

WHAT IS DESIGN?

Hearing the Outcry

What is “design”? This is the fundamental question for my profession, and I spend my days as a designer trying to find the answer somehow. We’ve entered the 21st century, the entire world is engulfed in a vortex of great transformation, accelerated by technological progress, and our sense of values concerning both the making of things and communication is in flux. When technology changes the structure of our world, the aesthetic values that have accumulated in our environment are often victimized. The world, armed with economy and technology, pushes ahead, but the long-nurtured aesthetic of our daily life, overpowered by the intensity of the transformation, lets out a continual scream. In a situation like this, might it be more important to listen to the cries and face the delicate values that are about to be dissipated in the whirling change, than to look for the next big thing on the horizon? Lately I can’t help feeling this way, and the thought grows stronger daily.

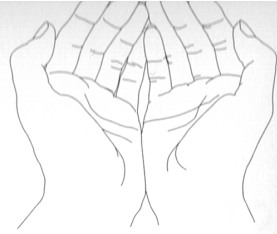
Constantly pushing the era forward isn’t always progress. We stand between the future and the past. I wonder if we could discover a key to our creativity not in that far-off target at which all of society stares so intently, but rather in the extension of a vision that looks right through society from the past. The future lies ahead of us, but behind us there is also a great accumulation of history—a resource for imagination and creativity. I think we call “creative” that dynamism of intellectual conception that flows back and forth between the future and the past.

Now design is not based solely on Western thought. Because the Industrial Revolution occurred in England, people of non-Western societies have long thought they had to learn the standards of modern civilization from the West. But both the effete civilizations of the day and struggles among civilizations were caused by the global spread of the values of Western modernity. Both human wisdom and design are found in the bosom of individual cultures around the world. We have to become aware of the wisdom and insight that is being threatened with extinction, soon to be swallowed up by the torrent of globalism. We have learned myriad things from modern thought in the West. We give this truth its due respect and each unique culture digests the fruit of Western modern thought, but still, the world has begun to move towards new design wisdom.

Design is the energetic acknowledgement of our own living world through the making of things and through communication. Outstanding perceptions and discoveries should make us happy and proud as living human beings. New things are not born of nothingness, and they are not taken from without, but from our attempts to boldly awaken our everyday existences, which seem ordinary and mundane. Design is the provocation of the senses and a way of making us discern the world afresh. Some of the design projects I’ve introduced in this book are my attempts to access this sort of speculation in my own way.

If I talk about my own experiences, it’s not going to turn into any beautiful story of design theory. Still, verbalizing design is one thing a designer does.

So far, I’ve told you several design stories, but I’d like to take a brief moment to review the period from the origin of the concept of design through today, in terms of various epochs. This is because I want to confirm one more perspective within the tide of history, one that looks out on both design and my own life. Of course, I don’t intend to trace history precisely, but to summon my courage to create a rough portrait, like a croquis.



Two Origins

Design began at the very moment man started to use tools. When was that moment?

In the film, “2001: A Space Odyssey” (1968), there’s a famous scene of that very spectacle. Two groups of anthropoids are fighting one another. One of the anthropoids finds a cylindrical object like an animal bone and picks it up. Using it as a weapon would give his group the advantage. The group with the power of the blow ousts the other. But the club is thrown up into the air and, rotating slowly, turns fluidly into a huge spaceship.

It’s thought that tools originated when anthropoids started walking erect, picked up stick-like objects, and hit things with them or used them as weapons. From the instant they took the sticks in their hands, they started changing the world around them through intelligence; the working of their intellect began with the construction of their own environment, and that led to the spaceship. One particular scene in the film symbolically illustrates this evolution with dazzling imagination.

If design is the transforming of the world based on understanding, which forms our environment, the beginning of human wisdom may have been the beginning of design.

By the way, was the club the only resource for tools? To me it seems there was one more. When our ancestors began to walk erect, for the first time both of their hands were free. Putting these free hands together would make a vessel. I wonder if our ancestors drank water from the vessel of their lightly folded palms. I bet they did. Just as we ladle water with our hands from a mountain stream, so did they. When the palms are lightly folded together, the space within is so small that a butterfly can barely flap its wings. Here, in this empty vessel, ready to hold something, is the origin of one more tool, a vessel.

A stick and a vessel—just as life itself has both female and male, so do tools. Didn’t our ancestors first obtain these two kinds of tools at about the same time? Imagine the beginning of design right there. What meaning is

there in this vanishing point of these two images, where they nearly converge in our distant past? I can’t clearly express it in words. However, if we place the wellspring of design there, on this vanishing point, our imagination concerning design will become dramatically more flexible. In particular, I believe that by concentrating on the original form of a vessel, which functions precisely because it holds “emptiness” or nothingness within, we may be able to come up with a new critical discernment towards civilizations that have stressed the club and processed the environment to excess.

The club amplifies physical strength and has evolved into a tool that can process and change the world. A sharpened stone axe developed into tools or weapons for hunting animals: the sword, the spear, the bow and arrow. At the same time, it evolved into the plow and the hoe to cultivate the land; an oar to propel boats; a propeller to paddle the air and processing tools such as the saw, the hammer and the knife. In the dazzling, brilliant history of human beings, the axe has evolved slowly and steadily. After the invention of motive energy, it developed into an enormous power. Power shovels, cranes, tanks and missiles that actualized an even more mammoth increase in power have swollen to such a scale as to metamorphose the nurturing environment of our very existence. And it is not only large-scale things, but also infinitesimal things and microengineering aimed at nanotechnology that are extensions of the club as a means of extending our physical functions.

