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Beyond Beige: Interpretive Design for the post-Industrial Age

“Without myths every culture loses the healthy power of its creativity: only a horizon defined by myths completes and unifies a whole. Myth alone saves all the powers of the imagination and of Apollonian dream from their aimless wanderings. The images of the myth have to be the unnoticed omnipresent demonic guardians, under whose care the young soul grows to maturity and whose signs help the man to interpret his life and struggles.”

1) Friedrich Nietzsche, *Basic Writings of Nietzsche*, Ed. Walter Kaufmann (New York: Modern Library, 1965), 135.

2) Duke Ellington, Irving Mills, “It Don’t Mean a Thing if it Ain’t Got That Swing” (MCA, 1938).

Your money emerges from an automatic teller machine, your phone messages from an answering machine, and your junk mail from a computer. Compounding the experience of this inevitable and continual exposure to high technology is the homogeneity of its design. Your television, for example, can only be visually distinguished from your microwave oven by the room in which you keep it. With the ubiquity of high technology has come an arbitrary visual affinity among objects of disparate natures. Rather than expressing something unique, most designed objects refer to exigencies of manufacturing. In recent years we have chosen uniformity over expression in the man-made environment.

Ironically, this monotony has reached its banal crescendo just when microelectronics and new materials have finally liberated designers from the dictation of form by mechanical function. Most designers have ignored the potential of products to communicate something about our lives and our culture. While the failure of contemporary design to express is not the exclusive

fault of designers, only they have the power to defy this now-paradigmatic muteness. They are the only link in the production chain with the potential to arrest this erosion of signification. By recognizing the designed object as a sign, can we begin to create as well as package?

If so, we must acknowledge the complexity of our role as designers. Technology has become amorphous, giving designers

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an unprecedented freedom of expression as well as a greater responsibility as its interpreter. The production system is our medium and we are subject to its limitations. There is an enormous amount of territory still left to explore. It can represent our shared or individual visions. According to Adrian Forty, “Unlike the more or less ephemeral media, design has the capacity to cast myths into an enduring, solid, and tangible form so that

3) Adrian Forty, *Object of Design* (New York: Pantheon 1986), ~ seem to be reality itself.”³

How has the ethos of noncommunication and formal stasis saturated our mass-produced objects? Perhaps it is the residue of a well-intentioned but less and less possible quest for a universal design. Universality has turned out to be thorny in application:

one level of universal thinking lies in the methods we use to tackle design problems, the other in the audience we hope to reach with

the solution. The desire to communicate to a variety of users and accommodate a variety of environments is a worthy goal, but not if it abolishes all variety of expression in design. There is no single answer to a thousand questions, and pouring all products into the same mold jeopardizes their potential to express their individuality. By eschewing any design gesture deemed nonessential, the early Modernists initiated an attitude that would eventually devolve into an ipso facto aversion to narrative or expressive

design. What is left of this ideal, severed as it is from the power of its original conviction, is a unified but ideologically stunted vocabulary. The reduction of objects to an inferred universal language and the idea that there is only one way to articulate function with form are withered vestiges of the Modernist lust for utopia. Such a consolidation of reference is close to impossible and hardly desirable.

While acknowledging the dependency of all contemporary design on the universalistic tradition, it is crucial to recognize the profound change our culture has undergone as information has replaced industry, and how that affects the object environment. What was mechanical and therefore articulated is now digital and therefore uniform. This transition points to the need for a more communicative design.

If we look at the evidence of the visual forms used to shape

products since the inception of the profession of industrial design in the 1920s, two distinct are evident. One, which we approaches

call *universalism*, holds that the appropriate visual language for mass-produced objects is pure and predetermined. The formal vocabulary is limited to simple geometrically described lines, planes, and Euclidian solids. Rather than making references to individual, culture, place, or time, it infers timelessness and placelessness. The other approach, which we call *interpretive design*, is concerned with reference. Visual analogies, metaphors, and similes make connections between the object and the life and

culture that support its making.

