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Women in Design FRICTION • PIONEERS • SWAIN SON



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The quarterly publication of the Industrial Designers Society of America (IDSA), INNOVATION provides in-depth coverage of design issues and long-term trends while communicating the value of design to business and society at large.

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Left: A woman cuts banana fibers by hand at the Bana factory in Mpigi, Uganda. See page 56.



Cover: Eva Zeisel holding "Talisman" mug, 2004, Lomonosov Porcelain, St Petersburg, Russia. Photo ©TalismanPHOTO. See page 45.

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FROM THE EDITOR



oth Donald Trump and Bernie Sanders are creating a lot of friction in the world today. Viewed from a certain perspective, this is a good thing. As establishment outsiders, they are shaking up the political world in a way that is causing people to ask more questions and question more conventions. It's a safe bet that this process will pay dividends eventually. People in both of the major political parties are having to reexamine the status quo and question orthodoxy. Opportunity is being created for perhaps a third party to emerge. Said another way, via this contentious arguing, friction is creating opportunity—illustrating the conclusion that friction is not always a bad word even though it's generally seen that way.

Mostly we try to avoid friction. It's natural, especially in groups or collaborative team situations. Few people or groups actively seek out confrontation. But friction, more specifically *creative friction*, can be a very productive thing. One might argue that it should be a key element in every design engagement and effort. Understood and used well, it can lead to better questions, answers and ideas. It may at first seem counterintuitive, but friction used in a positive way, in the service of innovation, should be encouraged.

In his seminal book *The Creative Priority*, legendary designer Jerry Hirshberg, the fellow who founded Nissan's first West Coast Design Studio, introduces a number of fundamental concepts important to nurturing creativity in

We've done well when there has been wide-open risk-taking–like with the Z and Xterra, when no one is doing cars like that, and the sales and marketing guys say there is no place for it.

FROM THE EDITOR

teams. One of them is called "embracing the dragon." It's all about learning from creative friction, a terrific ideal. I use it as a tool in an innovation and creativity class I teach at Northwestern University to demonstrate the value of creative friction. The idea is to have students role model being a designer and an engineer and to have them face off over something to be designed. It could be anything. A pen, a remote, a white board eraser. It helps to have an object to hold and to have them stand up in front of the class.

First the designer makes the argument of why and what needs to be done: which aesthetics are important, which human needs are being met and why there is a need for investment and costs. Next the engineer responds in kind regarding the realities of manufacture: what it takes to get it there, where the costs may exceed the benefit, what kind of investment is required. Once that is accomplished, the two change places. I make them physically change places and intellectually change roles. The engineer is now asked to make the design argument and vice versa. It's not easy. All the words for and against have already been used. Adopting another's view is hard when you just argued against it. But if the effort is made—the "dragon is embraced"—then a very useful perspective and an amazing empathy are acquired. The result of the exercise is almost always a newfound kind of respect for the other side's concern.

Lately the design profession is going through a good amount of creative friction relative to its expanding influence and participation. It is causing conversations that are shaking up the status quo. What is the new role of design regarding user interface and user experience? Is design thinking forever or played out? Is the profession exclusive or inclusive? Is IDSA? Is the practice of industrial design diverse?

This issue of INNOVATION examines more than one orthodoxy that can certainly shake up our thinking and help us evolve. I hope you enjoy the perspectives. Huge thank yous to Nancy Perkins, FIDSA and Ti Chang, IDSA for their work in assembling the content you find within, also to Ricardo Gomes, IDSA, for his challenge and push. The time is right for us to explore new methods and ways. Our political world is being shaken up. Innovative companies like Uber and Airbnb are challenging established business models. Societal norms and morays are being tested. Creative friction, it would seem, is all around us. The thing we need to learn to do is to embrace it.

> -Mark Dziersk, FIDSA, INNOVATION Executive Editor mark@lunar.com

CORRECTIONS

The Winter 50/35/50 issue of INNOVATION was an enormous undertaking by the guest editors Carroll Gantz, FIDSA, Vicki Matranga, H/IDSA, and Bret Smith, IDSA. Several errors were found in the issue; none of these were the responsibility of those volunteer editors. IDSA deeply apologizes and has updated the electronic version of the issue found at www.idsa.org/innovation.