Of course the vessel developed into various kinds of containers, but it also evolved into all kinds of tools, like clothing and shelter, that hold emptiness within and also hold or preserve things. Likewise, languages, which act as a tool for emotions and speculation; letters and characters, which preserve languages; or books, which house letters and characters. All these are vessels too. Extending from the vessel are also receptacles of intellect, such as the hard drive, which archives all data, including sound and image.

Mankind has constructed civilization by considering the operations of acceptance and preservation as antithetical to those of manufacture and change. Within their evolution, club-descended tools and vessel-descended

tools have sometimes united, giving birth to innovative tools like the spaceship and computer, which are neither sticks nor vessels, but comprise both; they are both stick-like vessels and vessel-like sticks. With these innovative tools, what kind of wisdom will mankind cultivate now? The present is the first step in this new situation.

Decoration and Power

Is design decoration? The concept of modernism is to speculate on the shapes and colors of objects with a rational mind, eliminating all patterned decoration, or “frills.” But in terms of human history, mankind’s grasp of the concept of simplicity is comparatively recent. In fact, with no fear of misunderstanding, I can say that throughout most of mankind’s long history, design has been a metaphor for affluence and the decoration that celebrates the traces of the man-made.

For instance, what was the purpose of designing the volute patterns that are densely overlaid on the bronzeware created in China’s Bronze Age? Why aren’t the patterns plain and simple? When you think about it, the sensibility that can see value in simplicity depends on a special aesthetic. Human beings are naturally awed by things that are intricate and complex. Our attention is more aroused by bronzeware whose entire surface is covered with intricate patterns than by a plain one with no decoration. This is because within the intricately patterned object is concentrated the mastery of difficult skills and the accumulation of artifice spanning a vast period of time. So we feel a special aura is expressed in the complexity of patterns. Bronzeware was the high technology of the time and was closely related to the authority that then ruled. That is, elaborate decorations were employed, as were breadth of scale and symbolism, to exert centripetal force to maintain unity among countries or clans.

The more the number of human beings on the planet increased, the more dynamically active were the various countries and clans, and the more

mutual contact and interference ensued. Refined patterns functioned in the surroundings of all great powers with especially stalwart armed forces and intimidating auras. The volute pattern led to the creation of the dragon pattern. In the neighboring Islamic world, the authority of the religion and of the nations was expressed with intricate geometric patterns as well. The same is true of Europe. The authoritative power of the kings and their countries was closely connected with delicate, elaborate patterns. The congeries of magnificent, complicated skills found in the churches has the same meaning in terms of the demonstration of authority and power.

The same root applies to the reasons for the creation of numerous astounding decorations: the walls of the Taj Mahal in India, with their amazing arabesque designs using a variety of colorful stones from all corners of the globe; the dragon patterns carved everywhere in the Forbidden City in Beijing; the arabesque designs covering entire walls of mosques; the intricate, Gothic-style cathedrals and elaborate stained glass of their magnificent interiors; the complex, embellished rococo decoration of the Mirror Room in Versailles. These kinds of mind-boggling accomplishments, which can be achieved only with immense amounts of time devoted by highly trained human hands, breed power. Until the arrival of the modern age, the world needed great powers. But the modern age is a world in which individuals, emancipated from such overwhelming power, can freely realize their own ways of life. The beginning of modern society and the collapse of central governments marked by popular revolutions and the rise of democracy were movements to free design from decoration that was used to produce a coercive force, and the impetus for discovering the value of rationality and simplicity.

Indeed, in the days of the inception of modern design, design still rested in the hands of craftspeople; and these hands, which underwent training for the likes of the aristocrats, which knew well both the severity and the pleasure of making things, maintained the quality of the furnishings of traditional life. By and by, thanks to the craftspeople, the general public was almost at the point of being able to enjoy a variety of devices and goods that

had been cultivated over the course of history. But a new paradigm for making things, called “machine production,” trampled the potential for such an environment. Using this as an opportunity, human beings recognized a manner of forming their environment that was rational and independent-minded; they became conscious of design.

The Origin of Design

According to the book “Pioneers of Modern Design” by the art historian Sir Nikolaus Pevsner (1902-1983), the concept of design arose from the thinking of two figures: John Ruskin (1819-1900), an advocate of social thought, and William Morris (1834-1896), a theorist and the founder of the Arts and Crafts Movement. This was only about 150 years ago, so it’s not an old story. Thanks to the machine production system, which sprang from the Industrial Revolution, England flourished in the mid-19th century. However, the early machine-made products weren’t much to look at; they were mere imitations produced by the awkward hand of machinery, aiming to reproduce furniture and other kinds of objects that maintained a vestige of aristocratic decoration. Glancing through reference material from the London’s Great Exhibition of 1851, we can imagine what they looked like. The cultivated forms that were refined over time by manual skills were superficially interpreted, distorted and mass-produced at extraordinary speed.

