strips cannot be underestimated, since woven cloth in Kano had been used as materials for trade in early 1851. Fagg[14] asserted that the Yoruba weavers' reputation for their type of weaving had long been entrenched in their customs. Eicher[15] corroborated Fagg's assertion, and quoted an unknown observer in the 1890s who described the flamboyant display of woven fabrics in this manner.

> ... The Yoruba is by custom a fully clothed mortal. It is considered in the highest degree unfashionable to appear in the public street without a complete covering of two or three ample and well dyed clothes, draped round the body in not ungraceful folds ....[16]

She went further to estimate that more than ninety-five percent of the Yoruba clothes consumption at that time was handcrafted from locally grown cotton (which was handspun and hand-dyed).

11 C. Polakoff, *African Textiles and Dyeing Techniques* (London: Rontledge & Kegan Paul, 1980), 55, 208–209.

12 E. Negri, "Nigerian Body Adornment," *Nigerian Magazine* (1976): 32–37.

13 B. J. Eicher, *Nigerian Handcrafted Textiles* (Ile-Ife: University of Ife Press, 1976), 32–35, 53, 65.

14 W. Fagg, *Tribes and Forms in Nigeria* (New York: Macmillan Company, 1965), 66.

15 B. J. Eicher, *Nigerian Handcrafted Textiles* (Ile-Ife: University of Ife Press, 1976), 32–35, 53, 65.

16 B. J. Eicher quoting an unidentified observer in *Nigerian Handcrafted Textiles* (Ile-Ife: University of Ife Press, 1976), 35.

Figure 3
Weaver on vertical loom.

Figure 4
Woman and other family members work in weaving open space.

Weaving

Neldon[17] explained that the handloom is the simplest and most primitive type of loom with special variations. According to Leony,[18] the horizontal loom, which was developed from the handloom, was refurbished for use in domestic weaving. Hodge[19] noted that the horizontal and vertical looms used in weaving came to Nigeria independently of each other, and they remain separate despite their uses and coexistence in some Yoruba towns. Horizontal looms no longer are used exclusively by men, nor vertical looms by women. Surveys show that women now work on horizontal looms more often than men. (Figures 3 and 4) Some weaving activities take place in open spaces because of inadequate ventilation. The weaver will shelter himself or herself and the loom under a little corrugated roof or palm thatch. Each weaver possesses everything that he or she needs for the work. The warp yarns are carefully rolled up and tied to the drag stone, some distance away, with the weaver sitting behind the loom. Warps can be let out as weaving progresses, requiring less space for the line of warp than would be the case if it had to be stretched to its full length. The basket containing spare shuttles, bobbins, measuring stick, swordstick for holding open sheds, and a block of wax for use in lubricating the warp threads are kept within easy reach.

17 G. Neldon, *Encyclopedia Americana* Vol. 28 (Danbury, CT: Grohen Incorporated, International Edition, 1989), 548–553.

18 C. Leony, *The New Age Encyclopedia* Vol. 19 (Canada: Lexicon Publications Incorporation, 1982).

19 A. Hodge, "Nigerian Traditional Craft: A Survey" in *Ethnographic Arts and Culture Series* (London: Ethnographica Ltd., 1982), 27.

Figure 5
Photosensitive screens.

Figure 6
Computer developed designs transformed onto Laser papers for the development into silkscreen printing.

Figure 7
Woven and printed samples of *Aso-oke* (results of studio experiments).

Adaptation of Motifs and Patterns with the Silkscreen Process

Research conducted by Ogunduyile[20] suggests that Islamic celebrations are open for the display of varieties of embroidered garments in Nigeria. Political rallies rank next. It often is suggested that embroidered garments are not suitable for casual wear and work dress; nevertheless, embroidery remains the most cherished method of embellishing surface designs on *Aso-oke* garments. The adaptation of contemporary designs and decoration on woven fabrics is a new, technical approach to the embellishment of *Aso-oke* in Nigeria. Silkscreen printing is one of the newest fabric decoration techniques. The reproduction of any design is possible with the photographic screen method. The screen-printing method was used to execute motifs and designs on stripes and already-sewn, woven cloths. The process of silkscreen printing using the photographic method was applied in the author's recent research. (Figure 5)

The silkscreen method was first adapted in Nigeria as a reproduction technique on fabric with a variation of traditional tie-dye patterns using starch as a medium. Eicher[21] recalled a production company named "Aladire" in Lagos, which was headed by an American woman designer in 1960. The Aladire Company began to train Nigerian men to prepare silk screens with traditional *Adire Eleko*, and to print the cloth. Factory-produced cotton fabrics were used and then silkscreened with a variety of traditional designs. Aladire experimented with different folkloric motifs that were to form the nucleus of reproduction techniques in Nigeria.

For quite a long time, *Aso-oke* designs have remained stagnant. Little advancement has been made in the designing and patterning of fabric surfaces. However, there has been a tremendous improvement in the use of colors and yarns for warping and weft for interlacing the most intricate inlays. As a shift from the conventional method of fabric decoration, this research effort conducted experiments to print patterns and designs in traditional and geometric motifs on *Aso-oke* stripes through the silkscreen process. It also suggested creating embroidery imitations on the necks of garments made of *Aso-oke.* These efforts, however, were not intended to compete with either embroidery as aesthetic decoration in *Aso-oke* garments or to downgrade the cultural value placed on *Aso-oke* by the Yoruba. Rather, the project sought to complement these efforts, and to promote an alternative market for twenty-first century *Aso-oke* consumers. The experiment marked the beginning of "change and tradition" in the emerging competition in local and international markets.

Formation of Motifs and Symbols

In order for printing on *Aso-oke* to reflect the Yoruba cultural background, motifs and forms of Yoruba traditional origin have been selected. These motifs originating from Yoruba proverbs have been featured in *Adire-eleko* and Batik cloths. Patterns also can be

20 S. R. Ogunduyile, "Owo Woven Fabric" and S. R. Ogunduyile, "A Comparative Study of Motifs in Hausa and Yoruba Embroidered Garments," *Journal of Creative Arts* Vol. II (2001): 26–31.

21 B. J. Eicher, *Nigerian Handcrafted Textiles,* 33.

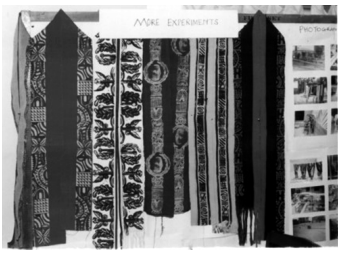


Figure 8
Pattern on light-weight woven fabrics.

Figure 9
More patterns and design
(studio experiments).

borrowed and developed by successive cultures, since patterns link all cultures and possess clear relationships with both natural and man-made worlds. The patterns are then repeated in grids on paper, ready for color work. Repeat structures are crucial elements of pattern design, providing "a wall against vagueness by means of definite form bounded by firm outline."[22] The essential value of the patterns is that they must combine beauty, imagination, and order. This order is manifested in all the patterns used in this project. Traditional patterns such as *Ibadan dun,* meaning "Ibadan is a pleasant place," has more than twenty motifs bearing illustrations of Mapo Hall (a famous landmark in Ibadan City in Nigeria), leaves of cassava plants, and abstracted birds such as ostriches, ducks, and, crested cranes, chieftaincy leaves, and chameleons.[23] (Figures 6 and 7)

Other motifs appearing on Yoruba traditional cloth include the sun, the moon, stars, seeds, combs, and other geometric shapes divided into mathematical grid units to provide an easy method of printing on fabric. The use of lines, curves, and cones complements the geometrical shapes. Several sketches of adopted embroidery designs were borrowed from already embroidered *Agbada* and other traditional dresses made from *Aso-oke.* The drawings are created and entered into a personal computer for scanning and making color separations. They are then transferred onto Kodak trace film for photo processing. The designs to be printed on *Aso-oke* stripes are created in very narrow, longitudinal rows to enable them fit onto some marked portion of the woven cloths, since not all of the striped areas would be considered aesthetically desirable. (Figures 8 and 9) The selected areas where prints appear therefore would enhance the entire coloration and distribution of design on *Aso-oke.* In the case of the overall printed embroidery imitation on the neck of *Gbariye* or *Dandogo,* (types of Yoruba attire) the design is enlarged to be just as big as the frame, to accommodate the totality of the embroidery concept on the garment.

Conclusion

As a cultural symbol of the Yorubas, *Aso-oke* remains the only cloth that has not been introduced to the worldwide commercial markets in thousands of duplicated yards. Okeke[24] recalled that copies of "Akwete" cloths ("English Akwete") were mass-produced in Manchester, England and exported to Nigeria for sale. A weaving machine is said to have been introduced to Iseyin weavers in the early 1980s by a foreign manufacturer, but it was not acceptable because it was ineffective and did not have the capacity to bring about the beauty and the genuine nature of the traditional designs. The old sentiments attached to the symbolic significance of certain motifs and designs such as *Etu, Alaari,* and *Sanyan* can no longer be seen when such when machines are used.

22 P. Phillips and G. Bunce, *Repeat Patterns: A Manual for Designers, Artists, and Architects* (London: Thames and Hudson Ltd., 1993), 9–12.

23 E. B. Ojo, "Symbols and Motifs in Oshogbo Batik Design" in *Contemporary Issues in African Art and Culture* (Ikere-Ekiti, Nigeria: Femi-Sola Prints Nig. Enterprises, 1996), 89–97.

24 C. S. Okeke, "The Development of Textile Design for Apparel Fabric Used by Ibos of Nigeria" (Unpublished M. Phil. thesis, University of Leeds, 1976): 61.

Nevertheless, production capacities still remain a major problem in the manufacture of *Aso-oke.* The low production rate of fabrics curtails economic gains, and restricts weavers to local markets. The increasing Western influence on Nigerian culture encourages the adoption of a European mode of dressing, for both causal and office wear, thereby popularizing factory-made fabrics and almost restricting the use of *Aso-oke* to only occasional or ceremonial wear.

The current study also addressed the problems of fabric coarseness and thickness of texture that has prompted consumer complaints. The creation of new woven samples and the printed *Aso-oke* type would provide substitutes for consumers. *Aso-oke* fabric now can be used for casual garments and many European fashions. The fear of eventual *Aso-oke* extinction appears to have professional weavers in Iseyin and Oyo worried.

The author's research also established the following facts: (1) change and continuity is desirable in the design and use of *Aso-oke*; (2) *Aso-oke* design qualities are dictated by the tides of time and unstable government policies that govern the importation of textile materials; (3) there are imitations of patterns and designs among weavers in Yorubaland; and (4) sellers and consumers constantly determine design specifications for weavers. Furthermore, there was a general consensus that *Aso-oke's* thickness causes minimum discomfort and generates heat when worn. Significant contributions about the design are made by weavers, although consumers dictate taste. *Aso-oke* fabric now can be decorated with designs, labels, photographs, signs, and emblems of the celebrants of marriages and chieftaincy titles.

As an aspect of Yoruba manufacturing technology, the current study has dealt with the patterning and designing of hand-woven fabrics in southwestern Nigeria. The fieldwork and studio experiments conducted by the author reveal the prominence of *Aso-oke* as a purely Yoruba traditional cloth, and as the artistic efforts and dynamism of their cottage weaving industry.

This paper provides a wide variety of creative approaches to fabric surface design, and entrepreneurship opportunities. It opens yet another vista for researchers and consumers who still patronize *Aso-oke* cloths.

Additional References:

S. A. Adetoro, "Nigerian Textile Design Royal Costume and Daily Wear Garment-Style: Transition Between Contemporary Periods" (Paper presented at *International World Crafts Council,* Vienna, 1980).

S. A. Adetoro, "Yoruba Culture," *The Nigerian Field Magazine* (1982): 7.

F. M. Andrews, *Creative Printmaking* (Englewood Cliffs, NJ: Syracuse University and Prentice-Hall, Inc., 1964), 65–73.

P. S. O. Aremu, "Yoruba Cultural Heritage," *The Nigerian Field Magazine* (1992): 18.

S. Babara, *English Embroidery* (London: Mills and Boons Ltd., 1974), 68–69.

J. Barbour and D. Simmons, *Adire Cloth in Nigeria* (Ibadan: Institute of African Studies, University of Ibadan, 1971), 17–19.

J. Biegelesisen, *The Complete Book of Silk Screen Printing Production* (Boston: Hunt Manufacturing Company Booklet, 1963), 34–58.

R. Brown, *The Weaving, Spinning, and Dyeing Book* (London: Routledge and Kegan, Ltd., 1979), 24–33, 36–48.

B. Caxton, *The World Book Encyclopedia International* (1972, 1977), Vol. 5, 6.

W. E. Dendel, "Sources of African Design and Techniques" in *African Fabric Crafts* (Newton Abbot, UK: David & Charles, 1974), 35.

G. A. Effron, *Introducing Embroidery* Vol. 5 (Oxford: Oxford University Press, 1957), 6–9.

J. C. Ene, "Indigenous Silk Weaving in Nigeria," *Nigerian Magazine* 81 (1964): 132.

P. G. Gohl and L. P. Vilensky, *Textiles for Modern Living* (Australia: Longman Cheshire Limited, 1979), 98–99, 256.

M. Gostellow, *Art of Embroidery* (London: Wiedefield and Nichlson, 1979), 2–8.

E. S. Harley and J. Hampden, *Books from Papyrus to Paperback* (London: Methuen and Co. Ltd., 1971), 8.

P. Johnston and G. Kaufman, *Design on Fabrics* (New York: Van Nostrand Reinhold Company, 1967), 41–42, 74–86.

P. Kent, "The Decoration of Woven Cloth" in *West African Cloth* (Denver, CO: Denver City Park; Museum of National History, 1971), 65–71.

V. Lamb and J. Holmes, *Nigerian Weaving* (Herts., UK: Roxsford Hertingfordbury, 1980), 20–25, 29–35, 101–112.

J. L. Marjory, *Introductory Textile Science* (Winston: Holt, Rinkchart, 1977), 46–47, 377.

C. Menakaya, "Reproduction Techniques in Screen Printing," *JINDEST* 1: 1 (2000): 1.

B. S. Myers, "Understanding the Arts" in *Prints and People* (New York: Nolt Renehart & Winston, 1961), 211, 220.

P. Oyelola, "Everyman's Guide to Nigerian Art," *Nigerian Magazine* (1980): 28.

R. Sieber, "The Aesthetics of Traditional African Art" in *Art and Aesthetics in Printing Society* (c.f. and Dutton & Co., 1971), 66–70.

P. G. Tortora, *Understanding Textile* (New York: MacMillan Publishing Company, 1987), 231–233, 343.

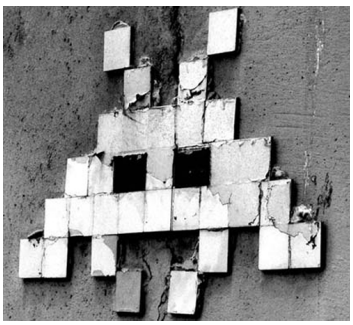
S. I. Wangboje, *A Textbook on Art* (Nigeria: Evans Brothers, 1985), 19–22.

Encyclopedia Britannica (Chicago: William Berton, Publishers, 1976), 218 –220.

L.A.: Invasion Over?

