Mullet &Sano
—A Decade On
BY KEVIN NAREY

DESIGNING VISUAL INTERFACES

COMMUNICATION ORIENTED TECHNIQUES

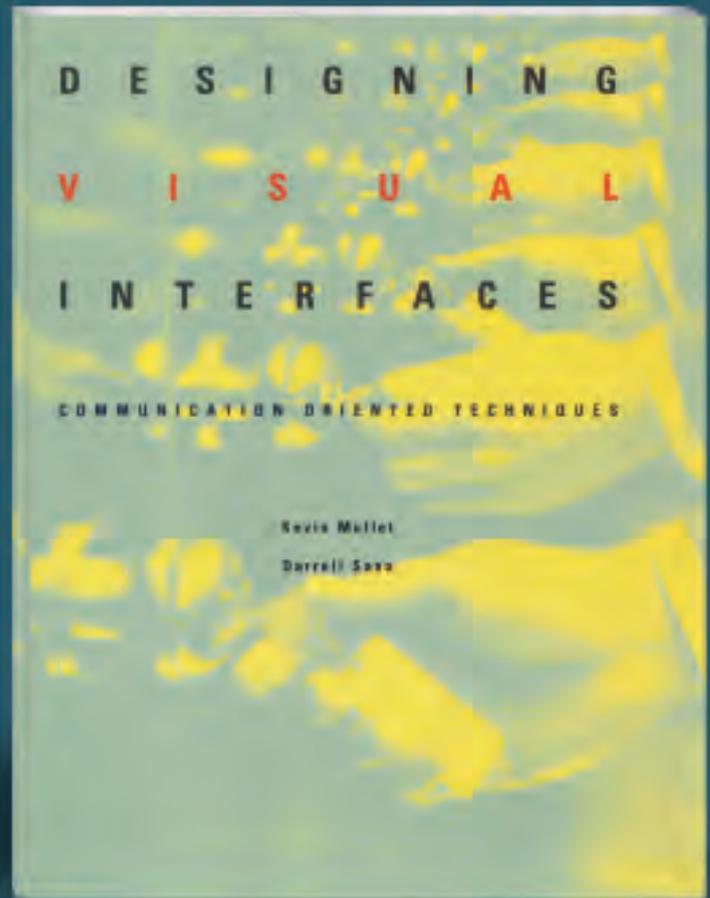Kevin Mullet

Darrell Sano

A decade has passed since the landmark publication *Designing Visual Interfaces* was first published. During that time, this influential book has made its way onto the bookshelves of UX practitioners the world over. With sales in the tens of thousands and rising, the authors' message appears to be standing the test of time—the book was ranked third in the CHI 2000 book survey.

UX magazine managed to catch up with Kevin Mullet and Darrell Sano over a virtual cappuccino and uncovered how their views have matured during a decade of change.

User Experience The commoditization of the market place is a hot topic among practitioners worldwide. What compelled you to go solo instead of staying with the larger tech organizations with which you originally made your mark?

Darrell Sano The technology industry, especially in the San Francisco Bay area, has been turbulent over the past few years. This turbulence seems to be the nature of the industry and profession. Many companies that I enjoyed working with simply no longer exist, such as Napster (the original concept), or were purchased by larger firms (myCFO), or simply shut down due to funding difficulties. Working within a high-tech company definitely offers benefits when working on a project, but the uncertainty poses a challenge for commitment, at least for myself in today's landscape. Working as an independent consultant affords location flexibility, project variety, and control. I believe these are three very good reasons for exploring a consulting business at this juncture. Having said that, there are certainly disadvantages for the consultant, one being the lack of continuous, on-going communication during design development.

Kevin Mullet Yes, I'll add to that by commenting on two recent concurrent projects, the first involving the design of consumer-oriented web interfaces for online photo sharing for Snapfish, and the second an X-client UI design for next-generation EDA (electronic design automation) tools with Synopsys. Only in a consulting environment is it possible to alternate between addressing the needs of electrical engineers designing a new microprocessor and of techno-phobic soccer moms who just want to share photos of their kids with Grandma. This is about as far apart on the complexity spectrum as it's possible to get, and it forces you to keep on your toes and stay focused on users and tasks.

UX Do you work with multi-disciplinary partners to achieve your working goal or are you alone during the solution design process?

DS In most startups I have worked with, I have been the sole UI resource, at least in the early stages of growth. Each company certainly has adequate engineering skills, sometimes a product management resource or two, but clearly lacks UI design expertise and realizes this fact. Most environments are starving for UI help! The design process for me is a continuous cycle between collaboration and solitary, focused design. Sometimes I collaborate with a colleague, most recently with Kevin. It has been both rewarding and challenging. The collaboration has forced us to clearly articulate our skills and what we bring to the project, individually, and together as a virtual team.