Under circumstances like these, it seems that anyone with any affection for his own lifestyle and culture must have felt the sense of crisis over the loss of something, and must have been concerned about the deterioration of aesthetics. Those crude machine-made goods would never be embraced by the sophisticated traditional culture of Europe without a fight. In fact, the appearance of these substandard objects resulted in the unearthing of both the culture that had been nurtured by manual work and the sensibilities hidden beneath that culture. Ruskin and Morris represented the collective snort of the people: “We absolutely cannot bear it!” This was their protest against

machine production, which threatened to roll right over the intricate, delicate sensibilities awakened in us by objects. Their activities were a warning and a great booing against the aggressive, impatient reform of the era. Clearly, the concept of design, or the beginning of its way of thinking, was the backlash of aesthetic sensibility against the dullness and immaturity lurking in the industrial mechanism that was so violently changing man’s living environment.

However, there was no turning back for machine production as long as it continued to fuel the trends of mass production and mass consumption. Even though the common intellect and aesthetic sensibilities leveled some criticism against it, nothing was going to slow the momentum of the production and consumption explosion ignited by the Industrial Revolution. Because Ruskin’s writings and lectures and Morris’s Art and Crafts Movement were so strongly anti-modern, with both men championing the revival of the manual skills of craftspeople and harshly criticizing the negative effects of machine production, their arguments were not accepted into the mainstream of the time and failed to gather enough force to stop or slow society’s transformation. Still, their insights and perceptions about the source of pleasure in the relationship between making things and daily life were upheld by the design movement activists of the next generation as the very wellspring of the concept of design, so we can say that in the end they had a significant effect on society.

It goes without saying that we cannot directly experience the era of Ruskin and Morris, but we can catch a glimpse from preserved materials. There is an abundance of these, vividly conveying the messages they introduced, including Morris’s works of the Arts and Crafts Movement, such as his book designs for the Kelmscott Press and his wallpaper designs. Whenever I look at their work, I am in awe, as if I were actually meeting these stalwart men of the 19th century. Their spirited drive in demonstrating—not through theory but through real objects—an antithesis to the doltish objects manufactured by the clumsy machine is still intense and ardent enough to unsettle the sensibilities of today’s designers; we still succumb to its beauty. Somehow their

work makes me feel like I'm being scolded. Clearly their passionate enthusiasm inspired the concept of design.

On the other hand, although the idea of design emerged from a negative social situation arising from deteriorating product quality, we can't definitively state that it was solely the brainchild of Ruskin and Morris. No doubt during the middle of the 19th century, as civil society matured, there thrived in a subterranean channel a sensibility different from art, some sense of gaiety in creating appropriate objects or environments, and a joy in bringing these to daily life. With the appearance of crude, machine-made daily commodities as an impetus, this sensibility flooded all society. The movements led by Ruskin and Morris symbolized this deluge.

In any event, the raging torrent of machine production pained the delicate aesthetic sense of daily life. This then triggered the emergence of design as a way of thinking and perceiving in society. Today, as our living environment is being newly transformed by the development and spread of information technology, we need to once again focus on the circumstances and movements surrounding the origin of design. I think it's time we took a new look at the roots of design thought and sensibility and at the pain that's arisen in this new era, just as if we were backtracking to the era of Ruskin and Morris.

Integration of Design

There's one more development that occupies a significant position in the minds of us designers as a special epoch enshrined right next to the concept of design. That's the Bauhaus movement. Bauhaus refers to both a school of design and a movement begun in Weimar, Germany, in 1919. In 1933, the Nazis forced the Bauhaus to close, so the activities of the Bauhaus proper only lasted fourteen years. Even in its heyday, the Bauhaus was small, with a little more than a dozen teachers and less than two hundred students. But this is where the concept of "design" got its direction. Here, the machine production system was accepted as a positive aspect. At the same time, a variety of concepts for

the plastic arts, excavated via the art movements of the beginning of the 20th century, were reorganized here.

During the period spanning the epoch of Ruskin and Morris through that of the Bauhaus, a storm of new and dazzling art movements swept across the entire world: Cubism, Art Nouveau, the Vienna Secession, Futurism, Dadaism, De Stijl, Constructivism, Absolutism, Modernism and so on. The names and representational style varied depending on the country, region, and ideology, but if one thing can be said, it's that in every area of Europe and in every field of art, in order to break from the forms of the past, practitioners used a passionate, radical trial-and-error approach to completely dismantle those forms.

Targets were all the vocabularies of the plastic arts that had accumulated during the history of the decorative arts: ornamental idioms, artisanal skills, and snobbish, monomaniacal aristocratic pursuits. It may very well be that as a result, various disciplines of the fine arts and the plastic arts momentarily turned into a kind of nutrient-packed mountain of debris.

It was the Bauhaus that with, penetrating ideas and energy, both verified and dissolved this mountain, then crushed it into powder in the mortar of powerful thought, and finally, in screening this detritus, arranged and ordered the elements. At this stage, all kinds of elements linked to the plastic arts were examined from the point of view of speculation as well as the senses and then were reduced to the zero point. The elements that could not be simplified any further were identified as color, form, texture, material, rhythm, space, movement, dots, lines, planes and so forth. It was the Bauhaus that, by neatly laying out these elements as if on an operating table, proudly declared, "All right then, let's begin a new era of plastic arts." And it did.

