4 Editorial

5 Design Q & A
From the movie by that name made by Charles and Ray Eames.
"What is your definition of design?"
"A plan for arranging elements in such a way as to best accomplish a particular purpose."

8 The Questions as They Were Posed

10 Francesco Gianninoto, FIDSA
"In packaging, my area of specialty, the most important designs by and large are those that have endured in the face of changing market conditions, and those that have succeeded in many market areas."

12 Jay Doblin, FIDSA
"Designers should be the corporate visionaries that articulate what the company could make and be. Lawyers, accountants, managers and engineers can't perform this function. Designers, if they're any good, are equipped to be visionaries ... But instead designers neither see nor seek this role."

15 Rowena Reed Kostellow, FIDSA
"It is not possible to be as aware of three-dimensional form through a series of graphic representations as it is when the design is developed in three-dimensional materials. The first method may result in a design that is adequate for the purpose but that lacks the character and subtlety that is possible when a designer can actually see the form taking shape."

19 Robert G. Smith, FIDSA
"If the high risks of pioneering new products lies beyond most company's means and milieu, rational reinvestment in innovation does not. This is the point I think many U.S. companies have missed."

21 Richard S. Latham, FIDSA
"At some point, the awareness and understanding that humans are not the servants of industry, but should be served by business and the sciences, will alter basic values and attitudes about industrialization."

24 Arthur N. BecVar, FIDSA
"Clues to how a company will view design innovation lie in its business strategies. Some companies seek to lead. Therefore they nurture creative ideas. Some companies are more conservative, seeking a traditional approach."
Jay Doblin, FIDSA, seems to always have been in the hot spots—the leading design firms and schools—just when they reached their peak. He calls it coincidence. It probably isn't. Doblin's track record spans 40 years, with roles ranging from designer to planner, professor to theorist. Switching careers midstream from design practice to a unique form of design planning, he has more than once invented entirely new approaches to design, especially to complex design problems. Many of his students and colleagues try to emulate him, but somehow no one succeeds. Despite his true ambition—which he says is to be a seagull on a dock piling—Doblin's secret seems to be plain hard work. Here's his story.

When he graduated from high school, Doblin intended to become an engineer so he could make things. But he hated math, an ominous sentiment in an aspiring engineer indeed. So, when a smart old engineer told him that engineering has nothing to do with making things (and a lot to do with math), Doblin changed course at once. He signed up for Pratt Institute's industrial design program, and found mentors in Alexander Kosterlow, Power Reed, Donald Dohner and Gordon Lippincott. "I loved every minute, it was a totally joyous experience," he recounts today. Pratt trained him, but Doblin still wishes he had received an educational foundation first. Without it, a designer faces recurring problems, Doblin feels. "As a result, I'm against training designers until after they have been educated."

After Pratt, Doblin spent 12 years working for Raymond Loewy, FIDSA. It was an exciting time to begin a design career, the golden years of product design's great practitioners.

In 1955, Doblin accepted the directorship of the Institute of Design at Illinois Institute of Technology, and spent the next 14 years introducing systems design and methodology to design education. His tenure followed Moholy-Nagy's and made him co-director with Mies Van Der Rohe. Doblin's goal was to change from Moholy's experimental orientation to a professional one. "It was chancey, but I believed it worked, in the end." Under his leadership, the Institute of Design provided a standard for other programs around the country.

Ralph Eckerstrom's establishment of Unimark in 1965 opened a number of possibilities for Doblin. He accepted the position of vice president and spent seven years putting the concepts he had encountered as a teacher into actual practice. Then, in the mid-1970s, he left Unimark to work on his own as a planning consultant, work he feels challenges every facet of his experience.

Paralleling these occupational activities, Doblin wrote two books—Perspective—A New System for Designers (1965) and The 100 Great Product Designs (1969)—and he is currently completing a third book, The Structure of Design. With many articles to his credit as well, he has always been active in his professional societies, and for his efforts was made an IDSA Fellow. In 1982, for the sum of his contributions to the profession, Doblin was awarded IDSA's highest accolade, the Personal Recognition Award, given to only six individuals in history. The above story illustrates why he was selected for the honor.