Raiford Guins

There was a time, not too long ago, when the urban landscape of Los Angeles was awash with little pixilated mosaics of 8-byte video game characters like the alien fleet from Space Invaders, the ghosts of Pac Man fame, Berzerk robots, and Galaxian's cosmic insectoids. Hollywood, the West side, Santa Monica, and Venice were invaded by these friendly visitors in the form of site-specific pieces by aptly named Parisian artist, "Invader." Invader has graciously bestowed thirty-four worldwide cities with his low-res "gifts," as he prefers to view his work, and has captured the attention of art magazines as well as galleries. From June 11–July 9, 2005 he had a solo show at Sixspace in Los Angeles entitled, "Rubik Cubism," that featured his well-known tile mosaics and introduced the city to the medium of the hand-held puzzle, Rubik's Cube, for creating art. Like Jean-Michel Basquiat whose NYC graffiti pieces were pilfered by opportunists in the 1980s, Invader's ninety-three mosaics have all but vanished from the urban surfaces of L.A. I first began taking pictures of *L'Invasion De Los Angeles* in 2003 and originally intended this essay to address urban redesign in the post-graffiti moment. Yet, the redesign that exists is one that has pick-pocketed Invader's gifts: A city that seems not to appreciate his ever-observant pixels watching over our everyday habitation of its freeways, beaches, parks, sidewalks, streets, and stores. For it seems that the "spirit of the gift," to conjure Marcel Mauss, is returned not with respect or generosity but with theft and selfishness. The City of Angels has a devil ransacking public art (store owners? city officials? collectors?) for the benefit of private gain. Fame has its price while bankrupting the sociality of public space. For me, Invader's tiny tiles plaster over the nondescript, ugly, and routine. They produce an opportunity for conversation as I stop to photograph one and a stranger asks the inevitable: "What are you taking a picture of?" On this site we speak. Strangers reminisce about having played video games. We share a collective memory returned in ephemeral form. We talk about fun times and smile knowingly. Together we marvel at the wonderful colors lovingly glued together to resemble raster graphic aliens. The mosaics are not vulgar, far from the boisterous tag that does no more than announce "I was here" to learned eyes in an obscure signature. These invaders are shy, perhaps even reclusive. Preferring the periphery—playing beneath the icon that is Randy's Donut, resting just above an entrance, waiting on a curb, sharing rather than destroying space on the exterior of a public restroom with other mosaics, and avoiding traffic on Interstate 10 West—they play with the corners of our eyes instead of assault us head on. In a city of bloated billboards, automotive shells, congested noise, pollution, and crumbling infrastructures these gifts demonstrate sensitivity, serenity, and peace. Or, at least did, as all I can share in this essay are the last invaders and the traces of others. Far from a hostile invasion, Invader's mosaics adorn the city with friendly faces whose pixilated smile is being scraped off. Where a curb was once something more, or a wall a surprise, we revert to cement, brick, and the remains of something else that could've been.



World Famous Randy's Donuts,
805 W. Manchester Boulevard, Ingelwood.

R.I.P. 134 La Brea, Los Angeles.

R.I.P. Hennessey & Ingalls Art and Architecture Books, 214 Wilshire Boulevard, Santa Monica.

R.I.P. Public Restroom, Venice Beach.

Interstate 10 West at Overland Exit.

Evolutionary Theories and Design Practices

Jennifer Whyte

Introduction

How widely applicable are evolutionary theories? What can they tell us about design practices? The concept of evolution often is used in design research, yet Langrish[1] argues that many of our evolutionary ideas are confused or pre-Darwinian, and that they should be replaced by a non-progressive Darwinism. The theories we use inform our analysis, and hence a clearer theoretical understanding of evolution has the potential to improve our interpretation of empirical data on design practices.

In this paper, I argue that the Darwinian concepts of variation and selection provide a useful theoretical lens for understanding longer-term changes across design families, but that they can be misleading when applied to design practices within particular projects. To support these arguments, I consider the treatment of evolution in literature about technological change, as well as the contemporary debates and controversies in human and cultural evolution. Analysis and comparison suggests that there is a broad spectrum of neo-Darwinian evolutionary thinking. This includes, but is not limited to, the notion of "memes," currently discussed by design theorists. I highlight the questions and challenges that this rich heritage of evolutionary theorizing poses to researchers of design, who are engaged in analyzing activities and the outcomes of human labor.

Of course, it may seem paradoxical to include a discussion of evolutionary theories in *Design Issues;* given the deliberate and intentional nature of design practice. Darwin's theory of natural selection provides a mechanism for the evolution of the species, which disposes with the hand of God as the designer of individual living things. It drew him into conflict with the creationists, who believe that all living creatures are individually designed. While there is a long history of speculation that biological evolution is just one instance of a more generic phenomenon,[2] a number of dissimilarities between the realms of the natural and the artificial raise potential challenges to the legitimacy of evolutionary claims. Designers clearly are involved in the realm of the artificial. Hence, we are justified in approaching the application of evolutionary theories to design as skeptics.

1 John Z. Langrish, "Darwinian Design: The Memetic Evolution of Design Ideas," *Design Issues* 20:4 (2004): 4–19.

2 See, for example, John Ziman, "Evolutionary Models for Technological Change" in *Technological Innovation as an Evolutionary Process*, John Ziman, ed. (Cambridge: Cambridge University Press, 2000), 3–4.

Nevertheless, evolutionary concepts do have great appeal when we consider human culture, and the objects that are designed and made within it. Historical studies of technology describe long-term changes in the structure and form of hammers, steam engines, and automobiles; paperclips, forks, pins, and zippers; bicycles, Bakelite, and bulbs; automotives; bridges and airplanes.[3] There also are rich traditions of using biological analogies to understand design, for example, through work at the Cambridge School of Architecture in the 1960s and 1970s.[4] In striving to develop robust theories of design practice, we must be prepared to analyze critically and to seek to falsify all contenders. The potential utility of valid evolutionary theories makes evaluating the validity of their application to design particularly important.

The Nature of Evolutionary Theories

Variation and selection are central to Darwinian theories. In *On the Origin of Species*, Darwin outlines processes of variation, under domestication and under nature; and processes of natural selection. He goes to great lengths to set out the logical basis for his argument for evolution, and to address the counter-arguments that could disprove his claims. Crucially, he introduces qualifiers. Hence, in considering the conditions that may be favorable to natural selection, he states: "A large number of individuals ... is, I believe, an extremely important element of success."[5] Inheritable and diversified variability also are characterized as favorable, though Darwin believes that mere individual differences are sufficient.

Evolution is, in biological terms, quite different to development: it focuses on the evolution of a population over many generations rather than the growth of an individual over a lifespan. In the social sciences, the term evolution sometimes is used loosely to mean any form of development or change. But evolutionary theories need to be more precisely defined and characterized to be useful. Darwin was not the first to propose a mechanism. Prior to Darwin, Lamarck had proposed a mechanism for evolution based on the inheritance of characteristics acquired during their lifetime, such as the passing on of learned knowledge or well-exercised muscles.[6] However, Darwin's theory is the only one to have stood up to comparison with empirical data. Modern theories of evolution typically require variations across a population to result in competition between variants, and differential inheritance of their characteristics in the next generation of the population. This process has been described as one of blind variation and selective retention.[7] It increases the fit between characteristics of the population and the local selection environment, and hence increases diversity.

Theories of evolution do not provide a basis for extrapolation of design prescriptions. The progressive view of the mechanism behind evolution is simply not supported by empirical data, and should be little more than a footnote in contemporary discussion.

3 The evolution of hammers, steam engines, and automobiles is described in George Basalla, *The Evolution of Technology, Cambridge Studies in the History of Science* (Cambridge: Cambridge University Press, 1989); paperclips, forks, pins, and zippers in Henry Petroski, *The Evolution of Useful Things: How Everyday Artifacts—from Forks and Pins to Paper Clips and Zippers—Came to Be as They Are* (New York: Vintage Books, 1992); bicycles, Bakelite, and bulbs in Wiebe E. Bijker, *Of Bicycles, Bakelites, and Bulbs* (Cambridge, MA: MIT Press, 1995); automotives in Paul Gardiner, "Robust and Lean Designs" in *Design, Innovation, and Long Cycles,* Christopher Freeman, ed. (1984); and bridges and airplanes in Walter G. Vincenti, *What Engineers Know and How They Know It* (Baltimore, MD: The John Hopkins University Press, 1990).

4 Philip Steadman, *The Evolution of Designs: Biological Analogy in Architecture and the Applied Arts* (Cambridge, UK: Cambridge University Press, 1979); and Christopher Alexander, *Notes on the Synthesis of Forms* (Cambridge, MA: Harvard University Press, 1964).

5 Charles Darwin, *On the Origin of Species* (London: John Murray, Albemarle Street, 1859).

6 Jean-Baptiste Lamarck, *Zoological Philosophy: An Exposition with Regard to the Natural History of Animals* (Paris: 1809).

7 Donald Campbell, "Variation and Selection Retention in Socio-Cultural Evolution," *General Systems* 16 (1969).

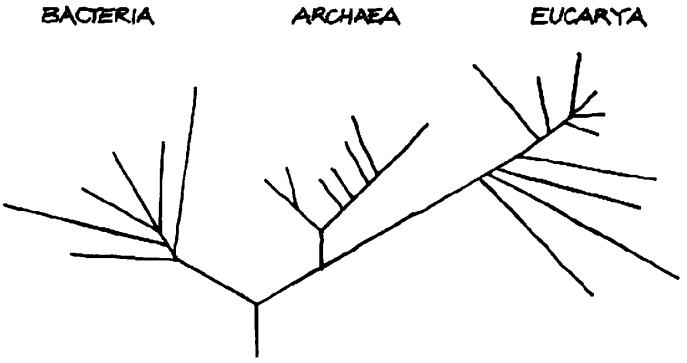


Figure 1
Sketch of one of a number of contemporary phyiogenetic trees.

Developed in the nineteenth and twentieth centuries through the work of (non-Darwinian) evolutionary theorists such as Lamarck and Spencer,[8] it sees all biological species moving up a "chain of being" which culminates in human beings. In their critique of progressive evolution, Laland and Brown go so far as to argue that:

> [H]istorically, certain ideas have tended to go together: a Lamarckian view of evolution with species arranged on a ladder and a linear, progressive concept of change, perhaps inevitably engenders prejudice as some evolved forms must be regarded as more advanced, or "higher" than others.[9]

As Langrish shows, it is this progressive view that often is criticized by design scholars. For example, Tonkinwise criticizes evolution as "a way of explaining what results from interrelated random processes, not the mechanism that brings about those results." [10] In fact, evolutionary theory does exactly the opposite, explaining the mechanism for change but not the results. Despite the development and refinement of scientific theories of evolution, erroneous beliefs in progressive evolution have been widely influential,[11] and are still deeply entrenched in debates on technological evolution.

One way of understanding the difference between the non-Darwinian prescriptive views of the historical sequence, and the modern, neo-Darwinian descriptive view of the historical sequence, is to consider the different versions of the "tree of life" that these theories propose. The progressive tree proposed by Ernst Haeckel shows a linear progression up a tree, with man at the top while contemporary phylogenetic trees, which are based on an analysis of molecules rather than species, show a broader divergence of life in which man holds no privileged position.[12] It is important to note that evolutionary research seeks to explain a number of phenomena: it is not only used to describe and analyze such historical sequences over the long-term, but also used to study the mechanisms for changes at any point in time.

Like Langrish, I argue that the Darwinian concepts of variation and selection provide a firmer foundation for theorizing about design than the non-Darwinian understandings that his work

8 Lamarck, *Zoological Philosophy: An Exposition with Regard to the Natural History of Animals* and Herbert Spencer, *The Factors of Organic Evolution* (London: Williams & Norgate, 1887).

9 Kevin N. Laland and Gillian R. Brown, *Sense and Nonsense: Evolutionary Perspectives on Human Behaviour* (Oxford: Oxford University Press, 2002).

10 Cameron Tonkinwise, "Design + Evolution = Eugenics: Mimetological Analogies, or Why Is Design So Enamoured with Evolution?" (paper presented at the European Academy of Design 06, Bremen, 2005).

11 Belief in a linear and progressive mechanism infiltrated twentieth-century thinking about society in a number of ways; from the erroneous idea that individual humans climb up the "evolutionary ladder" during development, which influenced Freud's view of infants as sexual creatures; to Marx's notions of human society progressing through various levels, punctuated occasionally by revolutions that take a society to a higher level. See Laland and Brown, *Sense and Nonsense: Evolutionary Perspectives on Human Behaviour*, 41–49.

12 Evolutionary trees do not provide evidence for evolution, but codify and present the data and analysis. Modern phylogentetic trees show scientists' understanding of genealogical descent. The tree in Figure 1 is based on the tree in Gary J. Olsen and Carl R. Woese, "Ribosornal Rna: A Key to Phylogeny," *FASEB Journal* 7 (1993).

replaced. As the following sections show, there has been significant refinement and elaboration of Darwinian evolutionary theory over the last century, both in terms of its application to technology[13] and in terms of the biological sciences themselves.

Evolutionary Thinking and Technological Change

The concepts of variation and selection are well established in the evolutionary economics tradition. In a challenge to equilibrium models of the economy, Schumpeter introduces a dynamic component into economic analysis by arguing that capitalism is a form or method of economic change that is never stationary.[14] Nelson and Winter draw on this Schumpeterian model of competition to develop an evolutionary theory of economics, which has become widely influential.[15]

Though this model uses the ideas of variation and selection, it is not strictly Darwinian in nature. Nelson and Winter describe themselves as unabashedly Lamarckian since their theory describes learning playing a role through the "inheritance" of acquired characteristics and appearance of variation under the stimulus of adversity.[16] According to them, the three basic concepts for an evolutionary theory of economic change are: first, the idea of an organizational routine; second, the idea of "search" to denote all those organizational activities associated with the evaluation of current routines, and which may lead to their modification or replacement; and, third, the idea of the "selection environment," which includes other firms in the market, the patent system, and other institutional configurations.[17]

Likewise, Freeman[18] describes the historical rise of science-related technology through developments in process innovations, synthetic materials, and then electronics. Influenced by Marxist views of technological progress, the dominant nature of different technologies at different junctures in history is explained using the metaphors of waves, paradigms, and trajectories; such as Kondratiev long-waves,[19] which are considered as long economic cycles that occur approximately every fifty years, techno-economic paradigms, and technological trajectories.[20] While, again, this work is not strictly evolutionary, the idea of technological trajectories and the related concepts of path dependence and lock-in[21] have a resonance with evolutionary theorizing.

Much modern work emphasizes the branching nature of technological change. From this perspective, the theory indicates that there will be branches, but cannot identify the ones that will be taken.[22] Variation is not random, but prestructured by regimes or paradigms. In addition to selection processes working on products, there are shifts in selection environments leading to the coevolution of technology, industry structure, and supporting institutions. In sociological and historical approaches, for example, attention is focused on the political processes underlying trajectories of change

13 Campbell, "Variation and Selection Retention in Socio-Cultural Evolution" in John Ziman, *Technological Innovation as an Evolutionary Process* (Cambridge: Cambridge University Press, 2000).

