

INNOVATION

FORM

EVA ZEISEL ■ SHOWCASE ■ WHO WE ARE



THE **FUTURE** IS...

IDSA 2012 INTERNATIONAL CONFERENCE • **BOSTON 8.15.12** • PEOPLE TECHNOLOGY BUSINESS

The Future Is... **BOSTON 8.15.12**

Get ready for a conference that ignites:

**IMAGINATION.
EMOTION.
SENSES.
PASSION.
INTELLECT.
CREATIVITY.**

The Future Is... about **US**.



–Austen Angell, 2012 Conference Chair

Find out more and register: <http://www.idsa.org/idsa-2012-international-conference>

QUARTERLY OF THE INDUSTRIAL DESIGNERS SOCIETY OF AMERICA

SPRING 2012

INNOVATION[®]



IDSA[®]

Publisher

Roxann Henze
IDSA
555 Grove Street, Suite 200
Herndon, VA 20170
P: 703.707.6000 x102
F: 703.787.8501
roxannah@idsa.org
www.innovationjournal.org

Executive Editor

Mark Dziersek, FIDSA
Managing Director
LUNAR | Chicago
mark@lunar.com

Advisory Council

Gregg Davis, IDSA
Alistair Hamilton, IDSA

**Managing Editor
& Designer**

Karen Berube
K.Designs
3511 Broadrun Dr.
Fairfax, VA 22033
P: 703.860.4411
k.designs@cox.net

Contributing Editor

Jennifer Evans Yankopolus

Advertising

Katie Fleger
IDSA
555 Grove Street, Suite 200
Herndon, VA 20170
P: 703.707.6000 x104
F: 703.787.8501
katief@idsa.org
advertising@idsa.org

Annual Subscriptions

Within the US	\$60
Canada & Mexico	\$75
International	\$110

Single Copies

Fall/Yearbook	\$35+ S&H
All others	\$17+ S&H

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.

FORM

- 16 Form Is Function**
by Tucker Viemeister, FIDSA
Guest Editor
- 18 Design to Touch, Use & Inhabit**
by Bill Moggridge, FIDSA
- 20 Bringing Form to Light: Designing with a New Lighting Technology**
by Michael McCoy, IDSA
- 22 FORM**
by Karim Rashid
- 25 A Form Speaks a Thousand Words³**
by Gregg Davis, IDSA
- 28 This Is Rhythms**
by Karen Gaylord
- 32 Industrial Design and Its Education: Defining Its Visual Responsibility**
by Kathryn Filla and Martin Skalski
- 38 Hands & Minds**
by Hartmut Esslinger
- 40 The Transformative Power of the Design Studio: The Path to a Black Belt in Design** by Peter Chamberlain, IDSA and Craig M. Vogel, FIDSA

- 43 The Formlessness of Form and Contemplative Biology**
by Steven Skov Holt, IDSA
- 48 Communicating Design Intent with Form: Visual Intelligence**
by Jeffrey Kapec, IDSA
- 52 Eva Zeisel Tribute**

Additional Contributors: Ayse Birsel, Scott Wilson, IDSA, Ross Lovegrove

FEATURES

- 14 The Designer's Dilemma, Portfolio and Matrix: Feeding the Development Pipeline** by Jim Kendall, IDSA

IN EVERY ISSUE

- 4 From the Executive Editor**
by Mark Dziersk, FIDSA
- 7 Design Defined**
by Allen Samuels, IDSA
- 8 Letters to the Editor**
- 10 Book Review**
by Scott Stropkay, IDSA
- 11 A Look Back**
by Carroll Gantz, FIDSA
- 54 Showcase**
- 64 Signposts**
by Alistair Hamilton, IDSA

PATRONS OF INDUSTRIAL DESIGN EXCELLENCE

INVESTOR

IDEO, Palo Alto, CA; Shanghai, China;
Cambridge, MA; London, UK; San Francisco;
Munich, Germany; Chicago; New York
Jerome Caruso Design Inc., Lake Forest, IL
Masco, Taylor, MI
Procter & Gamble, Cincinnati, OH
Webb deVlam Chicago, Chicago, IL

