

It's all in the

PROCESS

Information design isn't necessarily about databases, spreadsheets, or even infographics. It's about process—designers and clients working together to solve problems and convey complex information through design systems that are functional *and* beautiful.

By Ann Senechal

On these pages, we show samples of Meta-Design's work. They use Adobe products including Illustrator, PageMaker, and Photoshop.

Kensington product catalog. *The catalog brings a clear order to the company's products, which range from computer pointing devices to component carrying cases. Color, photographic images, and subtle differences in the typography used for section heads delineate product lines. The system also allows for easy expansion as Kensington updates and adds products.*

When the influential American architect Louis Sullivan unleashed his famous axiom, "form follows function," on the late 19th-century architectural community, he launched a debate that continues undiminished to this day. The dichotomy between form and function—between the aesthetic and utilitarian concerns of design—ripples through a similar and vigorous dialog in today's graphic-design community, pitting the practice of information design against the traditional principles of graphic design.

"Be good—make things good," pleaded longtime information designer Richard Saul Wurman during the American Center for Design's 1996 Living Surfaces conference in Chicago. By "being good," Wurman has always meant making information accessible—designing to create understanding and meaning, to communicate. "It is an extremely common, insidious malady among graphic designers and architects,"



he wrote in his 1989 book, *Information Anxiety* (Doubleday), “to confuse looking good with being good.”

Among the pioneers of what has come to be called information design (or information architecture) was print designer Ladislav Sutnar, who in the 1950s gave the discipline a foothold in the profession by turning catalog design on its head. Through his innovations, department-store catalogs began to direct the eye in an orderly procession across their pages to help readers absorb the vast quantities of information within.

Since Sutnar, several designers have made important contributions to the credibility of information design—Wurman through his city Access guides and Smart Yellow Pages, Massimo Vignelli through his architectural approach to organizing information, Clement Mok through his online hierarchies and interface work, and Erik Spiekermann through his reverence for typography and systems design.

A subjective truth is revealed.

As with most controversial subjects, everyone has an opinion on what information design really means. Most would agree that it's more about function than form, but from there the discussion diverges. In the most sweeping assertion of its worth, Rick Gréfe, the recently installed president of the American Institute of Graphic Arts (AIGA), says that it's what “makes the profession relevant. Design is the intermediary between information and understanding; it's not just something with an aesthetic or style.” Information design, he insists, “is not a subset of graphic design, but its core.”

Mark Johnson, who originally launched the San Francisco office of Wurman's *The Understanding Business*, and is now the firm's owner, president, and creative director, holds the more widely accepted view. He and his staff focus on applying order and structure to clearly describe information for the receiver. “Information design,” he says, “should be selfless. It should think about the audience, about how it will serve the user.”

Yes, agrees Vignelli, of New York's Vignelli Associates, who publicly adopted the moniker “information architect” last

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year, after 40 years of designing information for some of the largest corporations in the world. “Information design isn't what you wish to do. A new job isn't an opportunity for unloading your wishes. It's about solving a problem. It's important for us to refine our way of solving problems. Reality has many interpretations, but we try to be as objective as we can. We don't believe in being fascinated by form, and applying form to function.”

A recent issue of the design magazine *Emigre* (number 40), which happens to focus entirely on information design, wraps the debate in purely theoretical terms. Guest editor Andrew Blauvelt, director of graduate studies in graphic design at North Carolina State University, writes:

Following the tenets of information theory, the focus [of information design] is on the reduction of “noise” in the communication “channel” by eliminating extraneous content, simplifying formal options, and narrowing possible interpretations. The general economy of this kind of thinking leads from the many to the few. . . . Contrast this with a practice of graphic design that adopts a general economy of excess, leading from the few to the many: one solution produces a multitude of interpretations . . . the tendency is additive, not reductive.

MetaDesign turns theory into practice.

Of the recognized practitioners of information design, Erik Spiekermann, in particular, has kept the discipline alive and kicking. A tireless speaker, interview subject, and writer, Spiekermann, along with the widely respected work of his firm, MetaDesign, has done a great deal to elevate the status of information design to a viable—perhaps even a critical—



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specialty within the larger profession of graphic design.

MetaDesign opened its doors in Germany in 1979 and soon garnered notice for its design of the graphics, maps, and signage for the Berlin subway system. In 1992, the firm opened a San Francisco office to “adapt American theories of information design to a European look that is more typographically refined,” as president Bill Hill explained to the magazine *Online Design*. In 1996, the MetaDesign network expanded to London, and all told, the firm now employs around 175 people worldwide.