14 Joseph A. Schumpeter, *Capitalism, Socialism, and Democracy* (New York: Harper & Brothers, 1942).

15 Richard R. Nelson and Sidney Winter, *An Evolutionary Theory of Economic Change* (Cambridge, MA: Harvard University Press, 1982).

16 Ibid., 11.

17 Ibid., 400–1.

18 Christopher Freeman, *The Economics of Industrial Innovation*, 2nd ed. (London: Frances Pinter, Ltd., 1982).

19 Carlota Perez, "Structural Change and Assimilation of New Technologies in the Economic and Social Systems," *Futures* 15:4 (1983).

20 Giovanni Dosi, "Technological Paradigms and Technological Trajectories—A Suggested Interpretation of the Determinants and Directions of Technical Change," *Research Policy* 11:3 (1982).

21 Nathan Rosenberg, *Inside the Black Box* (Cambridge: Cambridge University Press, 1982).

22 Arie Rip, "Technological Innovation—in Context" (paper presented as the keynote at the International Network on Innovation Research Workshop, January 14, 2003).

in modern objects. In developing an empirically based socio-technical theory of technological development, Bijker argues that trial-and-error models, often cast in evolutionary terms, have specific advantages over models that stress the goal-oriented character of technological development.[23] However, Bijker[24] highlights two problems associated with an evolutionary explanation of the empirical data: first, its complexity: such an evolutionary representation would need three layers, with variation and selection in terms of problems, solutions, and resulting artifacts; and, second, if this representation is not completely adequate, the almost inevitable assumption is that the artifact is a constant fixed entity—to be generated through the variation process and then ushered in through the selection process.

23 Wiebe E. Bijker, *Of Bicycles, Bakelites, and Bulbs* (Cambridge, MA: MIT Press, 1995).

24 Ibid., 51–52.

25 Darwin, *On the Origin of Species*; Lamarck, *Zoological Philosophy: An Exposition with Regard to the Natural History of Animals*; and Richard Dawkins, *The Selfish Gene* (Oxford: Oxford University Press, 1976).

Contemporary Work on Biological, Human, and Cultural Evolution

When borrowing from evolutionary ideas, there is a tendency for authors in the design community to see biological evolution as a "closed" field of established theory. Design scholars habitually reference Darwin, Lamarck, and sometimes refer to the modern scholar Dawkins.[25] For practitioners in the field, however, there are a number of inherent debates and controversies, and there is an evolving knowledge-base. The discovery of genes and genetic bases for natural selection in the 1930s and 1940s served as an important spur to modern theorizing in biology. Thus, modern biological evolution tends to be concerned with genes, phenotypes, and populations;

Table 1:
Contemporary research traditions in human and cultural evolution

Human socio-biology	Builds on new evolutionary methods and ideas, including evolutionary game theory, kin selection, and reciprocal altruism. Kin selection is proposed to explain why individuals sometimes behave in ways that decrease their chances of surviving and reproducing and increase others' reproductive success. Reciprocal altruism suggests that altruistic behavior, which is initially costly to the actor but beneficial to the recipient, is selected if there is a high probability that the altruistic act would be reciprocated on a future occasion.
Human behavioral ecology	Uses mathematical models to compute the optimal human behavior in a given context on the assumption that this is what might have evolved. It then tests the model's predictions, primarily by studying traditional societies.
Evolutionary psychology	Interested in the evolved mechanisms that underlie human behavior and see modern human beings as creatures adapted to the environments of our stone-age ancestors. It looks at topics such as the evolution of memory, emotions, and reasoning. Critics argue, however, that what is known about our ancestors' way of life to make these analyses valid is insufficient.
Memetics	Builds on the idea of the meme. This describes aspects of our behavior and knowledge, such as particular skills, songs, ideas, and rituals that are transmitted between individuals through imitation and social learning.
Gene-culture co-evolution	Involves the development of models to explore the co-evolution of genes and culture. For example, it explains why Western people can drink milk without getting sick, while the majority of the world's adults cannot, by pointing to the co-evolution of dairy farming with genes for processing milk.

whereas Darwin is concerned mainly with organisms, speciation, and individuals.[26] Laland and Brown[27] analyze contemporary evolutionary theories in human and cultural evolution: their taxonomy and analysis is summarized in Table 1.

Although it is useful to characterize these traditions for purposes of analysis, the reality is more complex, and these traditions are not autonomous.[28] Human sociobiology, in some ways, is a forerunner of the other schools. It has, at its heart, the idea of reciprocal altruism, described by a number of eminent evolutionists as one of the most important, or the most important, idea in evolutionary theory.[29] Following the development of human socio-biology, human behavioral ecology and evolutionary psychology focus primarily on the dynamics of human behavior. Culture plays a larger role in work in memetics and gene-culture coevolution. The term "niche construction" is used to describe the activities, choices, and metabolic processes of organisms through which they define, choose, modify, and partially create their own niches in another important extension to the variation-selection model of evolution.[30]

Comparing Theories of Cultural and Technological Evolution

There are similarities between the development and contemporary theories of human and cultural evolution, and technological evolution. Similarities in thinking relate to the transmission mechanism between generations, and the relationship, or coevolution, with the environment.

There is, for example, a similarity between the concept of "memes," which Dawkins sees as operating by infecting individual minds, and "routines," which are used by organizations to encode and reuse their knowledge. Researchers of technological change use both concepts; while, in the growing literature on evolutionary theories in design, the former has a privileged place.[31] Memes are seen to be infectious, while routines are seen as one of the core capabilities of a firm, and a means of internal replication of knowledge rather than its external transmission.

In studying modern technologies, it has been argued that it is difficult to justify the assumption that a selection environment is truly independent of a particular technological trajectory.[32] Some scholars, therefore, see the evolutionary analogy as being rather limited. However, there is a growing emphasis on coevolution in both biological sciences, through the work on gene culture coevolution; and in studies of technology and organizations. For example, French Impressionists were successful in radically altering the type of art seen as high quality. Changes to the selection environment, from one based on assessment by established academic artists to one based on assessment by independent critics, have been used to explain this.[33] Niche construction is used to explore ways of intervening to create the alternative technological trajectories required for achieving environmental sustainability.[34]

26 Douglas J. Futuyma, *Evolutionary Biology* (Sunderland, MA: Sinauer Associates, 1986).

27 Kevin N. Laland and Gillian R. Brown, *Sense and Nonsense: Evolutionary Perspectives on Human Behaviour* (Oxford: Oxford University Press, 2002). The table and the following paragraph are largely based on this work.

28 Ibid., 88.

29 Ibid., 77.

30 Kevin N. Laland, John Odling-Smee, and Marcus W. Feldman, "Niche Construction, Biological Evolution, and Cultural Change," *Behavioral and Brain Sciences* 23:1 (2000).

31 For memes in the technology literature, see Joel Mokyr, "Evolutionary Phenomena in Technological Change" in *Technological Innovation as an Evolutionary Process,* John Ziman, ed. (Cambridge: Cambridge University Press, 2000). In the design literature, see Artemis Yagou, "Rewiring Design History from an Evolutionary Perspective: Background and Implications" (paper presented at the European Academy of Design, Bremen, 2005); and John Z. Langrish, "Evolutionary Design Ten Years On: Memes and Natural Selection" (paper presented at the European Academy of Design 06, Bremen, 2005).

32 Henk van den Belt and Arie Rip, "The Nelson-Winter-Dosi Model and Synthetic Dye Chemistry" in *The Social Construction of Technological Systems,* Wiebe E. Bijker, Thomas P. Hughes, and Trevor Pinch, eds. (Cambridge, MA: The MIT Press, 1987), 140–41.

33 Nachoem M. Wijnberg and Gerda Gemser, "Adding Value to Innovation: Impressionism and the Transformation of the Selection System in Visual Arts," *Organization Science* 11:3 (2000).

34 Arie Rip, "Technological Innovation—in Context" (paper presented as the keynote at the International Network on Innovation Research Workshop, January 14, 2003).

However, an interesting difference between these traditions is the way that they deal with industrialization and complex technological systems. Work on human and cultural evolution has tended to look at non-Westernized or prehistoric societies. In evolutionary economics and the sociology of science traditions, evolutionary thinking is used to describe post-industrial societies, and some attempts have been made to apply it to complex technological systems.

Application and Limitations of Evolutionary Theories

Do evolutionary theories fit with the empirical evidence of design practices? Are they useful in explaining design practices? What are the limits of their applicability? Empirical research on real-world design practices is greatly improving our understanding of design in a range of disciplines and settings, and is raising new challenges. Research is being conducted using protocol analysis, interviews with designers, and historical and ethnographic studies of commercial design practice.[35] This research is raising important questions regarding the nature of design practices at different levels of analysis, within a design project, and across a wider family of related design projects.

Evolutionary theories offer a range of new tools for understanding design; however, even their strongest advocates of evolution identify some limitations and objections. One objection relates to the unit of analysis:

> Virtually all the fundamental principles of biological evolution have proved troublesome when applied to technology. It is not at all clear what evolves .... It is not clear whether, or on what grounds, "selection" might be said to occur, or at what level.[36]

Concepts such as memes and routines have been criticized as evolutionary storytelling, because they are difficult concepts to "operationalize" in research, and related theories have not led to systematic empirical testing.

Another objection is to the assumption that technology is a fixed entity in the variation and selection process.[37] A further limitation, which was raised by Darwin, relates to the population size required for evolutionary phenomena to be a good explanation. Campbell describes this:

> There is bound to be a lot of the purely fortuitous or non-transferably specific in the life or death of a single biological individual or culture item. For a systematic selective criterion to make itself felt above this "noise level," there must be numerous instances involved, and a high mortality rate. Thus we would be more apt to expect effective selection criteria for neighborhood laundry organizations than for national organizational forms.[38]

35 For examples of research using protocol analysis, see Nigel Cross, Henri Christiaans, and Kees Dorst, eds., *Analysing Design Activity* (Chichester, UK: John Wiley & Sons, 1996). For interviews, see Michael Brawne, *Architectural Thought: The Design Process and the Expectant Eye* (Oxford, UK: Architectural Press, 2003); Bryan R. Lawson, *How Designers Think*, 3rd ed. (Oxford, UK: Architectural Press, 1997); and, for ethnographic studies, see Diane Bailey and Julie Gainsburg, "Knowledge at Work" (paper presented at the Academy of Management, New Orleans, 2004); Louis L. Bucciarelli, *Designing Engineers*; *Inside Technology,* Wiebe E. Bijker, W. Bernard Carlson, and Trevor Pinch, eds. (Cambridge, MA: MIT Press, 1994); Kathryn Henderson, *On Line and on Paper: Visual Representations, Visual Culture, and Computer Graphics in Design Engineering*; and *Inside Technology,* Wiebe E. Bijker, W. Bernard Carlson, and Trevor Pinch, eds. (Cambridge, MA: MIT Press, 1999).

36 Edward Constant, II, "Recursive Practice and the Evolution of Technological Knowledge" in *Technological Innovation as an Evolutionary Process,* John Ziman, ed. (Cambridge: Cambridge University Press, 2000), 219.

37 Wiebe E. Bijker, *Of Bicycles, Bakelites, and Bulbs* (Cambridge, MA: MIT Press, 1995).

38 Campbell, "Variation and Selection Retention in Socio-Cultural Evolution" in John Ziman, *Technological Innovation as an Evolutionary Process* (Cambridge: Cambridge University Press, 2000).

This suggests that there has to be a certain size of population for evolutionary explanations to provide adequate purchase on empirical situations.

Within a project, the observed activities of designers have been characterized as showing a reflective conversation with materials through the medium of a drawing.[39] There is evidence that experts use more effective design strategies than novices do.[40] Small numbers of individual options are considered, and designs are refined and changed over the lifetime of the process. Though there is considerable research on evolutionary design by computers,[41] this model of design is not found to resemble the messy practices of human designers.[42] At this level of analysis, I have found little to suggest that an evolutionary approach will shed light on empirical phenomena.

In a number of separate, but related, products, evolutionary phenomena have been noted across a range of sectors and product types.[43] To describe all the members of a particular technological trajectory, Gardiner introduces the idea of the design family,[44] using it to describe the range of automotive and airplane designs that have a common configuration; but which are variations tailored to specific markets. Evolutionary theories appear to describe phenomena across these families, and may be useful in addressing a number of questions. I suggest that the visualization of a design family provides a useful way of interrogating the historical development of existing technologies.

However, just as in modern biology different trees of life can be drawn by considering different genes, I suggest that different design families can be postulated based on different underlying ideas. The analysis of a portfolio of complex designs, such as those for architectural buildings, would propose different causal links in relation to the development of sustainable development, roof designs, etc.

Conclusions and Implications

Evolutionary theories may be used to challenge and extend our understanding of design practices in a number of ways. For example, by drawing attention to the way that the designer operates within a selection environment, an evolutionary perspective draws attention to the way the intentionality of the designer is, to some extent, contingent on this environment. Laland and Brown[45] describe one of the benefits of evolutionary theory as its ability to generate empirically testable hypotheses. However, we need to take great care to ensure that theoretical mechanisms for evolution are actually encountered in practice. There is a danger of conflating observed phenomena, which operate at different levels of analysis.

I argue that variation and selection are misleading when applied to design practice within particular projects. It is not clear what varies and what is selected, whether it is knowledge, designs,

39 Donald A. Schön and Glenn Wiggins, "Kinds of Seeing and Their Functions in Designing," *Design Studies* 13:2 (1982).

40 Manolya Kavakli and John Gero, "Difference between Expert and Novice Designers: An Experimental Study" in *Human Behaviour in Design: Individuals, Teams, Tools,* Udo Lindemann, ed. (Belin: Springer, 2003).

41 Jun H. Jo and John Gero, "Representation and Use of Design Knowledge in Evolutionary Design" (paper presented at the CAAD Futures), *The Global Design Studio: Proceedings of the Sixth International Conference on Computer-Aided Architectural Design Futures* (National University of Singapore, Singapore, September 24–26, 1995).

42 Henrik Gedenryd, *How Designers Work* (Lund, Sweden: Lund University Cognitive Studies, 1998).

43 Vincenti, *What Engineers Know and How They Know It,* and Petroski, *The Evolution of Useful Things: How Everyday Artifacts—from Forks and Pins to Paper Clips and Zippers—Came to Be as They Are.*

44 Paul Gardiner and Roy Rothwell, "Tough Customers: Good Designs," *Design Studies* 6:1 (1985), and Gardiner, "Robust and Lean Designs."

45 Laland and Brown, *Sense and Nonsense: Evolutionary Perspectives on Human Behaviour.*

sub-assemblies, or other contenders. The practices of expert designers are not easily explained through processes for creating surplus variation; creating competition between variants, and then selecting the most appropriate. Thus, I argue that variation and selection provide a useful theoretical lens for understanding longer-term changes across design families. Design families exhibit variation, competition between variants, inheritance of features, and the accumulation of successive cultural modifications over time. In many instances, there is a reasonable sample size to analyze. However, evolutionary phenomena are more easily traced in preindustrial societies and in industries such as machinery, than in the development of complex products such as buildings or infrastructure.

There is ongoing debate about whether technological evolution is Darwinian or Lamarckian in nature,[46] and learning has been proposed in a number of evolutionary understandings of technology. However, the literature reviewed in this paper points to a number of significant developments in evolutionary theories. Just as understanding the natural is changing through the discovery of genes and the development of concepts of kin selection and niche construction, understanding the artificial is changing through ideas such as path dependence, technological trajectory, and design families.