"As I see it, there are no secrets to design. I just give all I can to what I'm currently doing. I'm probably a workaholic, but it is such lovely work. No occupation could be more rewarding and have so many exciting people."
Your most important design contribution... I have to give you two answers on this one because my design work has moved from the physical to the abstract in the course of my career. I've been out of single product design for years, but if I have to choose, I'd say the Edison Voicecorder of 1952. It represented a revolutionary reduction in size, won innumerable awards and was, all in all, a massive success. But I wouldn't call it my design. As with all the other products I worked on, I shared responsibility for the design with many others.

The more abstract side of my work has occupied me for at least a decade. I've been doing large scale programs for big companies to help them improve their overall performance through design. Most of my work takes the form of tedious reports and reams of research. Probably the most successful project I have been involved in was for J. C. Penney Co., Inc. Our team at Unimark had 25 members. The Penney team included more than 200. It took us seven years to research, plan and produce the program. Thousands of packages, products, stores, displays, graphic pieces and so on were designed, winning the 1974 IDSA Special Award for J. C. Penney Co., Inc.

Business' pioneering role... New product ideas (except scientific ones) are spawned by a single person. These are rare events. The inventors are probably entrepreneurial beings, loners who are totally dedicated to their idea. Because no established company wants it or them (they are usually rather odd), these inventors often begin a company. If the idea is useful, the company grows into an industry. As this occurs, the entrepreneur fades away and the business is taken over by managers who exploit the concept, usually in good faith. Then, to maintain growth, they conglomerate, capitalize, market, extend, export, and so on in a thoroughly business-like way.

In this context, design is a low-level activity that cleans up products under time and budget pressure. Designers often accept this role. One design director called his department Sleeping Beauty, just waiting for the kiss of an assignment to wake it up.

This is a sad state of affairs. Designers should be the corporate visionaries who articulate what the company could make and be. Lawyers, accountants, managers and engineers can't perform this function. Designers, if they're any good, are equipped to be visionaries, performing the role of the original entrepreneur. Instead, designers neither see nor seek this role.

This is what's wrong with American industry: One business in 100 has a designated corporate visionary. The managers are business executives, the designers are minions. No vision, no progress.

Design and the bottom line... Overtly aiming to improve the bottom line is the biggest misconception in business. Profits aren't an objective, they're the result of delivering greater consumer satisfaction. The best way to satisfy consumers is through better design. This simple idea is so obvious that it all too often goes unnoticed.

There are two kinds of consumer satisfaction: intrinsic and extrinsic. Intrinsic are what consumers take out of the package and use. Extrinsic include a host of benefits, such as convenience, polite service, reasonable terms, warranties, nice packaging and delivery and an honest salesperson. Designers can contribute to all these kinds of consumer satisfaction.

Most significant technological advances... Machines—if that's what they are—that translate information (words, numbers or images) into digitized form, then transform it to better satisfy someone's objectives, then translate this back into information (words, numbers or images): These machines represent advances beyond anyone's capacity to assess. This is what the mind does.

But I urge you to ignore the machine itself. What is important is to understand that digitized information systems make it possible for many designers to work simultaneously on a single problem. I call it the exobrain effect. The combination of individual skills in a cooperative system is, for designers, a wholly new way of working that renders obsolete the old board artist approach. But it is the process that's important, not the machine.

Design's changes in the past 50 years... Design hasn't changed much. Most designers still work intuitively. DaVinci would be a top designer today. A few methodologists predict major change, but there is no evidence as yet of change. I'm waiting for the first, clear instance of a methodologically designed, dramatically improved house, car, office, hammer, kitchen, bathroom...

The frontiers of industrial design... I take it I was chosen to contribute to this issue because I am perceived as successful. I would disagree. Please do not construe this statement as false modesty. I say it because, after all the working, talking, writing and teaching I have done, I think I may have missed the point. I want to make that point now.

An old Chinese proverb says: If man could turn earth into gold, they would be no happier. Only Midas has had personal experience with this.

If he had to pick a design from the days when he worked on physical products, Doblin would choose the Edison Voicecorder of 1952 as his favorite. The result of collaborative effort with many other designers, this product enjoyed massive success.
The designer who settles for using the computer to manage details and find absolute answers is not a designer, but a technician.

