

Design for the Real World: The Next Billion Users

Recently, I spent a week in South Africa, five years after my first visit. I was reminded of a strong impression from that first visit and from my first visit to south India a year ago: we professionals of usability analysis and people-centered design have only begun to grasp how big, and how small, our world is. Many of us do not have a sense of how radically different circumstances are in other parts of the world, despite the images that television and the Internet bring to us. At the same time, there are obviously common themes to human experience that usability-oriented professionals attempt to improve upon in developing products and services for home, work, leisure, and travel.

While I was in South Africa, Professor Gary Marsden of the Computer Science Department, University of Cape Town, and Professor Janet Wesson of the Computer Science and Information Systems Department, Nelson Mandela Metropolitan University of Elizabethtown, gathered graduate students for me to meet. While reviewing their computer-based communication and interaction projects, I was impressed both by the students' insightful inventiveness—for example, solving how to review photos on mobile devices—and by many of the projects' distinctive, and even moving, attention to local issues of usability. For instance, in analyzing mobile telemedicine in poor, underdeveloped eastern South African villages, one of the primary usability challenges is how to provide electricity for a computer-based solution. In my privileged Western experience, this normally amounts to searching for a nearby wall socket or an under-the-conference-table source of electricity.

South Africa, India, China, and other developing countries—wherever I go, I see clever local solutions to pressing problems that are, in fact, shared by many elsewhere. I notice that often these local solutions contain ideas that may have value and impact on conditions in the more fortunate developed parts of the world.

While serving as editor-in-chief of *UX* and on the editorial board of several other publications in our field, many proposed articles pass over my desk, or rather through my computer. I have been intrigued and impressed that Indian and Chinese authors are proposing fundamental new metaphors for user interfaces based in their respective cultures. I believe that it is only a matter of time before radically different, home-grown approaches take root in these two countries in particular. Their populations together constitute slightly more than one-third of the world's humanity.

Much of our understanding and most of our professional publications focus, quite understandably, on the concerns of the wealthiest one-quarter of the world's population—let's say 1.5 billion people (or thousand million, in British usage). Understanding issues of usability, usefulness, and appeal in the next billion users will challenge Western and other developed countries. Certainly, we will have to consider cultural, demographic, socio-political, economic, and technical issues that are somewhat new to us with established professional awareness and methods.

Even what is considered "usable" may need adjustment. Just as Richard Nisbett in his book, *The Geography of Thought: How Asians and Westerners Think Differently...and Why*, has proposed that even Western logic and philosophy are culturally biased, so researchers may articulate the culture biases in our fundamental notions of simplicity, clarity, and consistency.

Perhaps it is also time to dust off our copies of the Viennese designer, anthropologist, and writer Victor Papenek's *Design for the Real World: Human Ecology and Social Change*. I first read his book shortly after he published it in 1972. I remember being strongly impressed by his objectives of reducing the number of useless, harmful products and increasing the number of products that would serve less economically developed countries. I remember his plans to design inexpensive (today we would emphasize biodegradable) phonographs and records that could be dropped from airplanes into African countries to bring "multi-media education." Here was an early pioneer explorer of "world-sensitive global design," "ethical design," and "ecologically friendly" design. These concerns are infiltrating the usability and user experience analysis/design world in an unprecedented way. Expect to see more. What we shall need in the next few years are knowledgeable, articulate discussions, coming from globally diverse sources, of complex, challenging issues.

World Usability Day, November 3, 2005, is a harbinger of the world to come. If China does become one of, or *the*, dominant market player later in this century, user-experience professionals will need to consider how all of us can think more globally while acting locally in carrying out our chosen tasks. Considering the "real world" of the next billion users is a challenge and opportunity for all of us.

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