Evolutionary theories could be used in further research that seeks to understand the mechanisms through which innovative products are developed across a design family. More research is needed on the applicability and limitations of evolutionary theories for understanding design families in complex system industries.

46 Ziman, *Technological Innovation as an Evolutionary Process.*

Document

Étude sur le mouvement d'art decoratif en Allemagne (A Study of the Decorative Arts Movement in Germany)

Charles-Edouard Jeanneret
(Le Corbusier)

Translated by John Cullars

Introduction by Nancy J. Troy

Charles-Edouard Jeanneret (better known as Le Corbusier, a pseudonym adopted in connection with his work as an architect) published his first small book, *Étude sur le mouvement d'art decoratif en Allemagne* (A Study of the Decorative Arts Movement in Germany), in 1912. Researched during the course of an extended stay in Germany between April 1910 and May 1911, the *Étude* had been commissioned by the École d'Art of his Swiss hometown, La Chaux-de-Fonds. There, beginning in 1902, Jeanneret had studied decorative art for five years in preparation for a career in the local watch-making industry. Under the tutelage of Charles L'Eplattenier, his teacher and mentor throughout this period, the young man's horizons, and his ambitions, gradually broadened beyond the study of art and ornament to embrace architecture and eventually urbanism as well.

In 1907, Jeanneret embarked on a four-year period of travel that brought him to Italy, Vienna, Paris (where he worked for the architect and building contractor, Auguste Perret), and Germany, culminating in 1911 in his so-called Voyage d'Orient through the Balkans to Istanbul, Greece, and central Italy. During the year spent in Germany, Jeanneret traveled widely but also worked for five months as a draughtsman in the Berlin office of Peter Behrens, the most significant modern architect and industrial designer in Germany at the time.

Throughout his stay in Germany, Jeanneret remained in close contact with L'Eplatennier, with whom he was preparing a book, *La Construction des Villes*, which was never published.[1] L'Eplattenier recognized his young protegé's need to support himself while traveling abroad and therefore arranged for the École d'Art to pay Jeanneret to report on the situation of the decorative arts in Germany, covering a wide range of issues that might prove instructive to his Swiss sponsors, from professional education to the fabrication and sale of designs, and offering comments on the beautification of cities and

1 H. Allen Brooks has shown that this project sowed the seeds for the much later and vastly transformed *Urbanisme*, published in 1925. See H. Allen Brooks, *Le Corbusier's Formative Years: Charles-Edouard Jeanneret at La Chaux-de-Fonds* (Chicago and London: University of Chicago Press, 1997). I am indebted to Brooks's extensive original research.

of architecture as well. Jeanneret worked intermittently on this project in June 1910 and April–May 1911; he completed the manuscript only after returning home from the Voyage d'Orient, in January 1912. Soon thereafter, the report was presented to the board of the École d'Art, which on February 22 decided its findings were sufficiently important to merit publication "in the interest of the development of Decorative Art in our country." [2]

The *Étude* is important not only because it presents a contemporary analysis of pre-World War I German achievements in the industrial and applied arts (rarely in the text did Jeanneret use the term *arts décoratifs*) but also because it functioned as a vehicle for the twenty-five-year-old Swiss student of architecture and design to introduce himself into debates about the decorative arts in France. The book is on one hand a summary and cogent analysis of the conditions in Germany that French decorators perceived as a threat to their once dominant position in the international market, and on the other hand, it is a document of the theoretical views Jeanneret espoused in 1912, at the beginning of a six-year period during which his own development as a designer (and architect) was bound up with the circumstances of the decorative arts in France. Despite the fact that its patrons were Swiss, and notwithstanding the German subject matter at its core, Jeanneret's *Étude* had a significant impact in France. Indeed, the argument Jeanneret presented in framing the factual portion of his report was conceived with respect to his understanding of the decorative arts in France. The introduction and conclusion—which are here translated into English for the first time—contain broad, analytical remarks about the complex and intimate relationship that Jeanneret believed existed between the social, political, economic, and artistic developments in France and Germany since the end of the eighteenth century. He argued that the strength of the French craft tradition had survived the Revolution and produced the Empire style; subsequently, the decorative arts began to succumb to the triumph of bourgeois taste, going into precipitous decline after the middle of the nineteenth century. While independently minded painters of the avant-garde flourished during that period, the applied arts were moribund in France.

Having thus set the scene from a French perspective, Jeanneret turned to Germany, a nation he found lacking a comparably great artistic tradition and therefore better prepared than France to benefit from *le bourgeoisisme.* Germany's colossal economic and military power, manifested by its triumph over France in 1870, was paralleled by the energy and organizational proficiency that fueled its conquest of the applied arts. Jeanneret clearly admired the large ambitions and industrious spirit of the Germans, the characteristics that enabled them to create the powerful network of design institutions that he described in the two central chapters of his book. But he ended his study by noting that Germany's renaissance in the ap-

2 This passage is quoted from the statement, signed by the Secretary and the President of the board of the Ecole d'Art, published as a preface to Jeanneret's text in *Étude sur le Mouvement d'Art Décoratif en Allemagne,* 1912 (reprinted, Da Capo Press, 1968), n. p.

plied arts lacked an enduring commitment to art, and, he implied, the Germans were in a process of retrenchment, looking once again to France for guidance. Meanwhile, the French were well positioned to learn from the German lesson: "Will France, slapped in the face by Germany, abandon her lethargy in the domain of the applied arts?" That possibility, Jeanneret suggested, was beginning to take shape in the work of young French decorators whose furnishings had recently been shown publicly in Paris. Nevertheless, he concluded, the French (and French-speaking Switzerland) could not afford to ignore the German model of industrial production in the decorative arts.

Five hundred copies of Jeanneret's book were printed in La Chaux-de-Fonds, where the vast majority were distributed free of charge but provoked scarcely any response. However, Jeanneret actively promoted the book abroad; by October 1912, he was attempting—unsuccessfully—to have a second edition published in France. Large portions of the two middle chapters were reprinted in the French journal, *L'Art de France,* in April and May 1914, and in *Les Réalités Nouvelles* shortly thereafter. On May 27, 1914, Jeanneret wrote to Paul Cornu, librarian of the *Union Central des Arts Décoratifs* in Paris, that his book had been discussed "everywhere," and he was now "bombarded by orders from booksellers and people like you, Monsieur, interested in new ideas."[3] In another context Jeanneret noted that the book was highly regarded in both Germany and France, having elicited reviews in numerous art journals. After the outbreak of World War I, in October 1915, a French architect named Maurice Storez used the *Étude* as his touchstone for an article, published in *La Grande Review,* in which he called on the French not to succumb to disorganization and lack of discipline but instead to start planning for postwar reconstruction, as Germany was already doing. Arguing that discipline and organization were originally French traits, part of a national tradition characterized by good sense, logic, and the ideal, Storez urged the French to reclaim this heritage from the Germans. In the process, he quoted at length from Jeanneret's first chapter, cited points made elsewhere in the *Étude,* and acknowledged Jeanneret's study as having been of great service in the formulation of his own essay.

Jeanneret's *Étude sur le mouvement d'art decoratif en Allemagne* is an important document of the author's struggle to come to terms with the tension between art and industry that would later characterize much of his mature architectural production and writing. It also functions as a barometer of the rivalry between France and Germany in the field of the decorative and applied arts on the eve of the First World War—a rivalry from which much can be learned about the roots of the distinction between French Art Deco and the German Bauhaus that continues to shape our understanding of modernist design during the 1920s.

3 Quoted from Jeanneret's copy of this letter. Bibliothèque de la Ville, La Chaux-de-Fonds, LCms89, n. p.

La Chaux-de-Fonds, January 1912

1912

General Consideration

While staying in Munich two months ago, I received a letter from Mr. L'Eplattenier on behalf of the Commission de l'Ecole d'Art, a letter whose contents clearly conveyed the direction of the studies that I meant to pursue. Its characteristic passages are:

> Since you can very profitably study the considerable strides made by the applied arts in Germany for us, the Commission de l'Ecole d'Art has decided to assign you that mission, if you agree to it, supported by a stipend that the authorities will supply. You should prepare a report on everything dealing with professional education, the organization of the art trades, the creation, manufacture, and sale of artistic products. You may include in your notes everything concerning art in the city and in architecture—in short, on everything that might promote the development of art and beauty here at home.

That offer brought a satisfied smile. I accepted and expressed all my gratitude to the Commission for the confidence it had placed in me. My stay in Germany had been motivated by the express purpose of studying the production of art, and the Commission facilitated the opening of doors that might have remained shut to the curiosity of someone lacking official references. I had a taste for that type of study, and already had forged solid relations that could lead to others. In 1908 in Vienna, upon presenting my sketches, I had been engaged by Joseph Hoffmann for the Wiener-Werkstätte. That engagement proved to be of constant use to me in Germany. As soon as I reached Munich, I became acquainted with Dr. Theodor Fischer; and given his great kindness, our relations were more friendly than official. The situation was the same with Baron Gunther von Pechmann, Director of the Vermittelungsstelle für angewandte Kunst (Central Office for Applied Arts). Then, on my first trip to Berlin, I met Dr. Peter Behrens (with whom I would later spend five months as a designer), and the Dr. Engineer Hermann Muthesius. On my trips to Dresden, I met Mr. Wolf Dohrn, the de facto director of the Werkbund, and Heinrich Tessenow, an architect from the city of Hellerau. While on the road, I met Mr. Osthaus, the director of the Folkvang and German Museum at Hagen.

I am indebted to these gentlemen, these affable and magnanimous men, for most of the information that I was able to acquire. Mr. Alfred de Claparède, the Swiss Minister in Berlin, upon the written request of Mr. Robert Comtesse, supplied me with official references. Mr. Claparède earned my gratitude for the attention that he was willing to devote to this affair.

The Commission's charge encompassed such a vast amount, as shown by the passages in the letter quoted above, that I must excuse myself from responding to all of it here. Even within the limits that I've set for myself, I already can see this report becoming inordinately voluminous, and thus losing its usefulness due to reader fatigue. Of course, during the thirteen months of travel, my eyes were wide open. But I will only report here those things most pertinent to this study: my research into the roots, the vital path of that organism, *the applied arts* in Germany, an organic whole that reached maturity so rapidly, and whose robustness and vitality seem incredibly powerful to us.

General Considerations Renewal

Here's what today's innovators claim: Up to the French Revolution, the arts, the faithful expression of economic and political life, as well as the psychological states of the people, rose slowly and without eclipse by evolution, from the obscurity of the Middle Ages to the extremes of refinement and delicacy of taste. Born from the people and for the people, little by little, they had become the monopoly of the cultivated and wealthy classes.

The Revolution led to a complete reversal. Men in power—or having the possibility of rising to power—had an incomplete education, having risen from the ignorant plebeians. Their roles were those formerly filled by the nobles. In the domain of art, for example, that succession should have been impossible for them. But forced to take it on anyway, they committed a "fatal impropriety." That impropriety turned out to be disastrous for art.

Yet thousands of artisans had not disappeared; they had been amazing workmen (architects, carpenters, sculptors, workers in stucco and iron) of the most refined styles that had ever existed in Europe. Their trained hands and eyes had to resume their work following the troubled past. Now, here in France, where the Phrygian cap of liberty was deified, the resurrection of classical times was decreed as a purely literary gesture. This tradition of art was so strong that neither the eye nor the hand could betray it, and they created the "Empire" style that remains, perhaps, the most aristocratic, the most sober, and the most *serious* of styles. The innovators say that it is surely the style closest to us. Moreover, they say, "Logically, it's the style that we should take up again and continue." The sons of Empire artisans still know how to work, although the great influence had passed away and expired with the Emperor, giving way to a bourgeois spirit before which they increasingly submitted themselves. They had had enough of that adorable Restoration tradition (in Germany, "Biedermeyer")—the name given to poised, bucolic gentleman; somewhat concerned about being taken to be cheap, but nonetheless overflowing with integrity. This style is charming: it furnishes us with the sprightly taste for crinolines and cashmere shawls falling over shoulders, and pretty faces, framed by

ringlets, hidden under big floppy straw hats with cascading ribbons. That was all; the bourgeois spirit triumphed as much in politics as in private life. It was the Second Empire and the great disorder, "the Period after the [Franco-Prussian] War."

The moderns today claim to continue the Empire style, having elbowed out the more facile Biedermeyer, and wish to tie the thread of tradition again. They say, "Yes, craftsmen who are subject to the taste of the masses are dead; the applied arts, stifled by exterior contingencies, have fallen into the most lamentable state: they have stayed where they are while the independent arts have inherited the libertarian inspiration of the French Revolution, and are entering into a new era. In effect, the applied arts expressed their last word in the anemic forms of Louis-Philippe, when Delacroix was yelling at Rude, and Courbet later summed it all up in knocking the so-called tyrannical column off its pedestal, after having rubbed the offending canvases clean. He incarnated the "master" for those yet to come. Manet had the classics in his blood, and the soul of a precursor agitated him. Beneath the laughter of the public, he engraved the path of health with an indelible touch. Renoir, Monet, Sisley, and Pissarro followed these paths; while Cézanne appeared as one destined to open immense horizons. These geniuses expressed their credo in an almost sickly spirit because the jeering of the mob had frightened them. Van Gogh died insane; and Gauguin fled from Europe to find peace on an unknown island in the midst of primitive people living harmoniously.

And from all of that, an alphabet with avenging powers and unanticipated refinements in a color unknown until then was born. Reason, joined to the love of beauty, definitively proclaimed the dissociation of "painting" and "sculpture." That was, assuredly, the greatest "Reconquest." Both asserted themselves from then on; sculpture in love with forms, painting mad for color, which was naked and disconcerting to the masses that remained attached to their lazy ways and customs. Rhythm was preoccupied with self-expression; the "law" was imposed, and the artists set about realizing it. The moderns think that today is one of the most beautiful periods, and that the next twenty years will produce painting and sculpture beautiful and generous enough to match the times. It appears that history itself cannot contradict them.

But see how they call themselves "classics." That word is becoming stupid in their mouths—or else prophetic. The classics have been the traditional path, the persistent ascent of the race. They saw the bewildered, the bastards, then the blind, taking up the paint brush and delivering a pitiless verdict in harsh words, reaching the altars of the "institute," venerated by the mob becoming the despisers of "beautiful painting" and "beautiful sculpture," despising color, despising form. They captured all the attention and persecuted those who didn't think as they did. Then they found themselves overshadowed, laughed at by the bourgeois masses, and

hissed by academicians. They felt themselves elbowed in the ribs, and sensed that they had strength in numbers; they parried and thrust: war was declared.

The battlefield, yet again, was Paris.

They were pitiless in their turn; they were young, a bit crazy, and they exaggerated. They laughed. They opposed mad folly and insolent life to works that they claimed were born in caverns and dusty cellars from wretched brains. ... Seeing so much exuberance, so much in excess of their powers, one must not shake one's head and say that they were insane, but rather recall that their masters were bruised old men; humble, the most humble; conscientious, the most conscientious; respectable, the most respectable!—Delacroix, Courbet, Manet, Daumier, Cézanne, Van Gogh...