Of course I am fully aware that this is a rough summary made with a simple metaphor. The Bauhaus was a whole bundle of activities undertaken by a great number of people and can't be bound into any single thought. Walter Gropius (1883-1969) put his heart and soul into integrating a wide range of arts and outlined the Bauhaus plan. Johannes Itten (1888-1967) em-

braced mysticism. With his precise theory of the plastic arts, Hannes Meyer (1889-1954) brought an accurate indicator to the activities of the Bauhaus. Laszlo Moholy-Nagy (1895-1946) explored a new approach to the plastic arts for the new era based on elements derived from the dismantlement of past forms. Both Paul Klee (1879-1940) and Wassily Kandinsky (1866-1944) pursued the original forms of the dynamics through which living beings create order (form) by equating the process of molding with the issue of life. Focusing on the Bauhaus theater workshop, Oskar Schlemmer (1888-1943) developed a modernism that transcends conventional world-perceptions. The more carefully we look, the more individuality we find. The Bauhaus is simply the result of the convergence of activities carried out by individuals of many talents.

We could draw unlimited speculation from a detailed, microscopic examination of this group and its activities. But if we observe their combined activities from some distance, through the telescope of the 21st century, the collection of glittering stars would certainly appear as swirling galactic clouds. Unless we look at it with our eyes half closed, we often lose sight of the essence of history, but here, viewing the Bauhaus just as we would a galaxy from afar, I'd like to roughly summarize its entity and continue my story. Briefly put, the concept of design realized an extremely pure form in the framework of modernism, thanks to the opportunity provided by the Bauhaus.

Design in the Afternoon of the 20th Century

John Ruskin and William Morris nurtured the seeds; the art movements of the early 20th century cultivated the soil; consequently it was on the soil of Germany that design put forth small buds in the form of the Bauhaus. The way of thinking that design has presented embraces a world endowed with real spontaneity and liberty, and has developed into abundant foliage in many different cultural aspects insofar as human beings acknowledge the quality of their lives in terms of products and communication.

Now, in the second half of the 20th century, when design was supposed to flower, the power of the economy, instead, began to drive the world. Design ended up being pulled along by the new engine of the economy. All design thought, whether of Ruskin and Morris or of the Bauhaus, has had a socialistic tint. Both Ruskin and Morris abhorred being controlled by an economy in which making things was synonymous with machine production, and because the birth of the Bauhaus was enabled by the social-democratic government in Weimar, it can be said that the social-democratic trend fostered the Bauhaus way of thinking. Basically, the concept of design was conceived and developed in no small measure on the premise of idealistic social ethics. Now, within the intense magnetic field of economic principle, the purer the concept, the less able it is to live up to its ideal.

The birth of economic principle is clear-cut. Modern society was realized and personal freedom was born. This heightened the urge to possess objects, consume goods and services, and accumulate wealth. Thus were generated an unlimited number of authorities created to satisfy these desires more advantageously, and as these congregated and separated, a new great power that would move the world came into existence. This was the economy.

The economy, in an aim to encourage consumer spending in modern society, works to ensure the successive production of new objects. And in order to circulate these new products as the objects of consumer desires, the media have developed into a variety of formats, and communication methods have seen persistent evolution. Astoundingly, design has become part of the current of economic development.

The world experienced two great wars in the 20th century. If we look at this from a broad perspective, we see demonstrated the process by which the world shifts to a new motive principle. People around the world, billions of them in myriad nations, cultures and religions, all live by their own sense of value. The more intense the dynamism of interrelation, which is allowed by the progress of movement and correspondence in the form of trade and philosophical exchange, the more frequently egos

and forces collide. Without a framework for international intervention undertaken with the rationality of a bird's-eye view, these collisions spiral into wretched catastrophe, namely, war. After having experienced two great wars, the world seems to be maintaining just enough rationality to restrict the appeal of arms, which would cause more misery. Instead, economy, as the new unarmed method of competition, has begun to run the world as if it were the driving source of human activity. This is the shift of the motive principle of the world—to economy. Terms like economic war were born from this newly emerging context. Design has been embroiled in this situation.

Standardization and Mass Production

To imagine the situation with more clarity, let's go over it in some detail. After World War II, in the defeated nation of Japan on the tip of East Asia, product design became part of industrial production. Modern design thought, beginning with the Bauhaus, brought forth a unique modernism in Japan, too, but its evolution would be engulfed in the industrial momentum toward the commitment to standardization and mass production.

Immediately upon his return from a tour of inspection in the United States and Europe, Konosuke Matsushita, one of the representative entrepreneurs of Japan's postwar manufacturing industry, reportedly said, "The next era belongs to design." Of course he wasn't talking about something to be incorporated into the Bauhaus-like, idealistic wellspring of design. But these were honest words regarding the useful nature of design as it appeared to Matsushita, a businessman shouldering the industrial restoration of the country as it crawled back from the ashes of defeat. Right there, we had industries preparing for complete recovery and growth, and the diligent workers to shoulder that growth. The conditions were all in place; with rapid economic growth, design would fuse into industry as one of the gears driving standardization and mass production.

On the other hand, Japan had long been searching for an independent design concept outside of mass production. The history of modern design in Japan has been haunted by the question, "What is originality?" repeated like a hiccup every time modernism from the U.S. or Europe is dropped into the gut of our culture. This particular inclination to contrast the originality of one's own nation with Western identity or thought is a cultural trauma commonly found in Asian countries that have experienced the civilizing of their cultures in reference to Western modernity.