In the 50 most notable IDSA members section, asterisks were used to indicate deceased members. James Fulton, FIDSA, and Raymond Loewy, FIDSA, should have been marked as deceased, while Robert Blaich, FIDSA, (see p. 11) and Ed Zagorski, FIDSA, (see p. 12) are very much alive.

Budd Steinhilber, FIDSA, was kind enough to point out a problem with the IDSA logo evolution story. On page 13, two versions of the 1976 logo were printed rather than the contrasting 1973 and 1976 logos. Tepper & Steinhilber did the original design in 1973 as well as the requested revised version in 1976. The logo was changed to make the right stroke of the "A" more dominant than the original left stroke.



Revised 1976 logo



By Nancy Perkins, FIDSA

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Nancy J. Perkins is principal of Perkins Design Ltd., an industrial design consultancy for consumer products, mass transit and industrial equipment. Her corporate experience includes Sears, Jarden Consumer Solutions and CEO of a nonprofit employing people who are blind. She is an expert witness and a graduate of the University of Illinois at Urbana–Champaign, and was awarded an IDSA Fellowship in 1993.

Women in Design CELEBRATING & REFLECTING ON CHANGE

he following series of articles is a true celebration of the 25th anniversary of IDSA's first section, the Women's Section. The section has evolved over the years, but has always fulfilled the need for a resource for the exchange of ideas and camaraderie. **Sharyn Thompson, FIDSA**, and I founded the section in 1991 to highlight the career achievements of women.

My current co-chair, **Ti Chang, IDSA**, as well as my coeditor for this issue, has ambitiously devoted significant energy to creating outstanding events in San Francisco that have focused on viewpoints unique to women, providing interactive opportunities for the participants. Of the future of women in design, Ti says, "My hope is that by creating a forum and a platform to recognize the many contributions of women designers, we can soon easily name as many female designers as easily as we can male designers. Having role models is an important way to inspire our generation of designers and the next."

This issue of INNOVATION celebrates the fact that women students are in the majority at many schools that teach industrial design. Today it is not unique to see women winning IDEAs and frequenting the stage to receive recognition for their creativity. We celebrate their achievements, and I know Sharyn would be so gratified to see that progress.

For this series of articles, we wanted to include a wide scope of experiences to provide examples to young women in particular. The authors we invited for this issue reflect the career diversity of the profession, although we would have liked to include many more women but were limited by space.

Marketing strategies differ when appealing to women, as **Marti Barletta** explains in her article. When I first noticed her book *Marketing to Women* while browsing through Barnes & Noble, the title immediately caught my attention. I was elated that finally the subject was being given scholarly attention.

The opportunities open to women in industrial design have been expertly explained by **Angela Yeh**, **IDSA**, of Yeh ldeology. Her inclusive, personable approach in this field has been so welcomed and successful. She discusses the need for more design leaders who are women.

Jasmine Burton is embarking on solving critical needs in Africa through her social entrepreneurship Wish for WASH. She has been featured in a TED talk, and we applaud her for immediately taking on the challenge of managing a start-up enterprise, one that will significantly impact the lives and safety of women and girls.

Many of our authors have enjoyed the achievement of having clients invest resources in their ideas for manufacturing production, a crucial measure of design's effectiveness and impact on business. For decades, **Joyce Thomas**, **IDSA**, has enjoyed success in corporate and consultant positions in numerous consumer product areas. As she and **Megan Strickfaden** have developed their respective education programs, they have enriched student experiences through many years of honing their methods. The experience they share with students is a priceless gift to serve as advice for our future designers.

Carole Bilson, IDSA, charts her career path, sharing valuable insights about her achievements as a designer, a manager of large corporate design staffs and now as president of the Design Management Institute. In her current position she continues the important work and influence of the DMI.

Issue co-edited by Ti Chang, IDSA

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Ti Chang is the co-founder and vice president of design of CRAVE, which specializes in discreet and modern sex toys. Previously she founded INCOQNITO, a line of intimate accessories that double as fashionable jewelry, which was acquired by CRAVE. She has held positions with such major consumer brands as Trek Bicycle and Goody Products, where she helped pave the way for women by serving as the first female industrial designer at both companies.



Qin Li discusses the importance of perseverance and the priorities at fuseproject. Her insights as a design leader and about design as a way of life are ideals that resonate with all of us.