Parallel to the independent arts, literature had undergone the same struggles and won the same victories. And music situated César Franck as a beacon at the summit of a steep crest from which one could see new worlds.

Yet the applied arts had ceased to live; regardless of Grasset, regardless of Ruskin, and regardless of Morris.

* * * *

During this period, a unformed Germany eked out a living and expressed nothing: it copied France for centuries...up to the [Franco-Prussian] War. It was more predisposed than any other state to accept the bourgeois mentality. Germany cultivated its most definitive expressions because it didn't have its own traditions, and its disorganization paralyzed its own inventive talent. (Of course, I'm not speaking here about popular folk arts, which are no more German than Bulgarian, Swedish, or Hungarian; the folk arts are wholly **human** and thus international.) In fact, Germany, after having caused the French Gothic style to atrophy, expressed nothing more after the Renaissance (which had been very personal, like the German State at that time). Then the Italian baroque, the French Louis XIV, XV, and XVI styles, the Parisian Empire style, and finally the Restoration style from France again. On the other hand, its folk art, which remained its most normal and beautiful expression, evidenced a great tranquility among the impassive common people. But then it is 1870, and Germany conquers!

Concentration, unification: it becomes an organic whole. It was a complete victory, and its people were robust and of fresh substance.

Pride could be read on every face; the bourgeois were becoming proud; they worsened their condition in doing so! It certainly was a rare moment in the arts of the peoples of Europe. The cities that arose then were witnesses. After 1870, Berlin suddenly was much enlarged, Munich renovated, and Stuttgart grew apace! Economic prosperity was born; cities shot up, made of factories, filthy roads, and immense palaces in deplorably bad taste; traveling

across Germany, one learned a great deal about these topics! But the central point of this ethos seems to have been Berlin, with an emperor who lived among satellites grouped around him. Lasting pride, triumph, and an affront to the conquered (and to taste) were inscribed on every disproportionately large stone, lasting pride, triumph: the Reichstag Palace, the Dome, the Kaiser-Wilhelm I Monument in front of the Palace, and the Victory Column, symbolic of power—and also of ugliness—that became beautiful through sheer force of character!

It's clear that, with that state of mind, Germany remained outside of the idealistic concerns of the protesting Parisian painters. It had created its State, its industry, its commerce, and its army. And it had nothing to offer to painting besides a Feuerbach's sentimental romantic soul on the one side, and Böcklin on the other; a Schwind, dreaming about mountain sheepfolds or provincial villages, or a Menzel, who, by a happy coincidence, managed to portray people with a very vigorous brush. Germany also produced a Hans von Marées, whose genius was so unacceptable to his own people that he went away to seek spiritual communion at Pompeii; and a Leibl, whose friendliness and special affinities linked him to Courbet. The art galleries were full of enormous battle scenes, with the French in flight before pointed German helmets.

Now here's a new and unexpected side of things: France persists in denying its traditional artists; the Academy fulminates and undermines them. But Germany poses as a champion of modernism, creating nothing to prove it in the domain of the independent arts, but betraying the new tastes by the systematic assimilation (buying them out) of the works of Parisian painters and sculptors (Courbet, Manet, Cézanne, van Gogh, Matisse, Maillol, etc.) and, on the other hand, unexpectedly and suddenly showing itself to be colossal in power, will, and execution in the applied arts. These facts set the two nations in opposition: revolutionary Germany and evolutionary France. It was an accidental fact that leads today in Germany to disproportion between all too minimal roots and flowers that thrive out of all measure. It was, due to the sudden victory, an instantaneous flourishing; it was a transient incident. France made a slow effort at concentration, having to struggle against what could be identified as "the idleness of the sons of well-off, cultivated, well-educated families." There was an economic revolution in Germany because of the war and the artistic dictates of some hearty, argumentative spirits. In France there was a normal progressive evolution of the people's thoughts and feelings.

I'll focus on the case of Germany: its victory took it by surprise in 1870; Germany was stupefied, then delighted, then proud and haughty about it. It organized, showed off, expanded, and puffed itself up, objectively affirming to itself that it was a new and considerable power in the world. It proved this by the construction of fantastic warships, barracks, formidable arsenals, and then

gigantic palaces, which were out of all proportion and lacking in any sense of measure. In the domain of art, this dropsy of masonry, architects brusquely torn from their tranquil bourgeois spirit, arose, bringing horrible works with them. Architects who profited from the lessons of their predecessors arose in the following generation, embodying the nation's rationality and its triumphant impetuosity. There were works of astonishing immaturity, then of rationality, then of propriety, and the obstacles of the routine were overcome, the roots not cutting deeply enough into the topsoil of the nation. The satisfaction of work well done came, and brought with it the swell of pride anew.

It was an economic, thus *practical,* revolution. The freelance artists that circumstances suddenly rendered great, such as a Murat, a Hoche, or a Ney, first gravitated toward the practical sphere. Political, commercial, and industrial expansion gave them utilitarian, highly modernistic, problems to solve: public buildings, schools and administrative buildings, factories with worker colonies, train stations, marketplaces, slaughterhouses, meeting halls, theatres, concert halls, and "garden" cities. Optimistic by temperament in an optimistic period, they easily solved the problems proposed to them: they were strong—practical and very active. They availed themselves of the most effective propaganda and created expositions of all kinds including art journals, which they transformed into fundamentally new organisms that had a major impact on the public, lectures, and competitions. They achieved miraculous success—risen from the economic and political revolution—in the face of great social problems that they wanted to solve through art and "harmony."

Intoxicated by success, they had unlimited faith, which was the generative force behind their works.

Throughout this prodigious evolution, they aimed for enthusiasm, freshness, especially discipline, an admirable practicality, and an inspired opportunism: they demolished the ivory towers that had always separated artists from the masses in France. They were, as the occasion demanded, populists, socialists, imperialists, and at the same time speculative profligates. Administrative fortresses were subjugated and removed in one fell swoop. Princely courts, rivaling earlier Maecenases in self-regard, wanted to serve them and distributed funds, encouraging their initiatives. Now they labored for their Kaiser—the man in the pointed helmet; the Man of the Dome, the Reichstag, the Kaiser-Wilhelm I Monument, and the Victory Column. They ended by draping him in Pericles' toga—Pericles at the helm of a dreadnought!

* * * *

What first marked the new orientation of the "applied" arts in Germany, aside from Ruskinian reform, was the unexpected revelation of Japanese art. It is likely that the ground was favorable since the assimilation was radical. Echoes of Ruskinian crusades touched

France, Belgium, and England. France could neither understand nor support the efforts of a Grasset; Belgium surrendered to exaggeration (Van de Velde); and England found almost nothing new to contribute—its architecture remaining adequate to its manners. Vienna provided a sensitive soil, and its revolutionary trends reflected the arts of Japan. A superior sensibility such as that of Otto Wagner was revealed there. His two pupils, Olbrich and Hoffmann, went on to play major roles. Joseph Hoffmann imposed his undeniable personality, and became the soul of an unparalleled speculative enterprise—the "Wiener Werkstätte" [Vienna Workshops]—that brought Vienna attention unequaled to this day.

Olbrich, after having founded the "Vienna Secession," was called to Darmstadt by the Grand Duke of Hesse. There, he became the center of a colony of artist-artisans. They dazzled Germany by their Secessionist works, while superior talents who were tied to tradition both by their temperaments and their studies (Theodor Fischer in Munich and Messel in Berlin) provided a favorable counterweight to the extravagances of the Secessionists. Men who were devoted to the arts abandoned the brush, and concentrated their efforts on architecture. Paul Behrens, the Munich and Darmstadt painter, became director of the architecture section at Düsseldorf, then counselor to A. E. G., the colossal Berlin electrical company. Bruno Paul, caricaturist for *Simplicissimus*, was named director of the Berlin School of Architecture and the Decorative Arts. Painter Bernard Pankok became director of the Stuttgart School (for interior design and the decorative arts). And another painter, Wilhelm Debschitz, opened a new school of decorative arts and interior design.

Many regions within large countries such as Prussia, Bavaria, Würtemberg, and Saxony participated in the movement, thus dividing it and depriving it of the monolithic character that it took on in Vienna. Things were less colorful and more fragmented—the schools in Berlin, Dresden, Munich, and Stuttgart all were thoroughly different.

Among the European powers, Germany played an essentially active role in the domain of the applied arts. It is remembered for its eloquent exhibits at the expositions in Turin in 1902, St. Louis in 1903, Milan in 1906, and both Brussels and the Paris Autumn Salon in 1910. France brought nothing to such expositions. I regarded her as shamefully represented in Rome. It seems that, when it comes to expositions, France likes to make herself look ridiculous.

What are the factors that gave Germany its power? What are the cogwheels of that astonishing machinery? It would be interesting to know. This is what I've set myself the goal of seeing—what I'm trying to report as accurately as possible. What I saw in the twelve months of 1910–11 is so complex that I'd be hard-pressed to be succinct, and harder still to be clear and thus useful.

[pp. 17–70 omitted]

Final Considerations

Germany is organized: Chapter II, "Initiatives and German Creations," discusses a collective economic movement for the nation. The consequences will be (already are) a privileged situation for German industry in the midst of that of other nations. It also is its rehabilitation. The phrase "It's German" can no longer retain its dismissive signification.

But concerning art and the rest, it seems that the great innovation in the applied arts in Germany was above all the outpouring of the peoples' energies and of their organizational skill. The role of art was diminished. Art was the pretext, the means, and the springboard. It wasn't, it seems to me, the prime mover. The creative forces that were exalted for a time by the violent thrust of external contingencies seemed to become anemic at this point. Artistic talent, having suddenly acquired authoritative rights, sensed its pettiness in the midst of the immense spaces that the few previous years had given it to exploit. Uncertain, it looked about; it lost its insolent faith from the past; its Secessionist fury was extinguished and Germany, especially a year or two ago, turned again in a big way to the arts of France. The champions of that struggle seemed to wish to curb their personalities in a premature capitulation.

Wasn't a reverse phenomenon taking place in France? It is undeniable that enormous energies were consumed in suppressed efforts. The painful attempt perhaps resulted in putting down deeper roots. Did France, insulted by Germany, break free of its lethargy in the domain of the applied arts? Signs of a predictive nature appeared in the last two "Autumn Salons." Would the very first innovators, from forty years earlier, finally receive their just reward?

Some will find that I am making too much here of national rivalries; they are, in fact, ethnic. But they do exist in the two countries. As a Frenchman [actually French-speaking Swiss], I have suffered because of them in Germany. I was struck by this phenomenon in Paris, where they assert at the same time that the German invasion is exaggerated. Moreover, they are a precious stimulant for both nations.

A study such as this one facilitated by the Commission de l'Ecole d'Art should be done in still other areas: the marvelous Germany of the industrial arts deserves to be better known. At this time of international competition, information also should cross national frontiers. Germany is currently of interest. If Paris is the hearth for art, Germany remains the great production site. Experiments have been done there; effective struggles have taken place there; masonry has been raised; and the halls, with their storied walls, tell of the triumph of order and of tenacity.

Secularism, Islamism, Emblemata: The Visual Discourse of Progress in Turkey

Gökhan Ersan

Footnotes begin on page 80.

Introduction

The modern Near East is a region experiencing a painful confrontation between tradition and modernity.[1] Modernization projects which were launched during the early twentieth century to reconcile it with European modernity are argued to have failed. In many places, the projects to build secular nation-states have been overturned in favor of a revival of the glories of classical Islam. The Islamist militants, intellectuals, and politicians all argue that a return to the Islamic theocracy is the remedy for the ills of underdevelopment and the recovery of social order. To enforce their ideology, Islamists started a militant struggle against their own nationals some three decades ago, and having made advances at home, Islamist politics pose a serious threat to global peace today.[2] What unleashed the age-old notion of Islamic theocracy as a hope for Muslims in the twenty-first century? This essay penetrates the question by looking at the changes in the design of the emblem for the City of Ankara—now a loaded symbol of visual culture in Turkey.

Turkey is a pivotal country simply because reform started there by the abolishment of the Caliphate—the spiritual leadership post of Islam—in 1924. It is the only country with a Muslim majority where secularism is established as a constitutional principle, and where a secular culture has taken root. Turkey also is placed at the crossroads of Europe and Asia, seeking membership in the European Community. However, the country experiences an identity dilemma in matters concerning religion and secularism.

There is a body of visual evidence tied to political arguments which were staged during the declining days of the Ottoman theocratic monarchy over what would deliver the country from underdevelopment. These arguments of the eighteenth and nineteenth centuries continued into the twentieth and the twenty-first—the period of the modern Turkish Republic. The visual evidence has a long pedigree that begins in the eleventh century, when the previously shamanist Turkic tribes adopted Islam as their religion. There are sixteenth century banners of conquest inscribed with Koranic scriptures; eighteenth century courtly art influenced by European encounters; the cultural influence of nineteenth century Europe

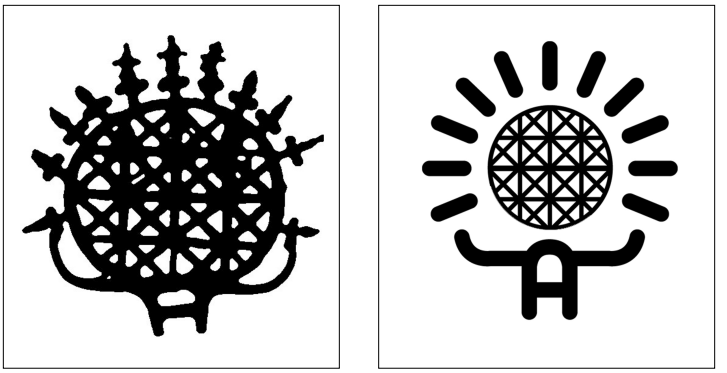


Figure 1
Modern Ankara's traditional symbol, the Hittite Sun (left), and a stylized version adopted as the municipal emblem in 1994.

infiltrating the empire's urban centers; Western social and cultural institutions implemented by military officials and state bureaucrats; as well as reactions against change, and the creation of an orthodoxy of an Ottoman-Islamic golden age. At the end of this rich line of evidence is a recent symbol in Turkey—the replacement of a secular symbol (Figure 1) by a religious one (Figure 2) in the nation's capital. Ankara's new emblem reflects Turkey's political division.

Two Models for Progress: Secularization or Islamic Revival

The precursor to the Turkish Republic, the Ottoman Empire, by the end of eighteenth century, had realized the dire need for change. In 1792, Sultan Selim III asked prominent scholars for their advice on the appropriate course of action to end the decline of the Empire.[3] Some argued for a return to the pure, orthodox Islam of the Prophet's age. Others suggested that the Empire stop resisting change, and seek inspiration in the forward-looking institutions of the West. Consequently, the Ottomans implemented reforms which included the abolishment of the fanatical Janissaries (1826) in favor of a modern organized army, followed by the Reform Edict of 1839 that obliged the Sultan to relinquish some of his powers. Finally, in 1876, a new constitution established a parliament which enabled the representation of non-Muslim subjects—whom Sheriat law did not recognize as equal. A reactionary Sultan (Abdulhamid) cancelled the parliament in 1878, reestablishing the Empire as an Islamic theocracy for the next thirty years. During Abdulhamid's reign, conservative intellectuals promoted a return to classical Islam as a way to save the Empire. The Islamist or Hamidian (after the Sultan's name) answer to progress could be summarized as "borrowing technology from the West, and preserving the tradition of Islam."[4] This became the cultural doctrine of the Islamists worldwide as their reaction to the challenge of European modernity in the nineteenth century.