The flaw in our marvellous capacity to turn earth into products is that our capacity results in products that are only 51 percent good. For a long time, most people assumed that we must accept the bad side effects in order to get the benefits. Yet, this is what design is all about—the rationalization of technology for humanity. In this primary purpose, design has failed. Ralph Nader began the trend, and now a great many people reject the premise that you must take the bad with the good. This attitude and design's failure should be the primary concern of design schools and practitioners.

The rationalization of technology for humanity is a lofty objective. Nonetheless it should be design's aspiration. Until we can accomplish this objective, we are but a trade. That is why industrial design lacks stature; that is why it lacks professional standing; that is why its growth is insipid; and that is why it makes no genuine, unique contribution. This must change.

Computer-aided design...
The computer's value to design is unlike the contribution it makes to virtually any other sector. As a result, when designers perceive the computer's function, they often perceive it from the point of view of those other sectors, the accountants, the lawyers, the engineers and the clerks who track numbers and sort words. The error is natural, given the obviousness of these computer tasks. Yet perhaps the greatest disservice designers can do themselves is to continue in this misapprehension. The designer who settles for using the computer to manage details and find absolute answers, is not a designer, but a technician. Indeed, I would caution us to avoid becoming digitized participants that make a very specialized contribution. Design is more general. It is visionary. And its greatest strength lies in its creative focus on concepts, often vague, usually unquantifiable.

With all these vague, unquantifiable concepts to cope with, the computer offers us a heretofore unprecedented service: it forces us to structure our thinking. Therein lies its primary value to industrial design. The computer's real power comes into play in a designer's hands. It absorbs and structures information and gives back the pivotal link, the street map to where the designer should focus creative energy. Thus we can harness the computer to better perform our most valuable contribution—being a visionary—by using it to expand and explore our visions.

Other designers you respect...
I am deeply indebted to Raymond Loewy. He made it possible for me to work on marvelous accounts. Although only in my 20s, Loewy backed me and trusted me fully. He is the older I get, the more I respect him. I believe beneath his theatrical image lay concealed a far more interesting and illustrious person. Granted he is himself responsible for our misunderstanding, having created it with considerable zeal. Ironically, that very theatricality is why he isn't credited with making an enormous contribution to design practice.

Eames and Nelson are two of the very greatest. Uncanny in quality and unaccommodated striving for freshness, often carried off with genius, describe both.

The most gifted designer I ever worked with was Peter Thomson. He had golden hands, an ability to draw flawless forms with unlimited imagination. I learned much from him. He showed me the way from cruelty to retirement, but I have never achieved anything near so fine as he.

Of them all, however, the designer I respect most is Richard Latham. Beginning as an extremely able working designer, he moved on to pioneer product planning. In this work, he was 20 years ahead of us all, and perhaps still is. I consider him the wisest designer of the post-World War II period.

Advice to industrial design students...
The most essential element in life that students fail to grasp is that their immediate objective is to become competent. Whatever the endeavor, it is the competence that counts, because only competence can give you identity, dignity, self-assurance, stature and a livelihood. Unfortunately, most students have learned to think that joy is parties, cars, sex, drinking, vacationing and so on. Wrong. The ultimate joy is competence.

To become competent in design, get enough education so that you can think, read, write and talk. Then become obsessed by design. Draw for 16 hours a day until your eye, hand and mind's eye work together. Next, intuitively design and build 100 products. (You can expedite this effort by working for a top designer, for free if you have to.) Do nothing but uncompromisingly incredible work; never be practical; frequently go bananas. When this experience levels off in challenge, it's time to become disciplined, methodological and business-like. Study business, psychology and marketing. Take on complex projects. Now, with both flair and control in your work, great design can begin.

(Flair without control is beguilingly dangerous; control without flair is mechanically prosaic.)

There is one last thing, which I warn myself about as well as students. As you think about design problems, watch for what I call "walls that limit thinking." I find all too often, that when I think I'm done with a project, I'm really just about ready to begin. Sometimes the client has slated the problem in a way that points to the wrong direction. Sometimes the design team has assumptions in its mind about the process it should use or the end result it wants. Really fine design work identifies these walls. It breaks through. It finds new destinations.