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Global interaction in design

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abstract

Based on a virtual conference, Glide'08 (Global Interaction in Design Education), that brought international design scholars together online, this special issue expands on the topics of cross-cultural communication and design and the technological affordances that support such interaction. The author discusses the need for global interaction in design and its impact on design education and research. Authors in this issue are introduced.

Audrey Bennett teaches and conducts research in graphics at Rensselaer Polytechnic Institute. Her research is on theory development in graphics that explains the phenomenon of collaborative visual design. Over the past three years she's been developing this theory on interdisciplinary research projects in technical communication, social robotics, literacy and ethnomathematics with funding from the National Science Foundation, The American Institute of Graphic Arts (AIGA), and Louise & Hortense Rubin Foundation Community Fellows Program; the work is published in the Journal of Design Research, Visible Language, Design Issues, The Journal of Graphic Design, American Anthropologist among others. She organizes GLIDE—a biennial, virtual conference that disseminates research on interaction between designers and underserved, global communities and directs baohouse.org, a virtual design studio for research on socially conscious graphics.

introduction

Research occurs worldwide, and the scholarly dissemination of any new knowledge that its processes might reap usually quick starts with a conference presentation. Attending an international conference used to mean traveling by car, train or airplane to a hotel or university situated remotely in another part of the world, to deliver a verbal and visual presentation about one's work. Today, however, a conference presentation can mean something more eco-friendly and democratically accessible. The development of technologies for low- and high-bandwidth contexts and synchronous and asynchronous communication has created opportunities to bridge geographic divides in conferencing and enable virtual presentations—even global collaboration in the classroom.

GLIDE (Global Interaction in Design Education) is a biennial, virtual conference that I organize through the AIGA, the professional association for design. GLIDE aims to bring new voices to the discourse in design research and contribute new knowledge to the discipline's body of work on the technical and cross-cultural facilitation of global interaction in design. Using existing technologies for asynchronous and synchronous communication, GLIDE disseminates the research of scholars from anywhere in the world whose proposals are accepted after a peerreview process. One of GLIDE's goals is to reduce the carbon footprint created by conferences around the world each year through the primary use of a virtual format. Virtual conferences, like GLIDE, democratize the dissemination of new knowledge by providing low-cost (void of transportation and accommodation expenses) venues for refereed scholarly presentation and open-access to published scholarship. Participants who might have been prevented from attending because of lowincome, lack of institutional support, physical disability, visa restrictions, parenting situations and elder care now have greater access. Thus, virtual conferences have the potential to become invaluable resources for future generations of scholars interested in the conference's interrelated topics.

The virtual format for conferences has precedence within design and other disciplines (e.g. art). For instance, in an email message to the doctoral listserv of the Design Research Society, Australian design researcher Ken Friedman states:

"...This is in essence the model that David Durling and I pursued at La Clusaz...In the run-up to the face-to-face conference, Chris [Rust] and I whipped up an informal and highly successful on-line debate. At one point, I wrote something on whether Picasso could have earned a Ph.D. Chris grabbed that idea and channeled the spirit of Zeke Conran to put forward some

stimulating ideas. I responded by nailing some theses on doctoral education to the digital doors of the old DRS list. I challenged people to a debate and we were off. The debate lasted from April 2000 through the end of June 2000, just before the conference. In 2003, PhD-Design hosted a more formal on-line conference on Design in the University. We started by looking at plans for a new design school at University of California Irvine, and the conference ran with formal contributions, responses, and debate from 14 November to 18 December. In 2006, Chris and the Sheffield group took on-line conferences to the next level with a conference connected to their UK Arts and Humanities Research Council project reviewing practice-led research. This took place on a dedicated JISCMAIL list, it last[ed] three weeks with weekends off. The format was carefully defined with requests for word limits and cogent summaries. Just last month, Oguzhan Ozcan and the *Leonardo* journal group hosted a highly successful on-line conference on PhDs in art on Leonardo's Yasmin list" (K. Friedman, personal communication, April 7, 2008).

In contrast to the virtual conferences that Friedman describes, GLIDE contributes to the development of virtual conferences through both its form and content. That is, GLIDE is a virtual conference about virtual conferencing in design education and research that addresses the technological, cultural and pedagogical challenges involved in global collaborations and the outcomes of global research agendas and pedagogy. GLIDE'08, the first of the biennial series, brought together, virtually, an international mix of scholars to share first-rate experiences teaching and conducting collaborative research globally. Holistically, their presentations:

- → disseminated new contributions to our broad understanding of the benefits of design research to society on a global level and
- → disclosed pedagogical and technical strategies and models for global interaction and collaboration.