Following the collapse of the Empire at the end of World War I, the civilian and military elite who followed the reformist thesis declared the Turkish secular nation state; and launched social and

Figure 2
The City of Ankara emblem, 1994.

judicial reforms unlike the partial reforms of the past. The Turkish "revolution" was aimed at the total transformation of the society.

Today, once again there is an intelligentsia that supports the first thesis, arguing for a re-Islamization of society and a return to Islamic theocracy—notwithstanding the millions of Muslims worldwide for whom the "Islamic solution" has gradually become popular during the last three decades.[5] Proponents of the new Islamism want to reverse the modernity project. In Turkey, the most visible act of reversal occurred in 1994, when the emblem of Ankara (Figure 1) was cancelled at the behest of an Islamist mayor in favor of an Islamist symbol: a blue badge featuring drawings of minarets, domes, a tower, and stars sprinkled in the night sky (Figure 2).

The emblem depicted recent landmarks of Ankara. *Kocatepe* Mosque, the *Atakule* Tower, and the *Begendik* Mall were conceived by cultural conservatives to change the symbolic character of the nation's capital. These landmarks created political controversy, and sparked fiery debates when they were implemented. They were imminently combined within the frame of the new Ankara emblem. Their juxtaposition created a corporate symbol that addressed Islamism's social, political, and economic dimensions.

There is much more nested in the emblem than the three Ankara landmarks. I will show how much history unfolds from its layers, and why the emblem takes on so much meaning.

Ankara as the Icon of the Secular Nation-State

The story starts with the establishment of Ankara as the icon of the secular nation-state, and the inauguration of the ancient sun-disk as the symbol of the nation's capital.

At the end of World War I, the Turkish reformers had emerged as the victors of an Independence War that they had instigated. Victory brought them popular support, and it granted them authority.[6] This postwar nation-building effort afforded the reformers the opportunity to sweep away every medieval institution of the state that the Ottoman Sultans had not dared to touch. Ankara, the nation's new capital, was at the center of this project. Almost as old as Istanbul, Ankara was the site of a Roman fortified town, which later was inherited by the Seljuks and the Ottomans. The Ottoman Ankara, like many other towns in the Anatolian mainland at the turn of the century, still clung to the old fortress.[7] As the new capital, Ankara was designed as a model for the rest of Turkey's developing urban centers. The 1932 plan envisioned an industrial hub and a cultural model[8] (Figure 3). The Turkish reformers acknowledged a cultural continuum that reached beyond the bounds of Islam. Unlike the Islamist view of history, the new view took the Islamic period as only one episode in the Turkish national history.[9] The reformers sponsored studies of ancient Anatolian civilizations—which were

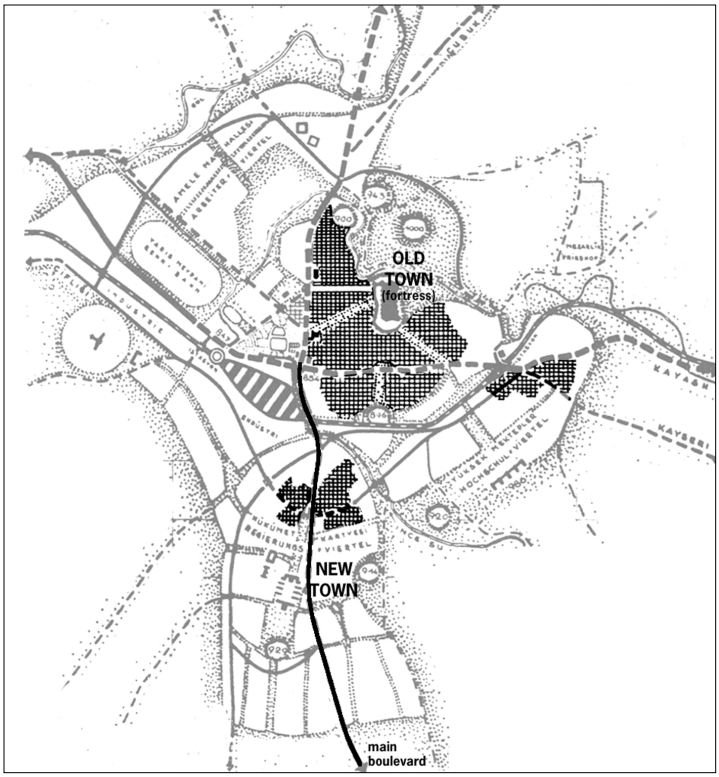


Figure 3
The Ankara plan. Herman Jansen.
Ankara Sehri Imar Plan, Ankara (1932).

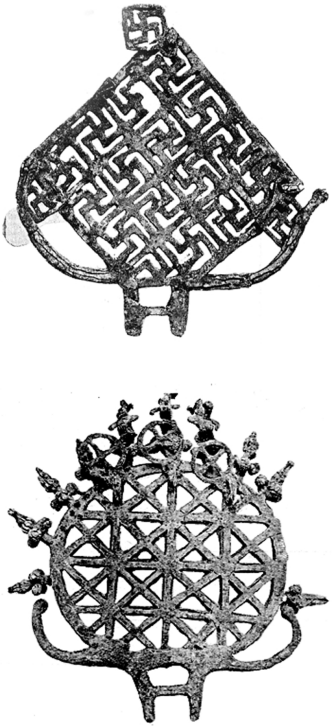


Figure 4
Two different Hatti sun-disks. From Arik, Remizi, Oguz. *Türk tarih Jurumu Tarafindan yapilan Alaca Höyük Hafriyati* Ankara: TTk Yayinlari (1937).

considered curiosities exclusive to the British and Austrian scholars during the Ottoman period. An ancient Anatolian artifact, the sun-disk of the Hatti, was chosen to symbolize modern Ankara (Figure 4). In time, this official emblem was embraced as a popular visual motif.

The republican sponsorship of a universalistic recognition of culture also set off culture wars between the vanguards of traditionalism and progressives who embraced Western ideals of liberal society and secular humanism. As we will see later, the Ankara emblem, since it was derived from a pre-Islamic culture, challenged the Islamist view that equated culture (*hars*) with Islam, and thus became increasingly intolerable by the emergent political Islamist movement from the late 1960s on.

Democracy for Theocracy? Cultural Conservatives Come Out of the Closet during the Cold War

By the end of WW II, the new Ankara had become a modern urban center. Turkey, criticized by the coalition for remaining neutral during the war, declared its alliance in 1944. The forward-looking, pro-Western Turkish Republic was included in the Marshall Plan for postwar development in 1947. The first democratic elections were held in 1950, and the founding Republican People's Party (RPP) voluntarily handed over power to the *Demokrat* Party after it was elected to office. The majority of voters, bitter about the WW II

Figure 5
"The Reality [revealed] on the 26th Anniversary of the Turkish Republic," (Diagram published in the Islamist *Buyuk Dogu* Magazine in 1949.)
The fundamentalists charted the Turkish rise and decline in history: Turkish power peaks in 1566 during the reign of the Ottoman Sultan Suleyman "The Magnificent," and then starts to decline. The Reform Edict of 1839—which many Islamists thought was a blow to Islam—marks the straight-down fall. The Turkish Republic, which was proclaimed in 1923, is considered to be the final link in the chain of events that perpetrated the Turkish fall.

economy and the increasingly inefficient single-party rule, yearned for change. Many progressives initially supported the *Demokrat* opposition.

For different reasons, the followers of the nineteenth century Islamist ideologies, too, had lent their support to the newly forming democratic opposition as early as 1946 (Figure 5). Egypt had its Sayyid Qutb, the scholar who is cited as the father of modern political Islam, and Turkey had Necip Fazil Kisakurek and Peyami Safa. These fundamentalist critics of the secular Turkish Republic envisioned democracy as a one-time transfer of power from the impious secular regime into the hands of the pious majority, for a return to theocracy. The nation's goal, which was articulated as "a struggle to reach the level of contemporary civilization," was redefined as "a march into a future that is rooted in the distant past." Islamism's most articulate ideologue was a poet named Mehmed Akif. He articulated his opposition to Westernization in these words: "A nation is a tree with roots in the past. Don't let the woodsmen cut the tree to cure the blight." [10] He argued for the restriction of reforms to technical matters: "There is no such social affinity between our society and that which we want to imitate [European]. But that is not the case as regards to matters of techniques, but such matters are transmitted by imitation." [11] In the view of the Akif's followers, U.S. financial aid was welcome as long as it supported a "pious"

development effort. They lent their support to the *Demokrats* expecting the party to reverse the Westernizing reforms before their reach penetrated into every corner of the country[12] (Figure 6).

In the 1950s, the *Demokrats*—supported by unprecedented sums of foreign aid—launched their "magnificent development" program. It was supposed to make the preceding Republican program pale in comparison. While the goal of the Republicans was set as a struggle to "catch up" with contemporary civilization, the *Demokrats* frequently pronounced their goal as a struggle to achieve "Turkey the Great." This term echoed "The Great Orient" motto of the cultural conservatives of the late 1940s, which signified a yearning for the greatness of the Ottoman-Islamic past.[13]

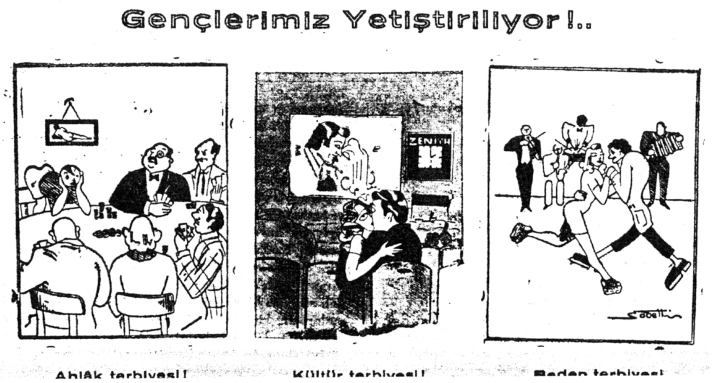
During their formative days in office, the *Demokrats* pursued a populist, conservative mobilization. "Enemies of religion" and "communist" labels served to marginalize the progressives. This policy benefited from Cold War anxieties. *Demokrats* also waged their cultural war by symbolic conquests.

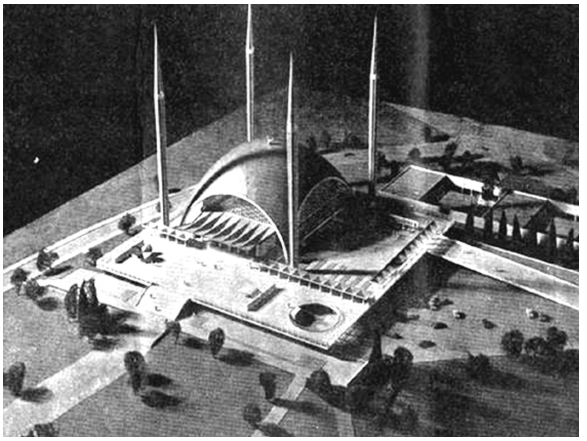
Imperial Symbol Becomes Islamist Icon: Ankara's Grand Mosque

In 1954, the City of Ankara, led by the DP, decided to construct a monumental mosque in the Republican People's Party's stronghold. Unlike Istanbul's skyline dominated by imperial minarets and domes—which also influenced Istanbul's emblem Ankara demonstrated the zeitgeist of the Republican period with its modernist architecture. The New Town was designed in the first place to encourage a secular public sphere, and bore few religious buildings.[14] Yet, the *Demokrats* set the objective of the project competition not as Islamization of Ankara's landscape, but as a challenge for Turkish architects to create "a modern interpretation of Islamic temples." [15] In 1957, Vedat Dalokay, who later would become the left-wing mayor of Ankara, won with a modernist design. However, the Dalokay mosque was not a completely new answer to the classic mosque form. Its point of departure was the Ottoman imperial mosque. The architect's stylistic choices sought to integrate the building with the New Town's modernist urban landscape. They also were responses to the progressive residents of the New Town, who were loyal supporters of the Westernizing reforms. Dalokay was proposing an unorthodox form for an unorthodox observance of religion. The foundation of the modernist Kocatepe Mosque was laid in 1963, and part of the complex was completed within a year.

Dalokay's design retains the traditional minarets, however renders them in a gothic, prismatic form. The traditional railings were removed in favor of an uninterrupted slender tower form. Eight slender columns converge to form a prismatic tip, eliminating the cone, the most distinctive feature of the classic, "pencil" minaret. The dome is remarkably unlike the sixteenth century classical shells, which were composed of central domes supported by smaller semi-

Figure 6
A comic strip published in the conservative *Gök-Böri* magazine (1942) under the headline: "The Education of Our Youth." Panels from left to right include: "Moral Education," "Cultural Education," and "Physical Education." The strip considers Westernization as the cause of moral decay in urban society.





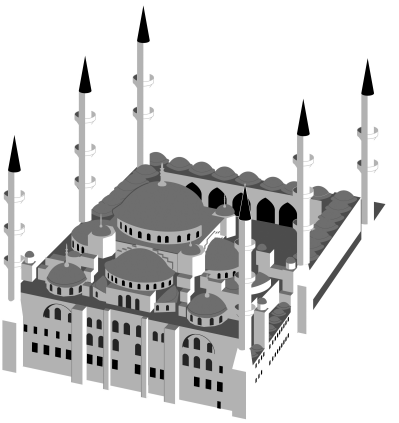


Figure 7
Kocatepe mosque model (left), from the brochure "T¨vrkiye Devrim Diyanet Sitesi," Ankara (1960); Blue Mosque, Istanbul (right).

domes. This is a single shell that covers the immense prayer hall. The result, still alluding to the classical Ottoman mosque is yet a distinctive aesthetic form (Figure 7).

By the end of the 1960s, the design which had appeased the conservatives of the 1950s was no longer satisfactory. These conservatives demanded nothing short of the unadulterated, traditional icon—the sixteenth century silhouette which would articulate the symbolic conquest of the Westernized New Town. The mosque which was in the process of being constructed was decreed irreligious; accused of being an imitation of a cheap dance club; likened to a barroom in Brussels.[16] In the mid-1960s, when a right-wing successor to the DP came to power, the Islamist right—then a marginal but a powerful section of the centrist right—started a rigorous campaign against the modernist mosque in construction.

Islamists mixed their argument with Turkish nationalism to gain larger support. One such "Turco-Islamist," Nihad Sami Banarli,[17] argued that the modernist design was a humiliation for the Turk who "never imagined to be defeated to the soil that he had conquered. He was the victor of the [Western] civilization he had entered into, not the prisoner of it." Banarli also denied cross-cultural interaction (the

Byzantine roots of the Ottoman mosque) and championed the purity of traditional culture: "When the Turks were in central Asia, they, due to a lack of materials were unable to create great architecture. Whenever the Turks raided in Anatolia and the Balkans they faced foreign architecture…immediately rejecting it. Instead the Turks embroidered into bricks and stones their very own tent domes, tent forms and tent decorations." Westernization was to blame for this cultural invasion/subversion of the Turks by the Turks: architects such as Dalokay grew up under a "discipline of denial" (modern art education) and thus suffered from the disease of awful imitation of Western art. To avoid this cultural subversion, the Turco-Islamists envisioned a return to the Ottoman-Islamic artistic exercise dictated by the medieval guild orders: the apprentice kissing the hands of every guildsmen present—a ritual that ensured the constancy in Ottoman style and taste.