Universal design seeks a language of product form compatible with any technology for any culture at any time. It valorizes the global nature of technology and strives to form components that work together in various combinations and environments. As applied to product form, universalism systematically avoids conflicting or irrelevant information.

To some early Modernists, the will to the “universal” and the reduced had a moral and political imperative – they were agents of truth and virtue, rectifying the delirious decadence of the fin de siècle *Ecole de Beaux Arts*. Their thinking and work was, in fact, revolutionary. Their legacy, on the other hand, is the diluted version of minimalism we encounter in so many contemporary design objects. More than a half century from the time of its inception, the visual language handed down from the “Less-is-More Corps” has devolved into a reductive design Calvinism with no recollection of its original impetus.

Some Bauhaus thinkers, particularly Mies van der Rohe and Marcel Breuer, sought to bring a universalist ideology to product design. In the name of function, they molded technology into a system of forms which, rather than reflecting what was *actually* happening technically, presented a classicized *ideal* of technology. While Mies’s Barcelona chair presented the new technology of stainless steel, it was laboriously hand finished as a highly crafted luxury object. The objects merely *depicted* function. But the depiction of function is an image and therefore a metaphor of sorts. At best, industrial materials in pure forms represented the *pro mise* of technology. As well as reduction to the unadorned and the essential, the Bauhaus involved the potential of products to carry significance as signs. Jean Baudrillard sees this potential of products to carry meaning as the key to the role of the object as both commodity and sign: “The object – that which the commodity was for Marx – is no longer today properly either

commodity or sign, but indissolubly both, and both only in the sense that they are abolished as specific determinations, but not as form. Rather, this object is perhaps quite simply the object, the object form, on which use value, exchange value, and sign value converge in a complex mode that describes the most general form of political economy.”⁵

The universalist language of Mies and Breuer found its way into

the visual language of the Ulm Hochschule fur Gestaltung in the 1950s and 1960s. But Ulm was more interested in understanding and rationalizing the new world of technological objects and systems. What it proposed was a substantial freezing of the object itself, a neutralization of its expressive values inside a formal code of great purity and precision that, would block its visual intru-

4) Through experiential work with projects from the graduate studios here at Cranbrook Academy of Art we are formulating an alternative design approach to the sign value and potential of the mass-produced object to reflect myth.

5) Jean Baudrillard, *For a Critique of the Political Economy of the Sign* (St. Louis: Telos Press, 1981), 65.

6) Andrea Branzi, “Outside the Mythical Olympus,” *MODO* Vol. II, no. 102

siveness and mitigate its mechanical arrogance.

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These ideas came into practice within multinational corporations in the early 1960s when the need for a systematic, corporate language of product form coalesced with industrial designers' desire to show, through the form of their products, a consistent professionalism in their response to client problems. Turning away from the exuberance, and what they deemed frivolity, of the postwar years, designers concentrated on ergonomics, business strategies, and the development of an approved, universal industrial language. Emblematic of this period, Elliot Noyes, design consultant to IBM, oversaw the development of a corporate product design style based on minimalism. The resulting language pulled together a vast group of products into a coherent line, insuring that each new addition was compatible with the rest.

Universalism also became an attractive way to tame the profusion of products crowding the domestic environment. Companies like Braun created families of small domestic appliances, sanitized of cultural references, which could reside together tastefully in the home. Discerning consumers embraced these minimalist appliances as an intelligent alternative to the mass of badly designed products available. Universalism, still vital, was welcomed as the style of choice by the world's tastemakers. By the late 1970s, however, this style was unquestioningly applied to all design problems, regardless of their demands.

The opportunity missed was the vast potential of the object to communicate about its maker, its context, and its role as the carrier of myths. In addition to its purpose as a tool, convenience, or formal statement, every object precipitates meaning. The concerted communication of cultural and personal signification through design is not new, yet it has rarely been isolated as a singular goal. We are suggesting that form can emerge from much more than reduction.