CULTIVATOR

Altitude, Somerville, MA
Cesaroni Design Associates Inc., Glenview, IL
Continuum, Boston; Los Angeles; Milan, Italy;
Seoul, South Korea; Shanghai, China
Crown Equipment, New Bremen, OH
Dell, Round Rock, TX
Design Concepts, Madison, WI
Eastman Chemical Co., Kingsport, TN
Hewlett-Packard, Palo Alto, CA
IDI/Innovation & Development Inc.,
Edgewater, NJ
Lunar Design Inc., Palo Alto, CA
Metaphase Design Group, St. Louis, MO
Nokia Design, Calabasas, CA
Smart Design, New York; San Francisco;
Barcelona, Spain
Stanley Black & Decker, New Britain, CT
Teague, Seattle, WA
Tupperware, Worldwide

Charter Patrons indicated by color.

For more information about becoming a Patron and supporting IDSA's communication and education outreach, please contact Dawn Hatzer at 703.707.6000 x119.

Statement of Ownership

Publication: *Innovation*
Publication Number: Vol. 31, No. 1
Filing Date: 9/21/11
Issue Frequency: Quarterly
No. of Issues Published Annually: 4
Annual Subscription Rate:
\$60 Domestically, \$110 Internationally
Mailing Address: 555 Grove Street, Suite 200
Herndon, VA 20170
Mailing Address for Headquarters: Same as above
Owner & Publisher: Industrial Designers Society of America,
555 Grove Street, Suite 200, Herndon, VA 20170
Managing Editor: Karen Berube
Issue Date for Circulation Data: 6/21/2011

	Ave. Year	Single
Total Number of Copies:	4,531	4,725
Paid/Requested outside county:	3,913	5,962
Paid in county:	0	0
Sales through dealers/carriers:	0	0
Other classes mailed through USPS:	298	313
Total paid:	4,092	6,275
Free distribution outside county:	0	0
Free distribution inside county:	0	0
Free distribution mailed through USPS:	0	0
Free distribution:	94	0
Total distribution:	4,186	6,275
Copies not distributed:	775	647
Total:	4,961	6,922

Cover photo: Shadow of an Eva Zeisel pitcher. Tucker Viemeister, FIDSA

Innovation is the quarterly journal of the Industrial Designers Society of America (IDSA), the professional organization serving the needs of US industrial designers. Reproduction in whole or in part—in any form—without the written permission of the publisher is prohibited.

The opinions expressed in the bylined articles are those of the writers and not necessarily those of IDSA. IDSA reserves the right to decline any advertisement that is contrary to the mission, goals and guiding principles of the Society. The appearance of an ad does not constitute an endorsement by IDSA. All design and photo credits are listed as provided by the submitter. *Innovation* is printed on recycled paper with soy-based inks. The use of IDSA and FIDSA after a name is a registered collective membership mark.

Innovation (ISSN No. 0731-2334 and USPS No. 0016-067) is published quarterly by the Industrial Designers Society of America (IDSA)/*Innovation*, 555 Grove Street, Suite 200, Herndon, VA 20170. Periodical postage at Sterling, VA 20164 and at additional mailing offices. POSTMASTER: Send address changes to IDSA/*Innovation*, 555 Grove Street, Suite 200, Herndon, VA 20170, USA.

©2012 Industrial Designers Society of America. Vol. 31, No. 1, 2012; Library of Congress Catalog No. 82-640971; ISSN No. 0731-2334; USPS 0016-067.

Advertisers' Index

- c2** 2012 IDSA Conference
1 LaFrance Corp.
c4 Lunar
c3 PTI
9 Stratyasys

Far Left: Jessica Rosenkrantz and Jesse Louis-Rosenberg for Nervous System





FROM THE EDITOR



THE FORM ISSUE

“Connecting users emotionally with a product is the new killer app, function is the new table stake.”



Michael Lozano

At some point everyone has experienced the idea or heard the adage that “beauty is in the eye of the beholder” or, as explained by the iconic Scottish philosopher David Hume, “Beauty in things exists in the mind which contemplates them.”

So if beauty exists in our minds, how does that happen? The celebrated late art historian Rudolf Arnheim, author of *Art and Visual Perception*, said that it has everything to do with form and how we perceive it. Which then begs the question: What role does form perception play in our contemplation of physical products and their function?

Maslow suggests that the most vital human needs start at the bottom of his famous pyramid and that the need for self-esteem and confidence is at the top of the same pyramid, far above the more important initial desires, say our desire for food and shelter. Of course, Maslow never met an iPhone.