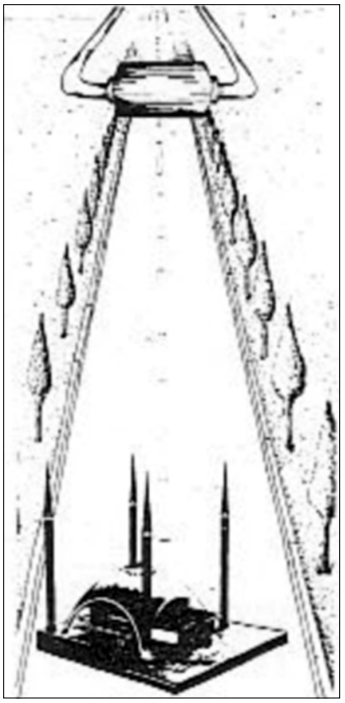


Figure 8
Cultural conservative view of the classic mosque design (c. 1976), from *Mimarlik Deryisi* 10 (1967), 7. This illustration, which supported an article, contrasts Dalokay's "modernist, machine-made, mass-produced prototype" with a "classic design" that was embroidered on the rocks of the nation by a worker who seemed to possess innate knowledge of the classic form. The Turco-Islamists' criticism had a peculiar Marxist tone.

In 1967, successors to the right-wing *Demokrats*, the Justice Party, took charge of the issue and helped the cancellation of the *Kocatepe* project.[18] This was done not on the grounds of the impiousness of the design, but on the grounds of the deficiency of building's structural engineering. In one of the most sensational events of Turkish political history, the partly-built mosque complex was torn down by dynamite.[19] Having destroyed this "wrong start," the Justice Party administration devised a new competition that, not surprisingly, awarded a sixteenth-century, classical design—the foundation for which was laid in 1967.[20] Referring to the *Kocatepe* controversy, Turco-Islamists defined Turkey's democratic struggle as a cultural war between a minor elite and the simple noble folk (Figure 8). Ironically, six years later, the modernist designer Dalokay was elected mayor of Ankara.

Islamizing Nationalism

Beginning in the late 1960s, the right-wing Justice Party attempted to marginalize Turkish progressives with the charge of "communism."[21] By 1971, Turkey's nationalist military—convinced of a revolutionary-communist threat—had taken sides with the right-wing nationalist movement, and the new state ideology was emerging as a blend of nationalism and Islamism: Turco-Islamism.

In response to the right-wing coalition/consolidation, there was a steady rise in the popularity of the Turkish left (Between 1969 and 1977, RPP votes in Istanbul rose from 33.8 to 58.3 percent; and in Ankara from 36 to 52.5 percent).[22] The left's ascent ended in 1980 when a military coup liquidized the founding RPP. The disenfranchised leftist, socialist, and workers' movements either went underground or were replaced by a state-promoted ideology of piousness or re-Islamization in all public spheres. The Iranian revolution also affected Turkey in the 1980s. Signaling the popular rise of Islam was a boom in Islamist publications, Koran schools, imam schools and, most important, the frantic activity of charitable-mosque building.

Upon the cleansing of the political landscape in 1983, a new centrist-right Motherland Party came to power. From 1983 to 1991, the Motherland Party implemented market liberalization and helped to popularize the marginal Islamists. The Motherland party launched a neo-liberalist "second" republican era. Prime Minister Turgut Ozal's contribution to the Turkish techno-traditionalist rhetoric was his motto: "We shall leap over the age," which circumnavigated the humbler Republican goal of "catching up" with contemporary civilization.

Neo-Liberalist Conquest by Design: The Atakule Tower in Ankara

As an architectural celebration of the neo-liberalist economy, the Atakule Tower and Shopping Center was erected in 1988 in Ankara's New Town republican neighborhood. Atakule was one of those ambitious urban building projects initiated by the emerging capitalists of the 1980s (Kuala Lumpur's *Petronas* towers by Islamist Mahathir is the most prominent example).[23] It also challenged its Western counterparts such as Seattle's Space Needle.

The Atakule tower was designed by an architect who was influenced by the cultural conservative ideas of the 1970s. Architect Ragip Buluc's neo-Islamic towers monumentalized the Seljuk and

Figure 9
Left: Atakule Tower, Ankara; right: *Space Needle,* Seattle.

Ottoman forms found mainly in tombs and madrasas. His radar towers for Istanbul's Bosphorus strait referenced the pencil minarets; a monumental tower proposed for an Ankara district monumentalized geometric interlace patterns found in the Ottoman tombs. The architect's body of influence surface in statements such as: "You'll certainly feel yourself in heaven in an Ottoman cemetery, you won't be afraid of death there."[24] Buluc also frequently criticized modern architecture employing an alienation of the individual theme. In his statements, he reiterated the loss of spirituality and the fall of the individual, while claiming to bring back the humanist element found in the almost divinely ordained ("unmeasurable" is his word) architecture of the Ottomans. These criticisms echoed Islamists including Akif, Kisakurek, and Safa in Turkey; Qutb in Egypt, and Mawdudi in Pakistan, who also voiced sharp responses to the calamities of the modern age, adopting an almost Western humanist tone.

Predictably, Atakule's design is a clear break from the republican architecture that had given form to Ankara's New Town—a cohesive urban fabric that was created during the 1930s and the 1940s[25] At the base of the tower is a mirror-glass structure that serves as the shopping center. A concrete hexagonal column rises from this glass base. The tower is a modification of the slender columns of Seattle's Space Needle, through the translation of curvilinear surfaces into polyhedral forms to attain a gothic, Seljukid character (Figure 9). The hexagonal column is terminated at the top by a dome that is composed of a polyhedral shell. Atakule draws people into the mirror glass mall at its base, which the architect claims derives from a Seljukid portal.

Atakule is not a man-made elevation placed on the Ankara plain, as one might expect, but is erected on top of an imposing hill which already overlooks the plain. It stands like a flagpole on the New Town's hill, which the cultural conservatives have long resented for symbolizing Turkey's progressive, left-wing republican heritage.[26] This architectural polemic is aptly titled as the "Ata[türk]tower," while expressing displeasure with that very architectural heritage.

In the final analysis, Atakule stands as a mixture of functional (generic mall space driven by materials) and symbolic elements (where sculptural possibilities are explored in reinforced concrete). The juxtaposition of new materials with Islamic tradition is no longer exclusive to Turkey. This new wave of architectural orthodoxy, which is sponsored by both public and private sectors across the Muslim world, is described as neo-Islamic architecture. As the neo-Islamic sendoff to Seattle's futuristic Space Needle, Atakule took Ankaralites on a trip to the time of the "Jetsons" and back to the thirteenth century, when Seljuk-Turks roamed Ankara steppes. However, an engineering error prevented the revolving deck and restaurant—the crucially important component and widely publicized promise of the design—from rotating.

Figure 10
Kocatepe Mosque, and Begendik Mall and parking lot.

Figure 11
Begendik Mall logo.

The Kocatepe Mosque Is Completed

The Turkish left's pacification by the military coup of 1980 gave the right-wing administration the political ground and the financial backing to complete the Turco-Islamist planned mosque in Ankara's New Town.[27] The foundation for this building was laid in 1967, and the lower part has opened as a temporary mosque. As mentioned earlier, the designer of the modernist mosque was elected mayor of Ankara in 1973. Even electoral power did not qualify Dalokay to once again implement his own design. Fearing attacks from the religious establishment, he found himself helping the builders. The Turco-Islamist plan was an assortment of sixteenth century Ottoman mosque features that combined the four semi-domed central plan of the Sehzade Mosque with Suleymaniye's facades and Selimiye's minarets.[28] The classic Ottoman forms, which owe their shapes to their brick tile support structure, were cast in reinforced concrete. Once again, in one Turco-Islamist ideologue's words: "A number of men in their right minds have rejected the former shape (Figure 7), which was the imitation of a cheap dance club, and have decided to give Ankara a mosque in the style of Süleymaniye-Sultanahmed. And Ankara needed such a mosque with national forms in order to become a Muslim-Turkish town."[29] The mosque opened in 1987 with a political demonstration of a ceremony. A further addition would make the mosque the emblem of the post-1980s marriage of Islamism and capitalism.

Kocatepe as Mosque-Mall

In 1993, a late-modern European-style shopping mall opened underneath the sixteenth century Ottoman-style mosque as the physical combination of mobilized Islam and capitalism (Figure 10). This juxtaposition echoed the glass mall and ancestral tower pastiche of Atakule. However, this final spectacle in the neo-liberal Islamist capital was not exclusively designed for the pious. The Islamist business could not afford this endeavor unless its customer base was extended to the secular society. The *Begendik* mall projected a modern face with its architecture and corporate identity to avoid intimidating secular customers. An identity of innocence was further articulated by the introduction of the pre-adolescent/pre-veiled girl motif in the promotional materials (Figure 11). Unlike the recently revived Islamic bazaars that offered products such as the ancient Islamic toothbrush (a short tree branch called *misvak*), this was a European-style mall that offered a wide range of items including sensuous lingerie and perfumery, but excluding alcohol.

Neo-liberal Islamist Icon: Ankara's Mosque-Mall Emblem and the Emergence of Political Islam

As mentioned earlier, for the Islamists, modern Ankara was not a success to be celebrated. Ankara was not a tabula rasa, but it was a formerly Muslim town desecrated by the modernizing regime.

Political Islam emerged in Egypt after Nasser's death in 1970. It spread out worldwide almost synchronically after the Iranian revolution, which coincided with the Mujaheddeen jihad in Afghanistan, and the Turkish and Pakistani right-wing coups. In Turkey, as elsewhere, certain visual codes signaled this rise: women's veils, a frantic mosque-building effort, amplified prayer calls, and young men sporting crescent-shaped beards. The disenfranchised activists from the 1970s, together with a growing number of rural migrants and a pious urban middle class propelled the rapid ascent of its popularity. By the mid-1990s, this popularity won the Turkish Islamist Party the municipal elections. However, the movement was in serious need of a collective memory. The Islamists found this memory in the Ottoman-Islamic conquest of Constantinople, the Islamization of a Christian city. The Islamist mayors in the 1990s evoked that memory and employed the rhetoric of reconquest—of places desecrated by the secular regime, where the impious now dwelt. The Islamists were successful in forging relationships with an urban, pious middle class, as well as the urban poor.

Throughout the 1980s and the 1990s, the country's politics had besieged the traditionally left-wing-voting Ankara. And 1994 marked the Islamists' municipal election victory. Ankara's mayor (Figure 12) acted like a Muslim commander who had entered a freshly conquered city. Ankara, the icon of the Turkish secular nation state, indeed had become a Westernized urban center with public spaces, modern public works, and inhabitants who had acquired civic codes over traditional ones. The Islamist mayor was determined to be a victor, not a "prisoner" of this urban culture. He set out to make his own mark on the City.

First, he ordered the removal of the modern public sculptures on the basis of their promiscuity. The mayor declared that he would "spit right in the eye of art like that."[30] He also removed the goat sculptures that publicized Ankara's famous produce, as well as the City's ancient heritage. The goats were removed for their secular presence and for their pre-Islamic connotations. Islamists denied associations with the pre-Islamic cultural history of Anatolia. Instead, they recognized a Persian-Arab-Seljuk-Ottoman-Islamic continuum.[31]

Finally, the City's symbol sun-disk got the mayor's attention. This symbol, the mayor argued within the framework of Islamic iconoclasm,[32] was a pagan idol that the impious Ankaralites worshiped.[33] The traces of the sun-disk were erased from the City to be replaced by an emblem which amalgamated neo-liberalist economy with Islamism: The *Kocatepe* Mosque that symbolized the political victory of Islamism, and the Atakule Tower that symbolized neo-liberalism (Figure 13).

This is not a classic emblem that combines several visual elements in their original form. It is a modern logo that blends these elements by simplifying the forms and finding complementary rela-

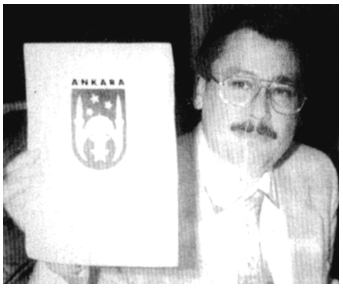


Figure 12
Ankara's Islamist mayor endorsing the emblem he decreed in 1994, from *Cumhiriyet* (daily), October 8,1996.

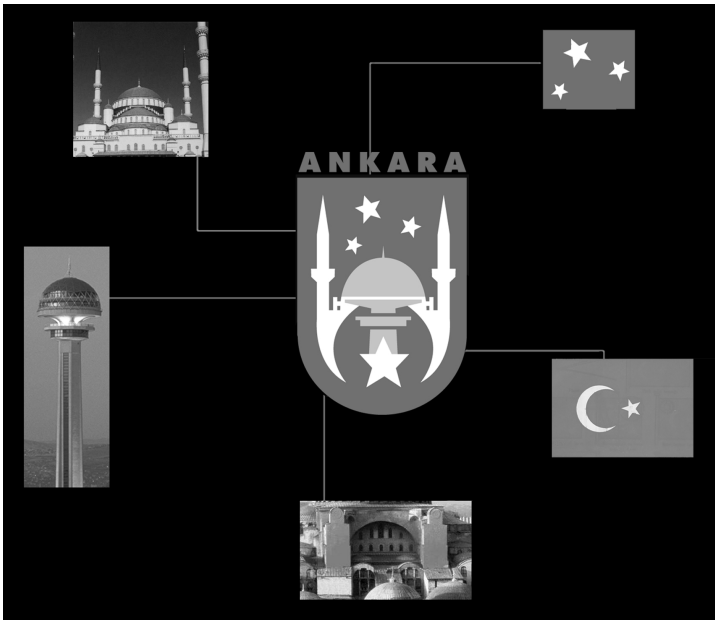


Figure 13
Ankara emblem and its references.

tionships between them. The minarets and the gothic base allude to the *Kocatepe*. And when they are complemented by the deck of the Atakule Tower, which here stands for a basilican dome, the result is a sixteenth century Ottoman mosque silhouette. Thus neo-liberalist *Atakule* is acknowledged to be sacrosanct by the Islamists. The crescent moon and the star motif on the base of the mosque allude to the Turkish national flag. However, the crescent which encloses the star subverts the nationalist symbol. The three other stars that are sprinkled above the mosque motif are clearly not elements of the national flag. These represent stars on a night sky given the dark-blue background. One can argue that, with this gesture, the night (which is a benevolent motif in the Arabian-Islamic vision of nature) replaces the day (which the Anatolian sun-disk celebrates). Furthermore, if the mosque silhouette on the emblem is *Kocatepe's*, then its minarets are reduced to two, and the three balconies on each minaret are reduced to one. The result is a plain, white mosque silhouette that reflects the neo-Islamist notion of modern: an abundance of white concrete. This silhouette could stand for any concrete replica of the classic Ottoman mosque in Turkey.