This special issue continues the dialogue in the intellectual arena of refereed, scholarly discourse—the peer-review journal.

glide'08

GLIDE'08 streamed via Adobe Connect on October 22, 2008 from 9 AM until 4 PM. There were thirty-three conference registrants from around the world. The advantage of an online conference like GLIDE'08 is the plethora of online, software applications available to facilitate communication and exchange of different types

of information between remote participants. Prior to the conference, the submission and peer review processes occurred via email. Since all of the members of the conference committee were located remotely from each other—even the members that were in the same state were at least two and a half hours apart—CollectiveX. com (aka Groupsite.com), Skype, telephone conferencing and email were used to manage the conference and keep key constituents updated on the goings-on of the conference. Social networking (an important part of face-to-face conferences) occurred via an online application. That is, after registering for the conference via Eventbrite.com, registrants were directed to EventVue.com to socialize and network prior to streaming as well as to a password-protected, conference wiki (glide.pbwiki. com) for log-in instructions for the actual conference and to review presenters' papers and biographies before the conference. After the conference, a survey for the Best Paper Award was conducted using SurveyMonkey.com.

On the day of the conference, attendees signed into the wiki for log-in instructions and/or proceeded to Adobe Connect streamed from Rensselaer's Multimedia Services' server in a distance-education studio. Although the studio could accommodate up to 25 local attendees, none opted to attend in person—they all chose the virtual interaction. On the day of the conference, attendees had access to the following types of content formats: Adobe Connect's webcasts (consisting of Powerpoint or Acrobat formatted presentations with voiceovers) and downloadable pdf files. Interaction between registrants was facilitated via synchronous Q&A sessions (via the webcast), telephone conferences and asynchronous blogs and wikis.

Overall, these technologies for remote communication marketed, managed and/or facilitated the virtual conference. Table I shows a comparison of these technologies in terms of their modes, purposes and nature of contact and exchange. Marketing the conference required the use only of text and images within an asynchronous communication context with no interaction to limited, one-way interaction (e.g., a hyperlink that takes you from an email message to the conference website). Whereas, managing the conference required all different modes of communication, asynchronous and synchronous contact with no interaction to more deeply immersive, two-way interaction. For instance, I used messaging—a form of two-way, synchronous communication—to troubleshoot technical issues that conference attendees had connecting to Adobe Connect. Once those issues were resolved, Adobe Connect led the way to facilitate the conference through the use of text, image and voice modes; synchronous contact; and immersive two-way, interactive exchanges.

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Table 1: Comparison of GLIDE 2008's technologies for remote communication and their modes, purposes and natures of contact and exchange.

Like traditional face-to-face conferences, there was some time devoted to testing the technology and assessing needs. Whereas, with non-virtual conferences, this kind of technical briefing occurs during the conference (e.g., on the day of the presentation), GLIDE'08's technical briefing occurred around a month in advance of the conference. Still, there were a few technical difficulties—for instance, one keynote presenter in Italy, at first, had difficulty connecting with the phone line. However, despite this minor technical glitch, based on the comments and questions posted by attendees during and after the conference, they enjoyed the experience. They generally expressed delight in not having to leave their homes (or offices) to deliver their presentations and/or participate. The following are some of their comments:

→ ...excellent work on the Global Interaction in Design Education Web Conference. The live streaming brought together a diverse group of international design educators to share their work and ideas. The presentations were each exceptional and profoundly interesting on many levels. The successful technical production alone was noteworthy and compelling.

- → Thanks for running the GLIDE'08 conference, I thought it went very smooth overall and was a ground breaking event in design education. I was glad to be part of the first one and look forward to being part of the next one...
- → What was important about GLIDE'08 from my perspective? It got a few Americans acquainted with a few people from Australia, Italy, etc. I think the American design community is rather xenophobic and they don't realize that interesting work, technological applications, educational innovations [...] are happening worldwide. I think they need to wake up.