KM I too am often the sole outside design resource, but I always collaborate closely with someone working inside the company. I find this is a good way to compensate for the common problem of having only a single in-house designer, which is typical for all but the largest software

companies. A product development organization gets the greatest boost in the quality and innovation of its design work when moving from one to two designers. There are lots of reasons for this, but the most important factor is the ability to rapidly iterate on novel designs in raw form while sorting the promising from the pedestrian ideas.

I've always been a bit of a cross-functional person myself, so I find it easy to work closely with developers as well as designers. On the most successful projects, in fact, you work closely with a lead representative from each discipline. I occasionally bring in subcontractors for prototyping and development work, usability testing, or writing, and I actually have a summer intern this year who is turning out to be very helpful. My goal is to stay small and agile, and to maintain enough separation to be able to do most of the work remotely.

UX Who has been the most influential design figure in your career to date? What have they designed that makes them so iconic?

DS I would have to say my wife, Jean Orlebeke. The quality of her work, the application of her extremely talented design skills to print, identity and communication design, books, and now fabrics and interior design, is inspirational. Great designers transcend the medium and I am constantly in awe of her work, dedication, and amazing product design skills across disciplines.

Design for "Living with the Genie" conference by Jean Orlebeke.

KM My design education at the Ohio State University emphasized the kind of systematic design philosophy developed at the Hochschüle für Gestaltung at Ulm, Germany in the 1950's. I found great inspiration in the writings of Paul Rand and the design systems of Josef Müller-Brockmann. If we're looking for an icon, however, it would have to be Adolphe Mouron Cassandre, whose monumental, super-graphic poster designs burst forward in the 20's and 30's to form a highly stylized visual and spatial language all his own. I find Cassandre's integration of space and form as mesmerizing today as the day I first saw them. While his work owes much to the earlier De Stijl and Constructivist movements, he was uniquely able to fuse these formal languages with an appealing populist commercialism to produce a unique form of visual propaganda that has never really been equaled as a body of work.

UX Do you have plans for a second book?

DS When we have the time! With *Designing Visual Interfaces*, we tried to author a book that would not become outdated by trends or technologies, focusing more on timeless principles and methodology. Having said that, I believe it would be beneficial to provide examples from the wireless mobile device domain, an area I have recently been involved in. And perhaps recent web technologies that have allowed for richer user interfaces. Our book focused on the static quality of the display, and it would be interesting to address aspects of time and space, motion and animation.

KM Yes, we get this request all the time. While we know the principles are completely generalizable across any interface presentation style, it seems that many of our readers are distracted by the historical GUI styles that now seem strange and unfamiliar to them. And of course, this was before the web exploded onto the scene to change everyone's world. So yes, we are collecting examples and will definitely be publishing a follow-up work that addresses these issues and captures our evolving thinking on the subject.

UX Within the last decade after your book was published, what do you perceive as being the most defining moment in the worldwide digital product design industry?

KM If we're looking for a defining moment, it would have to be the return of Steve Jobs to the helm at Apple Computers. In addition to turning around a company a lot of us care very deeply about (perhaps "saving" would not be too strong a word), he has re-established the iconic product design and marketing values first seen in the original Macintosh. While there is certainly much to criticize in Apple's design work since then (particularly in the human factors of input devices), at its innovative best it has helped lead the entire industry out of an era of generic putty-colored boxes and pedantic visual languages and into an era of consumer-friendly yet sophisticated design. Probably no other company has done as much to advance the culture of design, and the public's awareness of the value it adds, through such breakthrough products as the iMac and iPod, through the simplicity and focus of the various iLife applications, and through the visual and sensory qualities of the transparent plastic and brushed aluminum materials in the hardware design language.

DS My defining moment is the Internet bubble bursting, not from a financial perspective, but because of industry's realization that products and services must solve a problem that people have and provide value to the end user. Throughout my career, including four and a half years at Netscape during the rise of the Internet, my focus, and the focus of my design team, was to solve our customer's problem, to design software to help their workers or their customers attain a goal efficiently and easily. There was a Danish design exhibit in Chicago during my graduate years at the University of Illinois, and I always remember the title of this exhibit: "The Problem Comes First." This has become my design motto throughout my career.

UX Keeping in mind that the answer is ultimately contextual, which of the following business models do you feel has the most effect in terms of product design: a. In-house multi-functional team built on a widely

adopted user-centered design culture, or b. External business consultancy with heavy design focus?