Like Vignelli, Spiekermann regards design as a problem-solving process. As he explains on the firm’s World-Wide Web site (www.metadesign.com), “To most people, design means producing something visual; [whereas] I mean looking at the problem, taking it apart and putting it back together again. Information design . . . is as much about process as anything else.”

In MetaDesign West, the firm’s San Francisco office, partner and creative director Terry Irwin invokes Sullivan’s “form follows function” to explain how they approach their work, much of which involves catalogs, manuals, signage, and in-

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teractive multimedia. “Our work is concerned about getting people from A to B,” she says, “or clearly informing them about something they need to know. We’re not working with extraneous elements—no decoration whatsoever. We create systems in which information can live.”

In a typical project, they might rewrite existing material for optimum clarity of meaning; establish information hierarchies that prioritize the way information is received; anchor the system with typography, colors, and graphics that facilitate communication; test the design for compatibility with international standards and different types of computers; fully document the system; and train the client to take over the project.

Irwin points out that designing information systems succeeds only when clients become part of the process, staying involved every step of the way. “If we’re really going to solve the problem,” she says, “we need their help. Every problem is different. Every learning curve is steep.” When they realize how much time active participation in the design process

entails, some clients balk at the commitment. She recalls one large publishing company that disappeared for a month and a half before agreeing to become an active member of the project team and sign the contract.

An identity project becomes an online system.

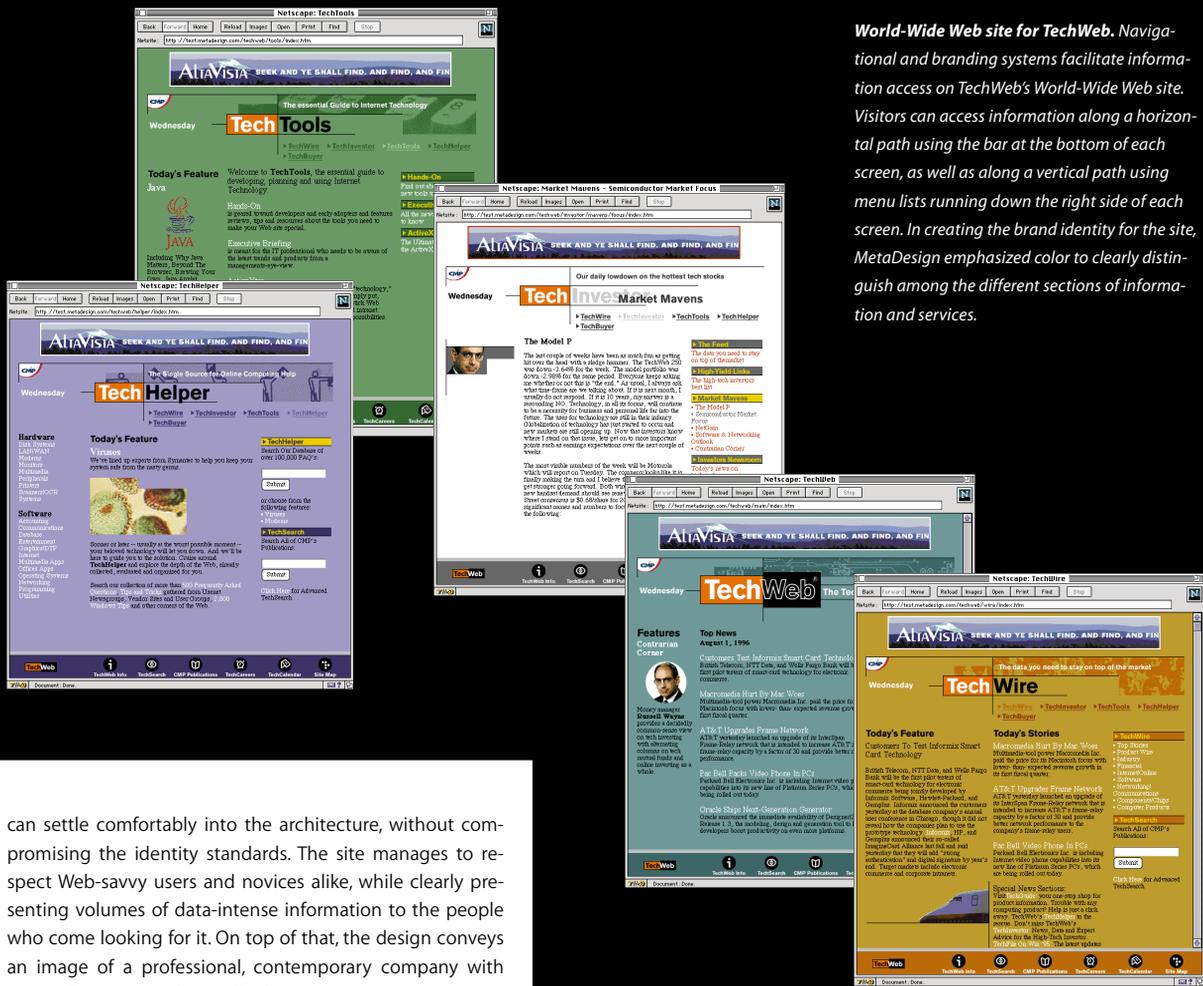
Many of the clients who approach MetaDesign West need to be convinced of the value of an information system, especially those who come asking for, say, an isolated brochure, a catch-all policy manual, or a quick rework of the company logo. TechWeb, a company that provides technology news on the World-Wide Web, approached MetaDesign about creating a new look for its up-and-running Web site. After reviewing the site, MetaDesign felt that more was needed—specifically, an overall site identity, a well-organized navigation system, and separate but compatible brands for the information subsections: TechWire, TechInvestor, TechTools, TechHelper, and TechBuyer.