the social need for global interaction in design

A conference like GLIDE that disseminates research on design collaboration with first-, third- and fourth-world communities implies that there is a dire need for this type of interaction within the discipline and society at large. If that statement conjures doubt in one's mind, then one need only consider the design disasters that occur through a poorly formatted election ballot or culturally inappropriate imagery in our own nation (see Lausen, 2007; Heller 2005; Ford, 2001). Then, multiply those problems ten-fold for such problems on an international scale, like the acts of violence that erupted after the publication of caricatures of the Prophet Muhammad in the West (Arson and Death Threats as Muhammad Caricature Controversy Escalates," 2006). Then, one might readily agree that the world is indeed in need of collaboratively designed solutions to a wide variety of old and emerging social problems that have global relevance, scale and reach. If not, then consider costly and environmentallydetrimental transportation systems that depend on limited foreign oil. As perennial global problems—like HIV/AIDS, poverty, hunger and homelessness—become more encompassing; and emerging problems-like global warming, terrorism, oil and water-threaten the future sustenance of mankind, no longer can design be solely about attaining aesthetic appeal or arbitrary functionality. The need for design outcomes to address or alleviate social problems comes from the afore-mentioned issues that threaten the future of humanity on a global level. Design must respond to this need, move beyond market needs and "[meet] social needs [...including] the needs of developing countries (Margolin and Margolin, 2002)." In order to do so, however, design today has to come from a process that integrates research methodology and collaboration with multidisciplinary experts (Poggenpohl and Sato, 2009).

The good news is that designers from around the world are crossing disciplinary and geographic borders, overcoming language barriers and technological hindrances

to collaborate in order to change the world for the better. They have pooled resources to pen manifestos, form new organizations, revamp old pedagogy to urge the next generation of designers "to think more about the broader historical, political, cultural and social issues concerning the things they design (Bennett, 2006)" and to change the way they design to include, for instance, soy-based inks, recyclable paper, eco-friendly materials, "cradle-to-cradle (rather than cradle-to-grave) life-cycles for design concepts" (McDonough and Braungart, 2002), and socially-conscious perspectives, among other things. A new design movement has fully emerged that is grounded in social-consciousness and—social advocacy. This socially-conscious design movement strives for outcomes that define good design differently than many of the modernist movements that preceded it (for example, the Bauhaus emphasis on making design compatible with mass-production). Today, some designers might respond to the question of what constitutes good design with a design outcome that has undergone a research-oriented and collaborative process—internationally.

The participation of today's graphic designer, in innovating design solutions to social problems on a global scale is a phenomenon spawned from the systematic reemergence of empirical and user research methods to the discipline (see Frascara, 1997; Laurel, 2003; Bennett, 2006; Poggenpohl and Sato, 2009). Historically, graphic designers have contributed to society primarily by visually translating a client's message. They've intuitively made over print and digital interfaces by applying proven visual treatments and creative strategies (e.g., choosing appropriate typefaces, colors and other graphics) that make corporate information accessible, readable and memorable. However, persistent prodding from the first and second publications of the First Things First Manifesto of 1964 and 2000 (Barnbrook, 1999), and a growing literature on design ethics and social responsibility has helped graphic design shift paradigms. It has evolved from a practice that helps businesses prosper to include research that aims to change the world for the better. Graphic designers no longer rely solely on their intuition to visually translate verbal messages or even a client to give them work. Today, graphic designers might secure their own funding to author and visually translate their own information to their own target audience. In this new role, many of them use interdisciplinary qualitative research methods (e.g., ethnography) and lead collaborative design processes (e.g., participatory design) to understand complex social problems that span multiple disciplines and audiences from cultures different than their own. In essence, graphic designers read, write and conduct research globally; this special issue highlights some of the fruits of their labor.

In the first paper, titled How print culture came to be indigenous, US-based designer Stuart McKee contributes a historical perspective on 'global interaction in design.' He uses discourse analysis to highlight and clarify the contributions of indigenous culture to the history of print design. Instead of speaking of indigenous communities and their contributions to design as a new frontier, not yet discovered, this paper posits the opposite. McKee discloses that indigenous consciousness has always been a part of Western design sensibilities and has helped to define its print history—though with little acknowledgement. By looking through the rear view mirror at our past interactions with indigenous people, we can learn how to move forward in our future interactions with these communities worldwide.

In the second paper, titled Navigating cross-cultures, curriculum, and confrontation: Addressing ethics and stereotypes in design education, US-based design educator Audra Buck-Coleman describes how requiring design students to stereotype each other can have pedagogical and social value. Buck-Coleman's Sticks+Stones study has the same confrontational ethos as Tibor Kalman's Race issue of *Colors* magazine. The effectiveness of Sticks+Stones can be measured not only by the aesthetic worth of the outcomes, but also by the changes in attitude of the students toward tolerance in regard to race, religion and culture.

In the third paper, titled Beyond borders: Participatory design research and the changing role of design, US-based design educator Adream Blair-Early gives her perspective on the state of design education and its growth potential. She posits that design education is more collaborative today due to technological innovation and cross-cultural pedagogical initiatives (e.g., multidisciplinary research centers). The influx of social networking and Web 2.0 interactivity, for instance, allows students to broaden the scope of their work to include others anywhere in the world. As cross-cultural collaborations in design pedagogy become more global, Blair-Early encourages the use of an action research approach in order to address the cultural issues that will likely emerge in the cross-cultural, communication process.