Objects informed by semantics have tended toward making visual connections between the technological object and other aspects of life through metaphor, analogy, simile, and allegory in their form. Because this approach is not so much a movement as a series of individual events, it is difficult to describe. However, the common characteristic of these objects is their attempt to make visual connections between themselves and their culture, nature, context, use, and maker. Mainly, the designers have not begun with a preconceived formal approach.

Throughout history we have endeavored to link meaning with form in functional objects. Interpretive design is linked to a genealogy including Ledoux and Le Corbusier. These visionaries share a commitment to *architecture parlante*, which Emil Kaufmann defines as "the wish to make the building (or design) speak, to

7) Emil Kaufmann, *Architecture in the Age of Reason: Baroque and Post-Baroque in England, Italy and France* (New York: Dover, 1955), 165.

make it express its meaning."⁷

Design as an entity distinct from art, craft, and architecture has

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existed since the Industrial Revolution. Relative to architecture, it is in its infancy. Although vastly different in scale and purpose, the history of architecture is useful as a storehouse of "solved" problems of form, function, and meaning. From this vantage point, we can go back through this history and uncover the philosophical roots of the emanated product.

Fig. 1) House for the surveyor of the River Loue by Claude-Nicholas Ledoux.

Claude-Nicholas Ledoux (1736-1806), in particular, used explicitly figurative allegorical language to reveal the significance of his buildings for the Salt Works at Arc-Et-Senans (1775-1779). The symbolization of each building was to emerge from life itself and from its context, not as a formal style whose elements might

8) Alberto Perez-Gonzalez, *Architecture and the Crisis of Modern Science* (Boston: MIT Press, 1983), 155.

possess unequivocal and aphoristic meanings. The city itself is an oval "meant to imitate the orbit of the sun, the supreme source of

9) Kenneth Frampton, *Modern Architecture: A Critical History* (London: Thames and Hudson, 1980), ~

light."⁹ Ledoux's house for the surveyor of the River Loue is a monumental cylinder through whose center the river flows. For Kaufmann this metaphorical structure is a quintessential example of *architecture parlante*: "Many architects have met this requirement simply by affixing easily understandable symbols to their

iC) Kaufmann, *Architecture in the Age of Reason*, 165.

ii) Frampton, *Modern Architecture*, 16.

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12) Perea, *Architecture and the Crisis of Modern Science*, 55.

structures, the caduceus of Aesculapius to medical buildings, the Orphic lyre to theaters. Ledoux, however, wanted to give the structure such form that it would tell its story by itself. The Surveyor's House is a grandiose symbolization of nature made serviceable to man. The House for Woodcutter is fashioned after a pyramid of stacked wood and the Oikema or House of Prostitution, "dedicated to libertinage, whose purpose was to introduce virtue through sexual satiety," isomorphically refers to a penis. Ledoux saw these conceits as more than pictograms or visual puns, but as explicit metaphors to help the structures depict their social significance, and therein "speak." Alberto Perez-Gomez feels that this "obsession to give visible form to all human activities through institutions that embodied their meanings is highly significant." He calls special attention to Ledoux's juxtapositions: "for example, a palace of Concord, devoted to solving family problems, a Temple of Love, where man could satisfy his sensual appetites [which] betray a genuine need to

legitimate human life, life that is being increasingly deprived of religious meaning while remaining within the context of a traditional cosmology."

Ledoux was a pioneer in the interpretation of meaning through form. He attempted to meld form and the explanation of purpose - to demonstrate the essential meaning of a structure through its form. In this way, he serves as an early ideologue of narrative design. Kaufmann's distinction between "easily understandable symbols" and a form that tells a story through symbolic language underscores the difference between products formed through styling and those formed through interpretation.