The sun-disk emblem was attacked by Islamist rhetoric as an idol that was worshiped. It had to be replaced by a proper cultural symbol. Ironically, the resulting icon that combined a sanctified shopping mall (Atakule Tower) with the mosque-mall (*Kocatepe*) raised the question of what the political Islamists worshiped the most. In the end, the Islamists have imagined Ankara in the form of Istanbul, the former Ottoman capital which was symbolized by its minarets (Figure 14).

Figure 14
From left to right: The former Ankara emblem, the new municipal emblem, and the Istanbul emblem.

Conclusion

Since 1950, the year when Turkey embarked on parliamentary democracy, an ambiguous economy prevailed in Turkish politics. At the level of state bureaucracy, the right-wing *Demokrats* of the 1950s projected Turkey as a modern member of the Western democratic world. Having also recognized demographic facts, they sought a conservative mobilization of Turkey's rural majority that would consolidate their government and which they calculated would sustain their hold in office—some argued—indefinitely. The Westernizing RPP was never recognized as a legitimate political opponent, but an anomaly which had to be purged from the nation's consciousness. But democracy was not recognized as a perpetual competition, but a one-time transfer of power.[34] Thus, in 1960, when the *Demokrats* refused to yield to the request for the renewal of elections, they were removed from office by an even higher power: the military. Their successors adopted this policy of conservative mobilization—a heritage which eventually would result in the collapse of the problematic Turkish centrist right-wing in favor of political Islam.

In the 1950s, Turkish *Demokrats* were preaching that social change was not necessary (knowing that certain reforms—such as the emancipation of women—were not as popular in rural Turkey as they were in the urban areas).[35] *Demokrats* were supported by the fundamentalists, who argued that the single-party impiety had ruined the country and that piety would bring prosperity. Therefore, the borrowings from the West should be screened, and made exclusive to a class of pious technicians.[36] While technology could be borrowed, the "culture" of technology should be rejected. The doctrine found expression in symbolic juxtapositions of the technological and the religious-traditional, in an election poster as early as 1957. A clean-shaven prime minister, dressed in Western attire—symbols which once were a matter for cultural debate[37]—was flanked by both smokestacks and minarets, each racing towards the

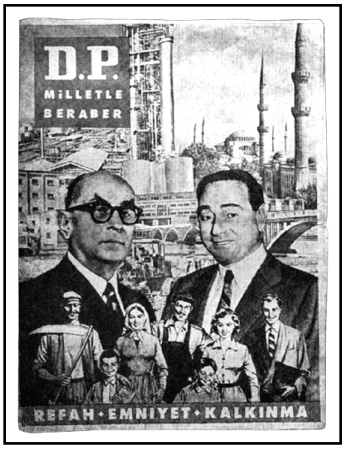


Figure 15
Demokrat Party election poster from 1957.

sky (Figure 15). The consequence of literal juxtapositions of tradition and technology were numerous failures of industrial development; rapid population growth; a massive rural exodus; and the emergence of an economy of land plunder as the only way to absorb that influx—in the face of civil unrest.[38]

As stated earlier, Islamization did not come naturally. It required a deliberate effort, partly sponsored by the hand of the very "secular" state. In the 1990s, the juxtaposition of the technological and the religious-traditional culminated in the political Islamist icon: Ankara's emblem that carried the mosque-mall and the sanctified observation deck. It was an icon that ridiculed property ownership, urban zoning, and rule of law; celebrated real estate speculation; and memorialized the marriage of cell phone consumerism and tribal tradition. These new paradigms were packed inside one blue badge, and were carried out with the discourse of "Islamic conquest" which, while the main resource of an imperial economy, now symbolized plunder legitimized under the protective banner of religion.[39]

1 Bernard Lewis, *The Emergence of Modern Turkey* (New York: Oxford University Press, 2002). This is the seminal study of Turkey's modernization effort.

2 Gilles Kepel, *Jihad: The Trail of Political Islam* (Cambridge, MA: The Belknap Press of Harvard University Press, 2002). Chapter 11 ("The Logic of Massacre in the Second Algerian War," 254–275) provides an account of Algerian Islamists' terror campaign which claimed 100,000 lives between 1992 and 2002. Chapter 12 ("The Threat of Terrorism in Egypt," 276–298) discusses the spread of Islamist violence in Egypt, which erupted in1992.

3 Bernard Lewis, *Istanbul and the Civilization of the Ottoman Empire* (Norman, OK: University of Oklahoma Press), 176.

4 Niyazi Berkes, *The Development of Secularism in Turkey* (London: Hurst & Company, 1964). This is the definitive survey of the two-century-long secularization process in Turkey. See also Emre Kongar, *Kuresel Teror ve Turkiye: Kuresellesme, Huntington, 11 Eylul* (Istanbul: Remzi Kitabevi, 2001) for a recent discussion of Turkish secularism.

5 Kepel, *Jihad: The Trail of Political Islam,* 62–65. The Arabs' defeat in the Nasser-led war against Israel in 1967 already has created a vacuum which was filled by Sayyid Qutb's Islamist philosophy. Nasser's death in 1970 put a definite end to the Arab nationalist cause.

6 Emre Kongar, *Kuresel Teror ve Turkiye: Kuresellesme, Huntington, 11 Eylul* (Istanbul: Remzi Kitabevi, 2001), 135–140. Kongar notes that, after Independence was won, Kemal Atatürk struggled with the majority of generals who supported the continuation of the theocracy. In order to proclaim the Republic, Atatürk cancelled the first parliament and founded a second parliament comprised of republican supporters.

7 Sevgi Akture, *19. Yuzyil Sonunda Anadolu Kenti Mekansal Yapi Cozumlemesi* (Ankara: ODTU Mimarlik Fakultesi Baski Atolyesi, 1978), especially Chapter 3 ("Spatial Structure in Anatolian Cities: Case Studies," 108–193), in which the urbanization of three Anatolian cities from the sixteenth through nineteenth centuries is analyzed.

8 Ilhan Tekeli, "Ankara'nin Baskentlik Kararinin Ulkesel Mekan Organizasyonu ve Toplumsal Yapiya Etki Bakimindan Genel Bir Degerlendirmesi" in *Tarih Icinde Ankara: Eylül 1981 Seminer Bildirileri,* Erdal Yavuz and Nevzat Ugurel, eds. (Ankara: ODTÜ, 1984), 321–338.

9 Berkes, *The Development of Secularism in Turkey,* 500–503.

10 Berkes, *The Development of Secularism in Turkey,* 343.

11 Ibid., 361.

12 Salahattin Gungor, "Secret Prostitution" in *Buyuk Dogu* 29 (Ilktesrin, 1949): 15. The article articulates Islamist resentment towards the recent visibility of Turkish women in the public sphere. A photograph of a couple sitting at a restaurant table is accompanied by this caption: "Turkish woman, at a bar corner, prone to hunt a customer. She is the victim of an understanding [which states that] even the path to prostitution can be considered as politeness and superiority—regarding they are learned from the Europeans."

Buyuk Dogu was poet/publisher Necip Fazil Kisakurek's personal quest to blatantly attack the RPP. The magazine was a pastiche of Islamist essays; cartoons lifted from old French and British illustrated magazines; and voyeuristic imagery lifted from lifestyle magazines of the day. It was ridiculed, but became a respected reference point for the contemporary Islamists.

13 From the 1950s on, this ideology was developed in the pages of *Buyuk Dogu,* a magazine founded by poet Necip Fazil as: "The Ideology of the Great Orient" (*Buyuk Dogu Ideolocyasi*). Necip Fazil, whose magazine was closed many times due to its fundamentalist content, finally ran his manifesto in *Buyuk Dogu,* (December 1965), titled as "The Only Path": No newspapers, no magazines, no novels, no theaters, no films, and no football games whatsoever are allowed until newer and better versions are set up as examples. Coffee shops, bars, casinos, brothels, and lazy-houses are banned forever. Everything revolves around prayer houses, schools, libraries, and suffering-houses. And every individual is liable for his duties inside a social order that (dictates) when to go to bed and when to get up.

14 Ali Cengizkan, "Cumhuriyet Donemi Kamusal Mekanlari Icin bir Calisma Ornegi" in *Ankara'nin Kamusal Yuzleri,* Guven Arif Sargin, ed. (Istanbul: Iletisim, 2002), 215–243. Cengizkan notes that Lörcher's 1925 plan envisioned industrial zones, Garden City-style neighborhoods, and public squares.

15 Quoted in Iltus, *Mimarlik Dergisi,* 69.

16 Cevad Ülger, *Ritmin Gücü ve Ritme Davet* (Istanbul: IBDA Yayinlari, 1985). This is a collection of essays on art and culture by an Islamist ideologue.

17 Nihad Sami Banarli, *Devlet ve Devlet Terbiyesi* (Istanbul: Kubbealti Nesriyati, 1985), especially the chapter on the Kocatepe Mosque ("Ankara Camii," 300–305).

18 Iltus, *Mimarlik Dergisi,* 69.

19 *Cumhuriyet* Daily, October 31, 1967: 1.

20 Hüsrev Tayla and Fatin Uluengin were the architects brought in as a result of a new project competition in 1967.

21 *Cumhuriyet* (February 3, 1967): 1. Reacting to the university protests of the late 1960s, the top Turkish general, Cemal Tural, declared the leftist movements as a major national security threat. The general stressed that the army would crack down on the leftist groups in the same way that it had acted on the corrupted politicians during the 1960 coup.

22 Michael N. Danielson and Rusen Keles, *The Politics of Rapid Urbanization: Government and Growth in Modern Turkey* (New York and London: Holmes & Meier, 1985), 110.

23 Gilles Kepel, *Jihad: The Trail of Political Islam,* Chapter 4 ("Islamism in Egypt, Malaysia, and Pakistan," 81–105) discusses the case of Anwar Sadat in Egypt, Mahathir in Malaysia, and Ziya Ulhaq in Pakistan. Turgut Özal poses as the Turkish counterpart of these leaders in his consolidation of Islamist capital.

24 Quoted in www.ragipbuluc.com.

25 Sibel Bozdogan and Resat Kasaba, *Modernism and Nation Building: Turkish Architectural Culture in the Early Republic* (Seattle and London: University of Washington Press, 2001). This is a post-structuralist reading of Turkish republican architecture. The book is rich in visual material documenting the early republican architecture. See also Lawrence Vale, *Architecture, Power, and National Architecture* (New Haven,CT and London: Yale University Press, 1992), especially Chapter 3 ("Ankara: A Capital Designed for Independence," 97–103).

26 Left-wing journalist Mümtaz Soysal protested the erection of Atakule, writing: "If there is no place to put a tower, a revolving tower will be constructed at the top of Botanic Park in Ankara. It is really a magnificent idea to disgrace the most beautiful part of Çankaya with a shopping site and putting a 150-meter-high tower over it." in *Milliyet* (December 31, 1985).

27 Jale Erzen and Aydan Balamir, "Kocatepe Mosque, Ankara" in *Architecture of the Contemporary Mosque,* Ismail Serageldin, ed. (London: Academy Editions, 1996), 109–111.

28 Dogan Kuban, "20. Yuzyilin Ikinci Yarisinda 16. Yuzyil Stilinde Cami Yapmayi Dusunenlere" in *Mimarlik Dergisi,* 1967, 7.

29 Banarli, *Devlet ve Devlet Terbiyesi,* 303.

30 Quoted in *Yenibir* (February 17, 2003). Also available at www.yenibir.com/bultenler/bulten/1,sayiid~199,00.asp. "In the Land of Fairies" was a public sculpture by the prominent Turkish sculptor Mehmet Aksoy, who argued that his work celebrated his cultural roots with portrayals of Anatolian mothers and the fertility goddess Imagery.

31 Bernard Lewis, *History: Remembered, Recovered, Invented* (New York: Touchstone/Simon & Schuster, 1975), 38–39.

32 Islam was established as a religion by the conquest of Mecca, a cult center. The prophet had destroyed the idols of Mecca in order to establish Islam as a monotheistic religion.

33 Gürsel Korat. "Ankara'nin Sembolu" (Ankara's Symbol) in *Radikal* (Section: 2, April 2, 2001). See also "Welfare Party Terrorizes the Capital" in *Cumhuriyet* (October 8, 1996).

34 The *Demokrat* Party passed laws in 1951 and 1954 to liquidate the opposition RPP's assets. By 1959, the opposition newspapers were either periodically closed by the government or their page runs were restricted. In April 1960, DP founded a special commission (*Tahkikat Komisyonu*) to investigate the actions of the opposition party and press. See *Cumhuriyet Ansiklopedisi* 1923–2000 (Istanbul: Yapi Kredi Yayinlari, 2002, vol. I2). Also see issues of *Akis* and *Kim*, weekly news magazines published in Istanbul during the 1950s.

35 Berkes, *The Development of Secularism in Turkey,* 473. The Turkish Civil Code, which passed in 1926, abolished polygamy and elevated the legal status of women. While women practiced their rights easily in the cities, certain women's rights remained only in theory in the isolated, patriarchal rural settings.

36 Berkes, *The Development of Secularism in Turkey,* 360. In the 1910s, the Islamists warned against the cultural dangers that awaited Turkish student abroad. They stated: "If we must send our youth to Europe, we should send them only after having taught them our own customs and morality …. We are Orientals, and we shall always remain so."

37 Berkes, *The Development of Secularism in Turkey,* 473–474. The wearing of the fez—which the Europeans used as an image to caricature the Turks—was banned by the so-called "Hat Law" in 1926. At the time, this forced change of headgear—which had strong religious signification—met with opposition.

38 For a brief account of modern Turkish economic history, see Iclal Dincer, "Ekonomik Politikalar ve Cografi Mekan: Türkiye Kentleri 1923–1980" in *International Symposium on Settlement and Housing in Anatolia Through the Ages, 5–7 June 1996, Papers Presented to the Symposium* (Ege Yayinlari, 1999). Comprehensive studies on the Turkish illegal settlements include Michael N. Danielson and Rusen Keles, *The Politics of Rapid Urbanization: Government and Growth in Modern Turkey* (New York and London: Holmes & Meier, 1985); Kemal Karpat, *The Gecekondu: Rural Migration and Urbanization* (Cambridge, Cambridge University Press, 1976), 64–65; Feral Eke, "Absorption of Low Income Groups in Ankara" in *Progress in Planning* 19 (1982): 1–88.

39 *Cumhuriyet* (October 11, 1996). In the mid-1990s, the real estate speculation reached a point where illegally occupied land was parceled and sold inside shops that opened under illegally built mosques. See also Bruce Lincoln, *Holy Terrors* (Chicago: University of Chicago Press, 1993), Chapter 5 ("Religious Conflict and the Post-colonial State," 62–76). Lincoln notes that, although religious communities still wage their conflicts around scarce resources, they seek to conceal this brute struggle with the elevated percepts of religious discourse. In Turkey, the rural migrants of the 1970s sought to wage their struggle for land under Marxist discourse. When Marxism failed disastrously, religious discourse was discovered to be a much stronger mean to legitimize land occupation, which found physical expression in the mosque-realtors of the 1990s.