Amina Horozic reminds us of how war can shape experience. The fearlessness she exhibits in developing her work in new environments highlights the hope that design can make a huge impact on the world—for the good.

As we look to the future, STEM programs worldwide will

help girls develop the skills they need to succeed in technical and design professions. **Anna Lewis**' book *Women of Steel and Stone*, published in 2014, has risen to the top of many best-seller lists, including the number-one best-selling young adult/teen book for architecture and in the top 10 of young adult/teen books on science and technology and young adult/teen women biographies. Her insights as an author and industrial designer outline a path to implement continuous progress to encourage girls to consider design careers.

Reflecting on the Changes During the Past Four Decades

In 1986, *ID* magazine published an article entitled "Against the Odds" written by Lisa Krohn. I was glad to be one of the five women she profiled, across the page from Ray Eames. Since then many of the issues that impact women's career choices that she mentioned in the article have subsided. We can celebrate that positive change. Critical mass does make a difference.

In the 1990s it was interesting to see how women took control of their own professional visibility to tell their stories. The founding of the Association of Women Industrial Designers (AWID) by Rebecca Welz is a case in point. In 1994 Rebecca and the AWID team organized AWID's exhibit entitled Goddess in the Details at the Pratt Manhattan Gallery.* The exhibit and catalog included the work of 23 women, several of whom were firsts: furniture designer and architect Eileen Gray; Maud Bowers Rice, a graduate of Carnegie Tech and the first person in the United States to receive a degree in industrial design; and my great aunt, Anna Keichline, whose patents and architectural achievements have inspired me my entire adult life. Also featured were the 1950s era Damsels of Design at General Motors (left) where women were welcomed to design the interiors of cars but not the exteriors or dashboards. Contrast that notion with the recent press about Michelle Christensen's design leadership in creating the highly acclaimed Acura NSX (http://nsx.acura.com/redefining_an_icon). Progress has been made.

Furthering the control of one's own visibility, and in a reaction to the low level of mainstream press about women, the 1990s saw an increase in the number of design books written by women about women: the Bard Graduate Center's retrospective exhibit and book *Women Designers in the USA 1900–2000* edited by Pat Kirkham, *Feminine Ingenuity* by Anne L. Macdonald and *Design and Feminism* edited by Joan Rothschild. These publications provided a forum for independent discussions about women's roles in the design professions. It was clear that if the mainstream press fell short of including women's achievements, organizing new venues was needed. Access to information is so crucial for young women, who always want to know what women are doing in our field. The need to showcase role models has never changed.

In the *Philadelphia Inquirer*, an article by columnist Eleanor Morton entitled "More About the Advantages of Having a Woman as Architect for the Home" appeared in 1936. She quoted Anna Keichline's insights on the subject: "The equipment of houses has been developed by people who seldom have experience using or operating these materials. Women as engineers or architects have immense opportunities there. There should be scientifically built houses and this can be done better by women than men. Indeed this will never be accomplished until women take hold." Keichline was speaking to the ideas women would bring to the process of the design of their own environments if they were involved in the process.

Extrapolating from that thought, of course, now women make contributions in every area of society, including industrial design. As a college senior, when asked by my professor to set my career goals, I responded that I wanted to work in the design of society's systems, meaning that design thinking could be applied to any aspect of life, institution or process to solve any problem, and that it should not be limited to traditional manufacturing realms. I believe that designers have a distinct advantage as business leaders because of their design process skills. I leaned on this skill daily in my former role as a CEO, and I'd encourage others to take on the challenge of being a CEO if the opportunity presents itself.

As the following articles and IDSA's archives can attest, women are taking hold, impacting all areas of industrial design. We need to move on to creatively solve our new societal challenges, rather than rehash the old ones. More leadership is required and is the work ahead of us. I have no doubt that women and men can create that healthier future. Perseverance is required and we, in the design professions, are already very good at that.

*Goddess in the Details catalog and exhibit credits: Association of Women Industrial Designers © 1994 by Anice Doak, Erika Doering, Darlene Lee, Laurene Leon, Patricia McHugh, Sharon Geller Metal, Meg Prata, Susan Scior, Patricia Slee, Denise Spoering, Rachel Switsky, Rebecca Welz, (Founder), Eleanor Moretta, (Director of Exhibitions at Pratt Institute) Designed in Austin, Texas

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