In the period from the early 1800s to the 1900s, many independent inventors produced artifacts that touch our senses and emotions more than the taut neutral forms of Modernism. Engineers and inventors had one foot in the traditions of wood and metal craft and the other in the technologies of the future. The industrial objects predating the Bauhaus employed an extraordinarily rich and unfettered design language. We see structures for large machines reminiscent of organic forms or architecture, inventive combinations of materials, and eccentric compositions that defy rationalization as the most efficient solution to the problem. There is a concern in much of this work for the richness of materials and imagery. The cast iron stove is a typical object from this period, employing imagery from the realms of furniture, animals, plants, and the typology of the hearth. The presence and character of the cast iron stove centered the room, adding an important dimension to domestic existence. Technology was not isolated from life but connected into it through an accessible visual language. Far from self-conscious, this work expressed a natural and intuitive delight with technology.

Following the entrepreneurial and sometimes chaotic design activity around the turn of the century, the twenties spawned more analytical theories of design. While much of the work of the Bauhaus was minimalist in form and tended not to employ metaphor, designers working elsewhere began making technological objects referring to life around them. In 1927 Le Corbusier and Charlotte Perriand produced a remarkable series of furniture pieces demonstrating that objects could contain formal clues to their nature and their place in the culture.

One of the most interesting pieces is Le Corbusier's Chaise Longue, designed with Pierre Jeanneret and Charlotte Perriand in 1927; it embodies many of Le Corbusier's ideas about technology's relationship with humans. He saw technology as prosthesis, or extension of our bodies and senses. In the chaise we see the cushion as a reclining figure supported by steel arcs which diagram its rotation to different positions. The arcs rest on a heavy,

Fig. 2) Chaise Longue by Le Corbusier, Charlotte Perriand, and Pierre Jeanneret.

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zoomorphic base. Each of these elements is clearly articulated to

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underline their separate but interrelated functions within the overall matrix of the piece. Le Corbusier thus introduces the idea of reading the meaning of a technological artifact by presenting a narrative of technology as support, prosthesis, servant, and beast of burden.

The Grand Comfort (1927) also demonstrates Le Corbusier's interest in articulating the separate function of each part of a design. Compositional contrast clarifies the different nature of each of the chair's parts. Thin steel tubing fences in the thick, soft cushions, which contact the body in a gesture of support and containment. He distinguishes inside from outside, structural from nonstructural, technological from biomorphic. By using and revealing such thin tubing, he celebrates the radical characteristics of a new technology.

Life forms are another source of inspiration for product form. The Mirella sewing machine by Marcello Nizzoli for Necchi (1956) is one of the most masterful examples of anthropomorphism in product design in this century. The human form in repose appropriately animates a machine that makes clothing. Functionally, curvilinear surfaces are ideal for a machine over which fabric must flow without snagging. The die-cast housing reduces the number of separate parts, thereby maintaining the smoothness of the figure. The metaphor here helps to simplify the production of this machine as well as comment on the context and character of the activity performed.

Fig. 3) Mirella sewing machine by Marcello Nizzoli.

Concurrently with the design systems movement in the United States in the 1960s, product designers in Italy were beginning to experiment with a more conscious use of metaphor and analogy to interpret technology. Mario Bellini, in his work for Olivetti and Yamaha, used architectural, zoomorphic, and anthropomorphic metaphors to make connections between object and the outside world. His Divisumma calculator for Olivetti (1972), with a continuous rubber membrane stretched over its keys, makes the analogy to skin over the product's technological bones.

With the exception of designers like Bellini, by the late 1970s design had become a quest for the simplest and most efficient package for technology without concern for the special nature of each product. Designers in the United States were beginning to question whether the limited formal language the profession had defined for itself the previous decade was adequate to the task of interpreting technology for the user.