“They were worried about money,” says Irwin, “but since their site was widely visited, it was important to improve its usability. Before we did anything, we wanted to talk to them about the problems inherent in their current site, so they agreed to pay for a day of our consulting time. We didn’t hard-sell, we just talked about the problems and what we might do to solve them.”

In the end, TechWeb hired MetaDesign to give its site a graphic facelift, a branding system, and a structural overhaul. The project team combined, created, deleted, and renamed sections and subsections, built an information architecture with flexibility for future adaptations, and designed a system of navigational avenues and conventions to guide users effortlessly to where they wanted to be, while showing them at all times where they happened to be. The overall identity is marked by uniform grid, type, and graphic standards, while each section is distinguished by its own color palette. MetaDesign also tested its work on several different computer platforms and monitors.

The crown jewel of the project is the 16-page “TechWeb Guidelines for Online,” which leaves little to chance for TechWeb’s in-house site stewards. No matter what changes the company makes in the future, new and revised information





World-Wide Web site for TechWeb. Navigational and branding systems facilitate informational access on TechWeb's World-Wide Web site. Visitors can access information along a horizontal path using the bar at the bottom of each screen, as well as along a vertical path using menu lists running down the right side of each screen. In creating the brand identity for the site, MetaDesign emphasized color to clearly distinguish among the different sections of information and services.

can settle comfortably into the architecture, without compromising the identity standards. The site manages to respect Web-savvy users and novices alike, while clearly presenting volumes of data-intensive information to the people who come looking for it. On top of that, the design conveys an image of a professional, contemporary company with something worthwhile to offer its customers.

Information design adds a few more steps to the process.

When information designers talk about process, the term takes on larger proportions than what most of us think of as the design process. For graphic designers, it usually means the initial client meeting, design iterations and reviews, and final client approval. For information designers, it's about wrestling a communication problem to the ground so that, in the end, the information communicates its intention with little effort on the part of the receiver. In good design, says Erik Spiekermann, "aesthetics is only about 10 percent of the work, and that's the icing on the cake; the other 90 percent is about getting involved in the process."

The information-design process starts with some serious strategic planning, usually through formal or informal research about the market, audience behavior and needs, existing communication materials, client objectives, and key messages. Mark Johnson's firm, The Understanding Business, calls this their period of "discovery." They even conduct information audits of a client's materials to determine what's redundant and ineffective, and what's really needed. They also develop what they call "information/business blueprints" to show the client in visual terms where both the problems and the opportunities lie.

More and more companies, Johnson says, recognize the

value of market research to help designers solve the problem at hand. "It used to be that a company's marketing department would hire a research firm to do market analysis, and the communications department would hire a design firm to communicate to the same market, and the two would be unrelated. Now, companies are beginning to see the value of using market research to help designers solve a communication problem."

Both MetaDesign and The Understanding Business encourage—even insist on—this research and planning phase to uncover the full scope of the problem and help reveal solutions. Increasingly, design firms are including communication strategists and/or market researchers on their staffs. The growth of design-strategy and usability firms like Chicago's Doblin Group and E-Lab suggests a widening acceptance of research, analysis, and planning as critical ingredients for successful design.