DS Based on experience, I would say the in-house team provides the most effective solution. There is no substitute to working day in and out with the development team, participating in informal, unscheduled design activities, and importantly, being there and able to influence the organization towards good design from within. Each day is design education for others in the organization, and part of the designer's job is to educate and influence. And the wealth of knowledge and domain experience within the organization also benefits the designer.

An outside consultancy will always be viewed as "outside." I have also seen less than stellar work produced by well-known consultancies, where the designs presented were simply out of step with company goals and objectives. The consultancy simply did not have the latest information, a deep, thorough understanding, and was out of touch with ever-changing company direction. And in a startup, rapid, shifting changes is reality. It was not the fault of the consultancy, but the challenge of the environment.

KM As Darrell suggests, the in-house cross-functional team is essential to the long-term success of any design program. You can hand off a point design to an outside consultancy, or you can bring in domain experts to create a programmatic solution within a specific domain, but the mission-critical strategic design work needs to be owned and tended by the holders of the UCD vision within the company. I believe consulting adds the greatest value when it brings a broader "outside" perspective to the table and when it is encouraged to shake up existing ways of thinking and generate novel directions that ought to be considered. In this mode of operation, the consultant should be encouraged to develop ideas to their full potential, with appropriate use of prototyping and visualization techniques, regardless of the constraints and demands of the current or upcoming releases, platforms, and schedules.

Of course, a lot of the work that we take ends up being very pragmatic, project-oriented, and schedule-driven. The clients realize they don't have time to do it right but they hope we can help them "make it a little better." This is a seductive business model (for both parties—most clients are fixated on their short-term problem for business reasons and the designer genuinely wants to help), but it should be avoided where possible, except as a stepping-stone to more serious design work. For seriously defective products, making things "a little better" is unlikely to impress users, external reviewers, or even management, who may find it hard to recognize the few incremental improvements in an ongoing sea of mediocrity. It's usually better to husband the resources and concentrate changes into a "big bang" release that addresses both fundamental and superficial design issues.

UX Do you prefer to see your practice as designing relationships with the customers or as designing the built product?

KM Clients generally want us to focus on the design of the products themselves, and that would certainly be our preference, but we often find large deficiencies in the degree to which the product concept and requirements—not to mention the user and task characterizations—have been formalized and understood. Ideally these concerns should be owned by marketing and product management organizations, but the near universal ineptitude—or perhaps it's just a lack of interest—in these areas for most technology companies means that

we almost always have to wade in and define them for ourselves. I always insist on seeing the written set of product requirements and frequently need to provide a refresher course on what requirements are and how to write them in a form that will be useful to the design effort (a lot of development organizations seem to think "PRD" means "Preliminary 'Realistic' Design" instead of "Product Requirements Document"). If I can't convince the client to spend the money on user profiles and a formal task analysis, I draw up a set of working assumptions based on conversations with the relevant stakeholders and my own experience and get them to sign off on that. You can't do design with user and task assumptions, so it's best to make them explicit and catch any disconnects as early as possible. Even if you have to do it on spec.

DS Since I am a consultant, I would have to say the emphasis is on the design of the built product, though there are always customer relationships that matter. As part of an internal team, however, the importance of managing relationships internal and external to the company is far greater. Engineering, product management, QA, documentation, and marketing are the customers for an internal design group. The external relationships are with the end users of the system, who can vary from corporate business users to young consumer adolescents. Everyone in the design team needs to build positive relationships, encourage trust, and deliver the best quality possible. That's how, I believe, you begin to influence design across the organization. **UX**

ABOUT THE INTERVIEWEES

Darrell Sano has more than twenty years of product design experience, beginning at Sun Microsystems, where he collaborated with Kevin Mullet and co-authored Designing Visual Interfaces: Communication Oriented Techniques in 1995. Since then, he has worked for Netscape, myCFO, a wealth management financial services firm, Napster, and then Ruckus Network, a digital media service for college students. Currently consulting, Darrell has delivered design audit and reviews, strategy and advanced conceptual design, visual design and branding, and detailed HTML and design specifications.

Kevin Mullet is founder and principal of Experience Design Reactor in Reno, Nevada. His consulting practice draws on fifteen years of industry experience as a user interface designer, architect, and manager at Sun, Macromedia, Netscape, Propel, and numerous Internet start-ups. Kevin has spent much of his career working on visual design and representation problems, as well as conducting design workshops and presenting tutorials to thousands of people throughout the U.S., as well as in Canada, Finland, Denmark, Italy, and the Netherlands.

ABOUT THE AUTHOR

Kevin Narey Kevin Narey has recently moved into IT Consultancy having previously been a UI Design Lead for gedas UK, the IT arm of Volkswagen Group UK.
He has worked in cross-functional project teams on enterprise applications for Audi, VW, Seat and Skoda whilst devising software processes to support essential design activities in solution development practice.