As technology was becoming less tangible and more bereft of the mythology so vividly expressed in early industrial objects and in the rare interpretive product, it became important to counterbalance that tendency with design that engaged the senses and the mind. There was an increasing need for design that acted as a touchstone, providing meaning and connections between the

Fig. 4) Divisumma calculator by Mario Bellini.

invisible processes of technology and one's daily life.

Architects traditionally have considered the urban context, for example, when building on a historic block, but industrial designers have traditionally designed products that do nothing to acknowledge their surroundings. The following three examples demonstrate a way of thinking about context for technological products.

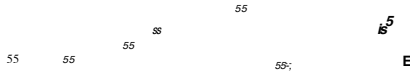
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**Fig. 5) Book Computer by David**

Gresham,

Personal computers normally reside on a desk or tabletop surrounded by books, instruction manuals, and piles of paper. Rather than eliminating paper, the computer revolution has increased the amount of manuals and printouts we deal with. The Book Computer by David Gresham acknowledges its probable context of stacks of books by its depiction of each module of the system (power supply, mother board, modem, disk drive, extra memory, etc.) as a book-like slab which plugs into neighboring modules. Like books of different character, each circuit board is a different shape and size. By reflecting the natural variation of each board in its outer case, the design draws an analogy between adding books to your library and knowledge to your computer.



**Fig. 6) Picture Phone**  
by Paul Montgomery.

Often a new technology can be better understood by domesticating it. The picture or window frame is the metaphor that drives the Picture Phone video telephone by Paul Montgomery. This reference is particularly appropriate for a product that presents a picture of yourself to others - a window on the world. It also reconciles the product to its context, the framed photograph propped up on a desktop. Compositionally, the frame organizes handset, speaker, and camera lens. The elements around the frame contain fragments of a face, reminding us of portraiture, without need for a completed image. The receiver is articulated with an abstracted ear while the lens of

the camera becomes an eye with a closing "eyelid." The image of desktop picture frame is reinforced with images of portraiture to locate the product contextually and as a depiction of one's self to the outside world.

Fig. 7) Phonebook by **Usa Krohn**  
with **Tucker Viencaster**.

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Taking cues from the product's context can be particularly effective if the analogies or metaphors invoked support clarity and enjoyment of operation. The Phonebook answering machine by Lisa Krohn with Tucker Viencaster uses its reference to a personal agenda as both an icon of recognition and a guide to the product's operation. The pages are electronic switches that turn to access the machine's four modes. The contextual metaphor lets it coexist comfortably on a desktop with personal books and papers. In addition to integrating the product in daily routine, the metaphor organizes and aids in its operation. By contrast to the ambiguity and complexity of answering machines requiring an operating manual close at hand, this machine is its own manual. It is self-instructional: when one turns to the page for making outgoing messages, that page automatically primes the machine to the mode for recording an outgoing message. Each page is, in effect, an electronic mode switch. The casting of personal electronic device into the mold of personal agenda is an attempt to make a product reach out to its users by informing them about how it operates, where it resides, and how it fits into their lives.

Another important source for product form is the significance of the object in everyday life. People tend to place greater importance on some daily routines than others. Products performing necessary but nonritual functions can be neutral background objects of little distinction. Objects performing functions of personal ritual significance should be more expressive. The toaster by Van Hong Tsai celebrates the everyday act of making toast. Its axial symmetry suggests ceremony, while the bread-shaped toasting chambers, their aluminum fins evoking waves of heat, encapsulate the process of toasting. The controls are clearly shaped to accommodate bleary-eyed early

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orning use. Recalling motorcycle engine cooling fins, the die-

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aluminum signifies not only heat but also precision in delivering consistently perfect toast. Symmetry, reference, and

material collaborate to present an expressive and receptive object Fig. 8) Toaster by **Van Hong Tsai**. that supports and colors

the morning routine.