In practical terms, no one designer can cover all the bases: strategizing, problem analysis, methodology development, and the actual visual design—or what MetaDesign's Irwin calls the "form giving." Information design, she says, requires

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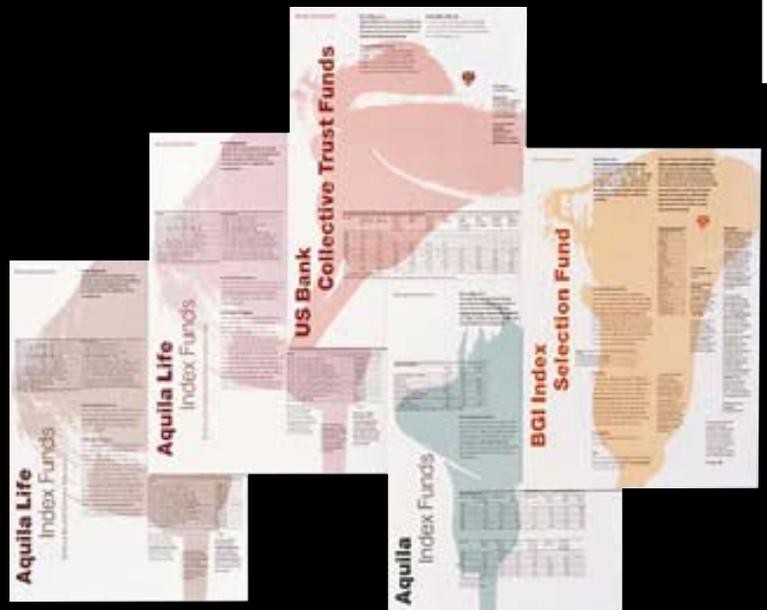
a designer who "loves type and is analytical, methodical, and organized. We've managed to teach intuitive designers to be methodical, but it's harder to help someone with an analytical orientation to be creative if they aren't already."

The answer for many information-design firms is the team approach, in which each part of the process is handled by a different person with a bent for that role. "Teams are good for the graphic-design profession," says Meredith Davis, head of the graphic-design department at North Carolina State University and president of the American Center for Design. "For information design, you can't get everything in one person. Projects need teams of individuals and/or other firms. But this is good. It makes us full-service providers, which makes us more grown-up. Graphic design is a young profession that rose out of the trades of typesetting and printing. Now's our chance to expand."

A reluctant design community holds back.

Although these leading practitioners of information design have clearly made a success of their particular brand of design, graphic designers at large seem to be adopting its principles slowly.

Mark Johnson feels that strategic planning—the critical front-end of the information-design process—is simply unpopular with designers. "The graphic-design community," he says, "may be warming up to information design, but it doesn't really understand the principles or process. They haven't embraced research and prototyping because they



think they can't bill for it, but more importantly, because they're uncomfortable with it." So, not only are many designers worried about clients rejecting design estimates that include planning or research, they don't really think it's in their job description.

Other information designers feel the reluctance goes deeper. "Most designers," says Erik Spiekermann, "are conditioned to regard the design of information as something that is somehow beneath them." If this is true, it seems to be fueled by many designers' intrinsic bias toward the way things look. "In the design field," says Irwin, "what happens every day is that people evaluate things on the way they look, not on how well they meet their objectives. You see this with design competitions—they're beauty contests, cosmetic exercises published without descriptions of the problem and objectives."

Richard Saul Wurman expresses this even more strongly in his latest tribute to information design, a big, beautiful, project-rich book called *Information Architects* (Graphis Press Corp., 1996):

[The Information Age isn't] the age that has been addressed by designers. Because of their access to computers... designers do make prettier pie-charts, now in 256 or in millions of colors, now in three dimensions, now exploding apart.... Each of these decisions has made the information less understandable. But apparently they are applauded by other graphic designers and by clients who don't seem to care about understanding....

There's always room for creativity.

Still, no one suggests that designs can't be both communicative and good-looking. When Sullivan wrote that "form follows function," he never meant to imply that architects should throw out aesthetics with the bath water. He merely wanted them to consider a building's purpose and function

BGI identity and collateral. In the time that MetaDesign has been working with Barclays Global Investors (BGI) in San Francisco and London, the company has gone through three name changes: from Wells Fargo Nikki, to BZW Barclays Global Investors, to BGI. Throughout the changes, MetaDesign's information system of clear, simple rules helped the identity to remain consistent. The plant metaphor of the fund-management brochures, designed by MetaDesign London, connotes controlled growth, a hallmark of BGI's fund-management strategy. Templates for fund fact sheets allow BGI offices to update constantly changing financial information at the local level.