Within this context, the *mingei* (folk art) movement, which found the ideal of product design in the traditional crafts nurtured by the everyday life of the citizenry, held conciseness as one of its concepts, and had a unique aesthetic that could stand shoulder-to-shoulder with Western modernism. The idea was that the form of an object is created and refined not by an incidental plan devised by industry, but by that accumulation of time called life. The viewpoint that design ought to be derived from tradition sounds reasonable compared to the assertions of Ruskin and Morris, but the movement had little significant influence on a social situation in which industry was making remarkable progress and the influx of postwar U.S. and European cultures was creating confusion.

It's obvious, when we look at it from a distance, with eyes half closed, that Japan's industrial design was directed not toward the culture of daily life but toward the economy. Rising from the devastating damage of war, Japan was fully engaged in increasing national power, and its goal was economic prosperity, not a mature consciousness of everyday life. For Japan at that time, the priority was not the quality of the food, but filling the stomach; not culture, but industry. The value system of that time exerted a latent power over the entire second half of the 20th century, one that even now reverberates deeply through the substratum of our society like a basso continuo.

Looking over today's product design, we see that except for a few examples, almost every design is based on the perspective of a large-scale manufacturer, premised on the principles of standardization and mass production.

In industrial design, the individuality of designers is suppressed, while the will and strategy of the corporations that plan, produce and sell goods or services is reflected accurately. If this system works well, we get rational design that skillfully gathers materials and technology in response to the demands of the contemporary lifestyle. If it does not, we get shameless design that has ingratiated itself to the market. The industrial products of Japan, represented by SONY, have shown the world high-standard design based on employment of in-house designers, close ties between engineering and design, and scrupulous management of standardization and mass production.

Style Change and Identity

What if we look at the United States? European pioneers of modern design who emigrated to escape the war brought with them a portion of that concept. Walter Gropius went to Harvard University, Mies van der Rohe (1886-1969) went to the Illinois Institute of Technology, Laszlo Moholy-Nagy led the New Bauhaus in Chicago. Each communicated his idiosyncratic thinking about design in his new home. These influxes of European or Bauhaus-style thinking can be detected behind the United States' breakthrough in the fields of architecture and product design.

However, unlike the social-democratic-tinged thought of the Bauhaus, design in the United States has continued to emit vivid colors as part of the marketing that supports its economic development. In the U.S., design has evolved in an extremely pragmatic manner, closely linked to marketing analysis and management strategy. The prevalence of streamlining in the 1930s in the U.S. was where the practice of using design to change the form of a product originated. Ever since, there's been no slowdown in the development of a coupling that affects the entire world: the differentiation of surface design paired with the evolution of industrial technology. In an environment in which the United States leads the world economy, this kind of pragmatic view of design influences Europe and Japan as well. In short, the U.S. views design as a management

resource. Entrepreneurs, who discovered that innovation is what whets people's appetite for consumption, promoted design to the role of "style changer."

The appearance of a new style forced the aging of the existing product and turned it into an antique. Series of plans were drawn up based on the strategy of "making things that are fresh today seem old tomorrow," just to motivate consumer spending, and design responded to that role with continual changes to product appearance. Then, in every corner of the world, all kinds of products, from cars to AV equipment, lighting appliances, furniture, sundries and packaging, came into existence through style change and stirred up consumer appetites.

On another front, when Europeans recognized the operating concept of brand (the preservation of value in the marketplace) they also assigned to design a portion of the work of handling this device, namely, branding. In the past, "management resources" meant human resources, equipment and financial resources. Recently these have been joined by information, which includes both corporate image and brand, two concepts that have filtered down to the general public. It is also the United States that has skillfully developed methods like corporate identification and brand management, strategically interpreting the role of design to aid corporate management.

Thought and Brand

What about European design? In Europe, two other defeated countries, Germany and Italy, pulled design along as they developed. After the closing of the Bauhaus school, most of the professors left for the United States, but those who had shared school experiences helped the Bauhaus idea progress in their new homes.

In Germany the Ulm School of Design played a part. Its first director, Max Bill (1908-1994), advocated a concept he called *Umweltgestaltung* (Environmental Design), with which the perspective of design began to include the idea of contending with its environment. The principle of the school

is clearly readable in its curriculum, which includes the fields of architecture, environment, product form, visual communication and information, but it seems they're listed here not as specialized fields, but to position design as a discipline that integrates all the fields. Included in this curriculum are not simply knowledge and training in color and form, but also philosophy, information aesthetics, ergonomics, mathematics, cybernetics and the fundamentals of the sciences. The contents of this curriculum were no longer to be regarded as an educational structure for a genre of handicrafts or art, but had to be understood as a sort of integrated anthropology or integrated formative sciences, premised on a crossover to science. This curriculum is evidence of deep consideration of what kind of ideas and knowledge system are needed to support designers, whose work bears upon the entire environment. It speaks of the deepening profundity of the concept of design from the Bauhaus to Ulm, a profundity that lay behind German precision products (as symbolized at one time by those of the Braun brand) and was the result of a very high level of research into human behavior.

What about the other defeated nation, Italy? Italian design, whose Latin radiance helped develop modern design, is quite a contrast to meditative German design. As illustrated by the words of the industrial designer Enzo Mari, who "grew up feeling close to Michelangelo and Leonard da Vinci," the world of Italian design freely reaches for an exuberant originality. Its free-wheeling dynamism gives design yet one more appealing aspect. And because of the high quality of its ideas and its plastic arts, not in mass production, but in relatively small-scale industrial production that integrates the handwork of craftsman into the production process, Italian design has achieved originality, excellence and increasing fame.