In dealing with new technologies, designers can help to locate their place in contemporary lives by recalling earlier objects that performed similar functions. We can mine the history of product design for images that give meaning to new machines as they enter the environment. The Microwave Lunch Pail by Paul Montgomery symbolizes a dual shift in work patterns. It alludes to lunch pails traditionally carried by factory workers, but signals its new role as a lunch carrier for white collar workers by revealing, from certain angles, the microwave components within. A modern lunch pail is therefore depicted in the form of an archetypal lunch pail to

underscore the poignancy of the shift in the nature of work from by **Paul Montgomery**, an industrial to a post-industrial

Fig. 9) **Microwave Lunch Pail**  
culture.

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Fig. 10) Disc camera by David Gresham with Martin Thaler.

Another direction in interpretive design is inspired by the Le Corbusian idea that technology is an extension of the individual. The video disc camera by David Gresham with Martin Thaler combines a representation of process with the anthropomorphic image of the user. The composite captures the ability of the video camera to expand our vision, hearing, and memory. A half mask wrapping around the side of the face signifies persona, while the disc shape (also the handle) marks the location of the memory where sights and sounds are stored. A grid, symbolizing the PC board within, compositionally and structurally connects the elements with the lens. The camera expounds on the notion of the object/tool as an expansion of our potential to see and remember. These projects are part of an ongoing exploration into the possibilities and potential for product form to express the profound relationship of our mass-produced objects to ourselves and our culture. While the need continues for understated, efficiently packaged objects and systems that perform quietly in the background, there is another need becoming more urgent as technology proliferates: a craving for what Nietzsche calls myth, what Heidegger calls the “setting up” of worlds<sup>3</sup> Perhaps it is the

13) Allan McGill, *Prophets of Ecstasy*, (Berkeley: University of California Press, 1985), 162.

To satisfy need, language design desire for humanity. this the of must expand to fulfill our desire to understand and intuit our artificial environment. The designer must come to terms with his or her role as interpreter in a time when we are increasingly anxious for meaning, yet increasingly aware of its subjectivity. How can this longing inform the next generation in the evolution of product design? Are there other aspects of semantics still worth exploring? Certainly we can go beyond context, process, memory of the object, and daily routine to sculpt products that express the uniqueness of their role and the vision of

their maker. But it is crucial that this work not indulge in purely personal expression or facile excess. We are not looking for a new style or vocabulary for its own sake. Of greater significance would be the harnessing of our potential to reveal the feeling a product can give us, its subliminal character, or the myths to which it can allude.

The universalist utopia envisioned by the Modernists sought to channel meaning into a rational world of hushed neutrality; the eclectic vitality of postmodernism filled that modernist void with a knowing *pastiche* of historical imagery. Both systems are ultimately confined to *fixed* meaning. This could never allow for a truly vital or sublime expression. Jean-François Lyotard explains that the sublime “is not simple gratification, but the gratification of effort. It is impossible to represent the absolute, which is ungratifying, but one knows that one has to, that the faculty of feeling or imagining is called upon to make the perceptible represent the ineffable.”~

14) Jean-François Lyotard, ‘Presenting the Unpresentable: The Sublime,’ *Forum* Vol. 20, no. 64 (April 1982): 32–38.

Technology is here to stay. To mask it by casting it into forms

referring to the preindustrial era would be retrogressive and sentimental. Objects must relate to meaning in a more supple way,



permitting more than one interpretation. In addition to the temporal nature of a product, we should seek to capture its mystery and spirit. To do so would assist the birth of an alternative to both universalism and reference whose expression is responsive and perpetually evolving.

How does mystery relate to the progress of product semantics? Products make myths tangible, either by reflecting a shared mythology or an individual vision. Our cherished objects have a presence we intuitively understand to contain sublayers, although the precise or full meaning may not be accessible. It is the realm of the sublime, the implied, the poetic. It refers, but to an inner not an outer context. That its depths may never be plumbed is critical to its power and magic. It is the mastered interaction between the poetic and the scientific, the knowable and the unknowable, the mystical and the mathematical that sustains us.