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before setting out to design it. Sullivan's own buildings were richly adorned with metal and terra-cotta ornamentation, with what came to be called "organic decoration."

Although Irwin calls decoration her greatest "pet peeve" in design, she, like every other information designer, believes strongly in innovation. MetaDesign, she says, "breaks ground every day"—in information structures, graphics, and typography. Vignelli says that just because function is the goal, it doesn't in any way preclude innovation. "Look at [architect] Frank Gehry's work," he says. "His buildings are highly functional, while still having a personal, innovative, and original language that he continually refines. There's nothing traditional about a Gehry building."

Graphic designers in America, he adds, like to "put on the dress of the season, in an endless search for innovation. But innovation doesn't come from the search. It doesn't come from simply changing things, from reinvention. It comes from refining your personal vocabulary."

The work of both MetaDesign and Vignelli Associates relies heavily on typography to breathe life into information structures. MetaDesign's Spiekermann was originally known for his type designs, and Irwin says everyone in the firm shares a love of typography. "Typography is the greatest fun of all," adds Vignelli. "Since you're not using a lot of pictures in information design, you can play with type—with scale, with positive/negative, with space, rules, and contrast. You can really make pages sing."

The more graphic designers come to believe that function and form can coexist compatibly—one lending meaning, the other, enjoyment—the more likely they'll be to integrate the principles of information design in their work. As Andrew Blauvelt writes in *Emigre*, "We need to recover the idea that information design can be both enlightening and entertaining, illuminating and delightful, practical yet fanciful."

It's time for change in the age of unenlightenment.

In his new book, *Designing Business: Multiple Media, Multiple Disciplines* (Adobe Press, 1996), Clement Mok, founder of San Francisco's Studio Archetype, focuses entirely on how computer technologies can be used not to dazzle people with what's possible, but to create usable products and comprehensible communication. In explaining why this is important, Mok quotes Bill McKibben's book *The Age of Missing Information* (Penguin Books, 1992):

We believe that we live in the "age of information," that there has been an information explosion.... While in a cer-



Audi corporate identity. MetaDesign's German office began its association with Audi AG in 1994, when it was asked to create digital versions of the Audi logo. It later developed corporate-identity guidelines for the brochures created by Audi's advertising agencies worldwide. Today, the Audi Corporate Design Guidelines comprise a modular system of data sheets, each defining the parameters for a different application of the Audi identity. Available both in print and online, the guidelines cover every conceivable application, including signage.

The sheer magnitude of the information accessible to us makes an irrefutable case for why information design is so critical. Clear communication can lead us out of this "Age of Unenlightenment."

tain narrow sense this is the case, in many ways just the opposite is true. We also live at a moment of deep ignorance, when vital knowledge that humans have always possessed about who we are and where we live seems beyond our reach. An Unenlightenment. An age of missing information.

Most information designers would agree that the sheer magnitude of the information accessible to us makes an irrefutable case for why information design is so critical. Clear communication that adheres to the principles of information design can lead us out of this "Age of Unenlightenment." And in the business world, says Mark Johnson, it can even be "a strategic advantage, a bridge to the marketplace."

The shapeless morass of information engulfing the Internet has only complicated matters further. On the one hand, the Internet leads us to believe we can find anything, anytime. On the other, it sucks us into a vortex each time we try. Yet, by bringing the world to our doorstep, the Internet has made a convincing case for information design. As Meredith

Davis explains, "It has forced us to look at the structure of information and how to get it across." Now, writes Blauvelt, it's time for digital media to join a concern with function and structure with a desire for meaning.

That's where graphic designers can play an enormous role. In this paradoxical age of overly informed unenlightenment, designers, says Blauvelt, "as purveyors of symbolic languages, are among the most likely people to give form to, and thereby enhance, information products." It's a time of phenomenal opportunity for graphic designers, a time when they can light the way to understanding. "The age we're living in now," writes Clement Mok, "is an incredible time because of the extent to which [we] ... can redefine our roles. It's not often that anyone can influence his or her profession."

That's a heady thought, but one with resonance on a couple of levels. Designers who can find lucid solutions for complex problems are likely to serve not only a society awash in a tidal wave of information, but their own professional needs as well. As businesses wake up to the merits of being good, not just looking good—to functional communication as a competitive advantage—they may be more likely to hire designers who can help them bring order to the chaos. ♦

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