As knowledge work gives way to a creative age, it also appears that beautifully formed objects and the self-esteem we derive from attaching ourselves to them have come of age in a more meaningful way than Maslow ever imagined.

Far from being the premium nonessential element, beautiful forms and answers may be the only way to survive in the automated and overly abundant product and service markets we experience today. Positive perceptions of form trigger the power of emotional connection that consumers seek in the offerings they buy and use, whether they are physical products, services, systems, software products or brands. Connecting users emotionally with a product is the new killer app, and in this regard, form rules and function is the new table stake.

Said another way, the performance and function of products and services have reached such a high state of accomplished parity that beauty, both in physical form and performance/interaction-based beauty, now dictates the success or failure of products. Interestingly, in the same way, selection serves to propagate species. It’s a fact. Honeybees are drawn to the most beautiful flowers and fragrances first.

Consider, for example, any tablet computer or e-reader device. As a group they are all fantastic and are all feature equal. Which one will endure? I would suggest that the one with the most beautiful form has the best shot.

Beauty comes in many forms, and its importance is usually underappreciated. The author and poet John Keats once said, “A thing of beauty is a joy forever; its loveliness increases; it will never pass into nothingness.”

Tucker Viemeister, FIDSA is a designer who has always understood this truth. He is an advocate for beauty. This issue of *Innovation* celebrates his eye and mind, and all the work he put into guest editing it. Thank you, Tucker.

—Mark Dziarsk, FIDSA, *Innovation Executive Editor*
mark@lunar.com

The World Stage

The first-ever meeting of IFI, Icograda and Icsid was held in Taipei, Taiwan, at the 2011 International Design Alliance Congress. While attending I found myself in the middle of a new world view on design in a country that is dedicating, by some reports, one-sixth of its economy to changing the idea of “Made in Taiwan” to “Designed in Taiwan.”

The Congress was designed as a dialogue between designers and nondesign stakeholders in a unique summit format. A nondesign expert presented a topic of global or social importance immediately followed by a panel of design thinkers from product design and graphic architecture who interpreted the talk and offered perspective.

The IDA's primary objective to become the global voice of design and an enabler of innovation was given a kick start at this event. I left Taipei with the idea that design's future on a global scale is bright and in many ways is just now beginning.

Icsid

Icsid protects and promotes the interests of the industrial design profession, serving as a unified voice through which members can be heard on an international platform. www.icsid.org

Icograda

Icograda promotes communication designers' vital role in society and unifies the voices of graphic designers and visual communicators worldwide. www.icograda.org