Examining European design in minute detail, we sense the independent spirit of its designers as well as a lingering craftsmanship. This is probably because the lineage of craftsman-like handiwork is inherited as part of the vocational consciousness of European designers. In the Bauhaus, a professor and a master craftsman partnered to teach lessons, and the foundation

of European manufacturing includes the handiwork of trained craftspeople. When this system works well, it produces design of stunning individuality, originality and freedom. When it does not, it renders design in which we sense a somewhat arrogant individuality.

In the market, those fine products marked both by the talent of individual designers and the quality of the craftsmanship gain a reputation for superiority, which is then preserved as a special value. That is, the force we call "brand" obtains social recognition. This brand, guaranteeing the quality and origin of a product, imperceptibly gathered strength in the world market and continued to develop when refined as a methodology. The industrial products of Olivetti and Alessi exemplify the notion of brand. With branding, we glimpse again the underlying strength of design. As I said, in the United States, this concept of brand was thereafter researched with great passion as an element of marketing and demonstrated its power as product design, corporate image management and ad strategy design.

I can't fully cover European design here. There are endless stories about the superb design of Scandinavia, France, England, the Netherlands and so on, but let's leave that for another time and continue on with the topic at hand. Japan, the United States, Europe: the shape and form design takes differs in each society depending on the circumstances of its birth, its lineage, and what influenced it during the coming-of-age of the national economy. Still, in the latter half of the 20th century, when economic power strengthened its control, economy was the main source of power behind the development of design. Expected to do more and more, as a service providing quality, innovation and identity, design began working to respond to these requirements.

In these kinds of societies, ordinary people so enjoyed associating with the novelty of information and products that they became afraid of falling behind the times.

The Prank of Postmodernism

On the brink of the explosive spread of personal computers, we were bound to head into the infancy of yet another new economic culture, but on the eve of that birth, for just a bit, design strayed into a bizarre labyrinth. In the '80s, the term "postmodern" was introduced in the world of design, developing into a trendy phenomenon that spread across the fields of architecture, interior design and product design. Originating in Italy, it spread like wildfire to the rest of the developed world. As the term indicates, postmodernism was conceived as the ideological conflict between modernism and the new era, but if we review it with a little broader perspective today, in the 21st century, we recognize that postmodernism cannot be seen as a turning point in design history. It was just a fleeting commotion that occurred during the hand-off of the concept of modernism from one generation to the next. If we look carefully, we can even see postmodernism as an event symbolizing the aging of the generation of designers that sustained modernism.

From the trends in the plastic arts, it is clear that postmodernism was a small, manipulated system of icons and something of a fad. Photos of people in old-fashioned clothes of any past era make us laugh because of the strangeness of an entire society's participation in this empty agreement called fashion. Viewed from the 21st century, postmodernism makes us laugh for the same reason. It seems like a revival of the Streamline Style. However, it's worth noting that those who initiated the movement included designers like Ettore Sottsass, whose brilliant accomplishments include products and corporate identity for Olivetti created within the tide of modernism. What distinguishes this movement from the streamline boom is the fact that the designers were not overwhelmed by the plastic, representational nature of postmodernism, but those who perceived the limitations and possibilities of modernism through their own experience played with design, creating an empty iconic system with full knowledge of what they were doing. At the same time we can't forget the germination, among ordinary people, the recipients of design,

of a kind of maturity and worldliness that recognized and accepted the fictitious nature of this kind of design.

However, I question reading postmodernism as the aging of a certain generation, because this is a world of pranks, directed by designers weary of spending time with modernism and ordinary people who have attained some sophistication regarding information. In the generation tired of pouring its pure passion into modernism, I sense a phase of mature insight.

The forms attending the playfulness of postmodernism are like the sophisticated jokes cracked by the designers of our grandparents' generation, an epoch of design's dissolution that we should cherish. The world should have let postmodernism pass with a smile, but the economy alone was serious, trying to use it to revitalize the market, and spreading it into the world much more than was necessary. For a bit, young designers were tossed about in the melee too. Even critics acclaimed postmodernism as a duel between modernism and a new era. Here lies the cause of postmodernism's wandering, its bewilderment and its bitterness.

From these events we should recognize that modernism isn't over yet. Even if the power of the impact it had at its inception has been lost, modernism is not the kind of thing that can turn into a trend or a fashion.

Modernism has temporarily suffered from the experience of being ironically shrugged off as a parody by designers of a certain generation who were tired of pursuing it. If the intellect that understands the quality of life through the practice of making things is an essential energy that can inspire modernism to evolve and grow, designers born afresh among the younger generation who are exposed to the idea of modernism will direct a new modernism that transcends the work of the senior generation that grew so tired of the mainstream.

Computer Technology and Design

Where does design stand today? The remarkable progress of information technology has thrown our society into great turmoil. The computer promises, we

believe, to dramatically increase human ability, and the world has overreacted to potential environmental change in that computer-filled future. In spite of the fact that our rockets have only gone as far as the moon, the world busies itself with worries and preparations for intergalactic travel.

The Cold War between East and West is over, and the world long ago began revolving on the unspoken standard of economic might. In a world in which economic power accounts for the majority of our values, people believe that the best plan for preserving that power is to respond quickly to forecasted changes to the environment. Convinced of a paradigm shift to rival the Industrial Revolution, people are so worried about missing the bus that they beat their brains out trying to get to a new place, but are only acting on precepts of precomputer education.