In the fourth paper, titled Virtual conferencing in global design education: Dreams and realities, US-based graphic designer Judith Moldenhauer confirms that the discipline of design has a paradigm shift underway from independent designing to "interdisciplinarity and collaboration" that warrants virtual conferencing. She then engages us in a frank discussion of the "dreams and realities" of virtual conferencing in design education. Her paper introduces the concept of "presence" to represent an ideal state of seamless communication and interaction between remote participants in a global collaboration—a dream state that has not yet been attained as evidenced by the three virtual conferencing exemplars in design education that she analyzes. One of

the exemplars is her own pedagogical study. However, as she observes, "with graphic and industrial design embracing technology since the Industrial Age," we will, most likely, move forward towards fulfilling the dream of presence through persistent and systematic modification of our technological infrastructures.

The special issue ends emphatically with a collaborative project that epitomizes 'global interaction in design' in which a design educator, working side by side with laypeople, nurtures the creative agency of the laypeople and guides the professionalization of their marketing efforts. In the final paper, titled The New School collaborates: Organization and communication in immersive international field programs with artisan communities, US-based designer Cynthia Lawson provides a model for the management and technical facilitation of global collaboration and grapples with the issues that emerge from this type of interaction. She describes a collaboration between her institution in New York City and groups of Mayan artisan women in Guatemala that aim to engender economic autonomy in a Guatemalan community by working with the Mayan artisan women to create a lucrative market for their crafts.

conclusion

One can garner from this special issue that in order to generate effective global interaction, as graphic designers, we need to accomplish a couple of major milestones. First, we need to innovate new technology, improve existing technologies for distance collaboration or communication and develop a protocol for the most effective use of existing technologies. Second, we need to theorize appropriate visual and verbal etiquette for communicating across cultures within the classroom and by way of virtual conferences. As we move towards refining the technological infrastructures of our global interactions, it might behoove us to adopt a Sankofan framework (pertaining to Sankofa, the West African concept graphically symbolized as a bird flying forward by looking backward) and look back at the accomplishments of other disciplines and regions of the world in order to progress towards the future.

acknowledgements

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references

Arson and Death Threats as Muhammad Caricature Controversy Escalates. Spiegel online. (Accessed February 4, 2006). http://www.spiegel.de/international/0,1518,399177,00.html.

Barnbrook, J., et al. 1999. First Things First Manifesto. 2000. AIGA Journal of Graphic Design, 17.2.

Bierut, M. 2000. A Manifesto with Ten Footnotes. I.D., 47.2.

Bennett, A., editor. 2006. Design Studies: Theory and Research in Graphic Design. New York: Princeton Architectural Press.

Ford, Paul J. 2001. A further analysis of the ethics of representation in virtual reality: Multi-user environments. Ethics and Information Technology, 3,113–121.

Frascara, J. 1997. User-Centered Graphic Design: Mass Communications and Social Change. Bristol, UK: Taylor & Francis.

Heller, S. 2005. Exploiting Stereotypes: When Bad Is Not Good. Voice, Dec. 13.

Laurel, B. 2003. Design Research: Methods and Perspectives. Cambridge, MA: The MIT Press.

Lausen, M. 2007. Design for Democracy: Ballot and Election Design. Chicago, IL: University of Chicago Press.

Margolin, V. and Margolin, S. 2002. A "Social Model" of Design: Issues of Practice and Research. *Design Issues*, 18.4, 24-30.

McDonough, W. and M. Braungart. 2002. Cradle to Cradle: Remaking the Way We Make Things. New York, NY: North Point Press.

Poggenpohl, S. and Sato, K. 2009. Design Integrations: Research and Collaboration. Bristol, UK: Intellect Books.

bibliography

Cherkasky, T., et al., editors. 2000. Designing Digital Environments: Bringing in more Voices. *Proceedings of the Participatory Design Conference*, November 2000, CUNY. New York, NY: CPSR.

Herrington, T. and Y. Tretyakov. 2005. The Global Classroom Project: Troublemaking and Troubleshooting. In Cook K.C. and K. Grant-Davie, editors. Online Education: Global Questions, Local Answers. Amityville, NY: Baywood Publishing Company, 267–283.

Scrivener, S.A.R., et al., editors. 2000. Collaborative Design: Proceedings of the Co-Designing Conference, Coventry School of Art and Design. Coventry, UK: Springer.

Wojtowicz, J., editor. 1995. Virtual Design Studio. Hong Kong, CH: University of Hong Kong Press.

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