IDA

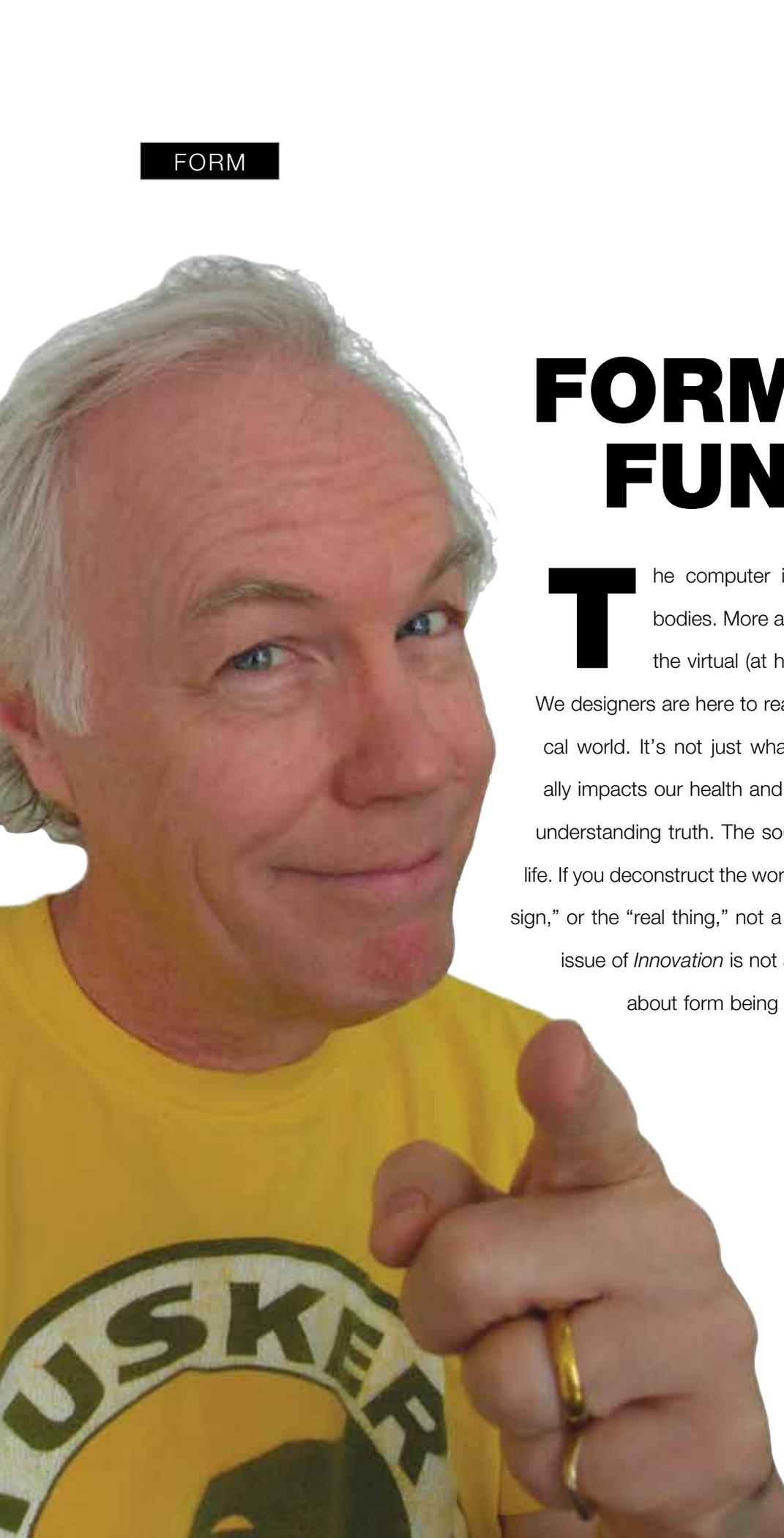
IDA is an alliance between Icsid, Icograda and IFI that advocates for the mutual interest of all the design professions. www.icsid.org/about/IDA.htm

IFI

IFI connects the international community of interior architecture/design in order to further the impact, influence and application of the design of interiors, promote global social responsibility and raise the status of the profession worldwide. www.ifeworld.org

—Mark Dziarski, FIDSA, Innovation Executive Editor
mark@lunar.com



A man with white hair and a yellow t-shirt is pointing at the camera. The t-shirt has a circular logo with the word "MUSKIE" visible. The background is white.

FORM

FORM IS FUNCTION

The computer is seducing humans out of their bodies. More and more of our time is sucked into the virtual (at home, in school and in the studio).

We designers are here to reaffirm the importance of the physical world. It's not just what we experience—real stuff actually impacts our health and our climate. **Realize** is more than understanding truth. The soul of our profession is essential to life. If you deconstruct the word “de-sign,” it seems to mean “un-sign,” or the “real thing,” not a symbol. **Objective. Matters.** This issue of *Innovation* is not about form *following function*—it's about form being in the actual *driver's seat!*

Tucker Viemeister has built design groups: as a founder of Smart Design (famous for Oxo “GoodGrips”), by opening frog design’s New York office, by establishing Razorfish’s physical design capability group, by developing Springtime-USA and recently as lab chief at Rockwell Group, where he built a small research and development team into a teeming interactive business. He is now president of Viemeister Industries, headquartered in NYC.

In our world of branding, finance and celebrity, real stuff is making a comeback—crafts, gourmet cooking, home brewing, Maker Faire, gardening. People want to make things—DIY. They are reshaping their bodies: pumping up at the gym or other augmentations with plastic surgery and Botox. Even Harry Potter needs a wand to make magic.

Today more nursery schools are using open-ended block play to encourage children’s imaginations. The problem-based-learning trend in K–12 programs is not new; progressive education is essentially learning by doing. Design thinking is a root skill of science, medicine, music, interfaces, writing and design. According to Arnold Wasserman, “Enthusiasts say that re-creating education around principles of ‘design thinking’ is the essential first step toward building ‘World 3.0.’” Even business consultants have learned Larry Keeley’s and Tom Kelly’s lessons about innovation. “But if everyone can do ‘Design Thinking,’” Liz Davis of Les Ateliers in Paris rhetorically asks, “what makes designers special?”