In a world in which the motive force is the desire to get the jump on the next person, to reap the wealth computer technology is expected to yield, people have no time to leisurely enjoy the actual benefits and treasures already available, and in leaning so far forward in anticipation of the possibilities, they've lost their balance and are in a highly unstable situation, barely managing to stay upright as they fall forward into their next step.

Apparently, people think they shouldn't criticize technological progress. It may be that deeply seated in the consciousness of our contemporaries is an obsession of a sort, to the effect that those who contradicted the Industrial Revolution or the machine civilization were thought of as lacking in foresight and were looked down upon. That's why people have such a hard time speaking out against flaws that are likely felt by everyone. This is probably because they're afraid that anyone who grumbles about technology will be thought an anachronism. Society has no mercy for those who can't keep up with the times.

However, at the risk of being misunderstood, I have to say that technology ought to evolve more slowly and steadily. It would be best if it took the time to mature, through trial and error. We are so excessively and frantically competitive that we have repeatedly planted unsteady system in unsteady

ground, which have evolved into a variety of trunk systems that are weak and liable to fail, but have been left to develop anyway. Having no way to stop, they barrel down the track, completely exhausted. People have wrapped themselves in this unhealthy technological environment and are accumulating more stress every day. Technology continues to advance and has multiplied beyond the amount knowable by a single individual; its entirety can be neither grasped nor seen, and it's so vast its edges fade from view. There is nothing aesthetically appealing about communication or the practice of making things when their ideology and education remain unable to cope with this situation, but just continue on their familiar trodden paths.

The computer is not a tool but a material. So says John Maeda a professor at the Massachusetts Institute of Technology. The implication is that we shouldn't use computers in the manner of just swallowing whatever software comes along, but need to think deeply and carefully about what kind of intellectual world can be cultivated based on this new material that operates with numbers. I think his suggestion deserves our respect. For any material to become a superb material, we need to purify its distinguishing attributes as much as possible. As a material for modeling and carving, clay has endless plasticity, but that limitless plasticity is not unrelated to the material's development. If it were filled with nails or other shards of metal, we wouldn't be able to knead it to a usable consistency. These days it's as if we're kneading the clay until our hands bleed. I have trouble believing that anything generated in this kind of impossible situation is going to bring any satisfaction to our lives.

Design today has been given the role of presenting the latest innovations of technology and here, too, is strained. Design, which is accustomed to showing its strength in "making what's fresh today look old tomorrow" as well as bringing novel fruits to a table full of curious diners, is further exacerbating its contortions, in obedience to the new technology.

Radical Dash

When technology moves society, we call the society “technology driven,” but there is one country whose design conforms to this situation more than that of any other country. It’s the Netherlands. The cradle of Europe’s most recent design epoch isn’t always Italy or Germany.

In 2000, the World Exposition was held in Hanover, Germany. Ecology was the theme, with presentations of programs about issues like natural resources and environmental preservation. Only the Netherlands’ message differed from the rest. I remember it went something like this: “Our country’s land, the forests, the varieties of flowers, energy, even beer: we’ve made it all, on our own.” The Dutch pavilion, nicknamed “Big Mac” and designed by the architect group MVRDV, comprised six layers. The rooftop held a plateau-like area with a small lake and several windmills that generated the building’s power. The lower level was a forest of natural trees. Natural wood pillars supported the floors and ceilings. A tremendous number of fluorescent lights were installed at random all over the ceilings, and it looked as if they had helped the trees to perform photosynthesis. On the sub-level was a flower garden. I seem to remember hearing the sound of honeybees from small monitors scattered in the carpet of flowers. Fundamentally, visitors to the pavilion were richly rewarded with a direct experience of the Dutch way of communing with Nature.

Now that I think about it, I recall that the Netherlands reclaimed its land by drainage and a quarter of its land lies below sea level. This is the origin of the saying “God created the world. Netherlanders created the Netherlands.” Saying that they made the land means they made the forests, the fields and the canals. The Dutch canals are very geometric, as if they were drawn with a ruler, and the houses stand neatly along their banks. Once tremendously enthusiastic about improving tulip varieties, the Netherlands is now the hub of the flower seedling industry. Its technique for generating energy through windmills is superb; it’s possible to conclude that the nation has some pride in having intervened in nature and created its own environment through man’s artifice.

Simply put, the tradition of Dutch modern design is radicalism, probably partly reflecting this cultural disposition. The artists who took an active part in the De Stijl movement in the first half of the previous century included the graphic designer Piet Zwart, who taught at the Bauhaus, the architect Gerrit T. Rietveld, noted for designing the Red and Blue Chair as well as the Schroder House, and the painter Piet Mondrian. The distinguishing feature of the De Stijl artists can be interpreted as frank and fundamentalist. The De Stijl gave origin to the tradition of Dutch modernism exemplified by fastidiousness as well as wholeheartedness, and marked by the sort of attitude that, once one decides to do something, he’d better commit to it until the end. Rem Koolhaas, who shines with particular brilliance in the world of architecture, is the emblematic figure of this Dutch radicalism; a floor turns directly into walls and the walls immediately into ceilings. Pillars do not necessarily stand upright. The color selection for the seats in an auditorium is random. Ceiling lamps are spaced randomly as well. To pursue a rational space apportionment, he comes up with the solution of a building designed as if it were raised from a ground plan made of a pie graph. His design approach, presenting modern brilliant touches against his dry, candid solutions, which at first glance look aggressive, seems to be a product of the technology-driven context.

The Dutch product design collective, Droog Design, also entails a nihilistic criticism of modernism. Though their pranks differ a bit from postmodernism’s, the radical sensibility at their core has the same root as Koolhaas’s. The aesthetics cultivated in this land of no mountains and much human ingenuity, fighting a bit with the jarring rhythm of an immature technology, has had no small effect on today’s design around the world. It blows a breeze of originality into the blocked mind. Before complaining about the rapid progress of technology, it might be a good idea to learn something from the straightforward, positive dash the Dutch have been on. There must be something for us to learn from it, even if the greater part of this book’s message is an antithesis to this kind of context.

Beyond Modernism

So far, this tale of design has covered design absorbed in style-changing techniques and design that clings closely to new technologies, but design is not going to end up as a servant to the economy or technology. While leaning towards that tendency on the one hand, design has done a consistently good job as a rational indicator for giving form to objects. Within its innermost parts, design carries an extra gene of idealistic thought: the pursuit of shape and function, and even while operating on economic energy, it maintains some semblance of a cool, pious way-seeker. That is, within industrial society, design has steadily acted as the rational and efficient indicator, planning for optimal objects and environments. Every time technological progress reveals a new possibility for creating new products or communication infrastructures, design plays a role in persistently and consistently pursuing the best possible solution. I am writing this on a plane bound to Buenos Aires from New York; not only the improvement of aircraft safety, but also the comfort of the seats and other interior furnishings can be recognized as the results of design's assiduous efforts. And from the simplified, ergonomic form of my computer's keyboard, I also see clearly design's role in manufacturing. In other words, one of the achievements of modernism is design's firmly rooted place in our daily lives.

Today's designers are beginning to realize that endless possibilities for design lie dormant not just in the new situations brought on by technology, but also in the common circumstances of our daily lives. Creation of novel things is not the only creativity. The sensibility that allows one to rediscover the unknown in the familiar is equally creative. We hold a great accumulation of culture in our own hands, yet we remain unaware of its value. The ability to make use of these cultural assets as a virgin resource is no less creative than the ability to produce something out of nothing. Beneath our feet lies a gigantic, untouched vein of ore. Just as simply donning sunglasses makes the world look fresher to us, there is an unlimited number of ways of looking at things, and most of them haven't been discovered yet. To awaken and activate

those new ways of perceiving things is to enrich our cognitive faculty, and this relates to the enrichment of the relationship between objects and human beings. Design is not the act of amazing an audience with the novelty of forms or materials; it is the originality that repeatedly extracts astounding ideas from the crevices of the very commonness of everyday life. Designers who have inherited the legacy of modernism and shoulder the new century have gradually begun to explore their consciousness of that fact.

The same is true of communication. To create an indicator that can be trusted in chaotic circumstances is to amass sensible, practical observations on the real state of affairs. Today we have come to understand the real state of affairs as follows. The conventional is not replaced by new technologies. The old accepts the new, resulting in more options. What we need for that to happen is not to cling to the new, but to rationally analyze the options we've got. For example, in the e-commerce market, newly established companies have not been as successful as existing companies that entered the same field after painstaking analysis. Internet news services haven't eliminated newspapers. The development of e-mail service and cell phones hasn't reduced the number of postal objects. Clearly, an increase in the number and complexity of media leads to multipolarization of our communication channels.

Communication design is the sensibility that efficiently organizes these media. The sensitivity cultivated by conventional media is not going to be made redundant by the emergence of new media. One medium may be the one that cultivates our communication sense, but others will make use of it as well. Design is the vocation of taking both old and new media, favoring neither, putting them into a cross-disciplinary perspective, and making full use of all. Design is not subordinate to media; design explores the essence of media. In fact, within the labyrinthine complexity of today's media, we can expect people to more clearly understand the genuine value of design.

Digging a little deeper into the relationship between technology and communication, some designers have begun to rethink the possibilities of the quality of information; putting aside the rough information that swirls

around like dust on the internet and clings to our monitors, they have recognized the profundity of the quality of information perceptible only when the senses become mobilized. A symbolic example is the attention in recent years that the field of cognitive science (which studies virtual reality) has showered on the “haptic” senses—those besides sight and hearing. The very delicate human senses have begun to become very important in the forefront of technology. Human beings and the environment being equally tangible, the comfort as well as the satisfaction we sense is based on how we appreciate and cherish our communication with the world via our diverse sensory organs. In terms of this perspective, the paired fields of design and technology and of design and science are headed in the same direction. I specialize in communication but have come to think that the ideal of this discipline is not trying to catch the audience’s eye with an arresting image, but having the image permeate the five senses. This is communication that is very elusive yet solid and therefore tremendously powerful, which succeeds before we even realize it’s there.

Well, we took a roundabout path, but here we are. This spot where we stand together now is where we think about design and practice design. Design is not merely the art of making things. Our brief jaunt through history proved that. No, design is the occupation of straining our ears and eyes to discover new questions from the midst of everyday life. People create their environments by living. Beyond the rational observation of this fact lie the future of technology and the future of design. Somewhere near their loose intersection, we’ll find the future of modernism.