We designers create real stuff. This *Innovation* is a celebration of the essence of industrial design: form giving. Objects **matter**. There is a reason that they *ground* us and that form following function is about genuine needs. Designers put real things on the table, things that we can see, hold and feel. “Today as never before the consumer is design-conscious, and the appearance of a product has become an integral feature in its success or failure,” wrote J. Gordon Lippincott in *Design for Business* in 1947.

Of course, everyone should be doing design thinking (it makes sense)—but we designers are the ones who give form to those ideas and solutions. We make the dreams come true. We translate new technology into tangible objects that people want and real places that people experience. We make brand strategies into real stuff that people grab, drink, drive and play with. Our work has the urgency of reality. It is more important than just good business: form is essential to human life. After all, we live in the real world where sticks and stones actually do break our bones.

“The biggest issue with the B school design thinking craze,” Craig Vogel, FIDSA said, “is that it does not support the idea of making people functionally literate of design.” The pendulum is swinging back, pushed by real problems like climate change and pulled by computer scientists and user-interface designers who not only find inspiration in biomimicry but who want to create digital tools to support real communities and actual experiences.

“The school and the culture separate the head from the body,” wrote Loris Malaguzzi, developer of the Reggio

Emilia Approach in *The Hundred Languages of Childhood*. “They tell the child to think without their hands, to do and make without their head, to listen and not to speak, to understand without joy.” Students today want to become industrial designers because they want to give form to their dreams—they want to contour cars, sculpt appliances, mold furniture, shape medical devices, construct spaces, model toys and make experiences.

Learning how to make beautiful forms is being squeezed by nonvisual subjects that industrial design students need to learn. Pratt’s Martin Skalski and Kathryn Filla advocate a renaissance of industrial design’s core responsibility and its supportive pedagogy. Minds and bodies are unified: drawing and making forms with our hands are the basic ways humans teach themselves (especially designers). The 1959 article (reprinted here) about the City and Country School’s Rhythms program explains how physical movement teaches children important skills, just as 3D exercises teach design students to think.

Fast Company may say that “the career of the future doesn’t include a 20-year plan,” but quality form giving is a craft that never goes out of style. As Harmut Esslinger’s teacher, Professor Karl Dittert, told him, “Renderings are nice, but models are magical.” Darwin’s *Origin of the Species* principle is all about the design-by-doing method (the natural selection system even works without *any* thinking). Survival of the fittest isn’t really about survival so much as reproduction (but that’s for another industrial design topic).

This issue about real stuff is a reminder to *knowledge workers* of the supremacy of reality above thought. Practice over theory—we see the apple dropping but can only infer gravity. Ideas and dreams are strong motivators, but real objects exist in the real world where they actually affect reality—in fact they are reality (not what we wish it is). Truth. Entrepreneur Avi Telyas makes prototypes—instead of business plans. Descartes may have said, “I think therefore I am,” but Karl Marx came back with “The philosophers have only interpreted the world, in various ways; the point is to change it.”

That’s where we come in. Good industrial designers obviously think about what they are doing, but they know how to think better because they learned how to think by doing. We know what it means to create real stuff that people touch, use and inhabit. Like firemen, doctors and chefs, industrial designers put out real fires, heal real ailments and cook up tasty new things that make the world a better place to live. Form is function **matters!** ■



OUT OF YOUR MIND, DESIGN

Introducing the IdXtractor! A PTI Design original, the IdXtractor is a system we've been perfecting for over 25 years. It is comfortable and non-invasive, only takes minutes to use and provides a lifetime of essential data. Shared with the likes of flying cars and time machines, the IdXtractor is a virtual mind reader, capable of guiding your idea from mind to manufacturing. To learn more about PTI Design, visit us at teamptidesign.com

50900 Corporate Dr., Macomb MI 48044 | 586.203.4700 | teamptidesign.com





A NEW FORM OF CYCLE TRAINING



CREATIVITY THAT MAKES A DIFFERENCE
SAN FRANCISCO – CHICAGO – MUNICH – HONG KONG
WWW.LUNAR.COM