***Mobile Persuasion Design*: Aaron Marcus Book Foreword**

Ben Shneiderman (draft 2/17/2015)

The half-century history of human-computer interaction and user interface design has produced innovative results that have transformed the world. The designers, engineers, and scientists, who developed compelling user experiences that include social media, e-commerce, medical assistance, and online education, have much to be proud of.

Ubiquitous mobile devices, even in developing nations, enable a broad range of people to communicate with family, get medical help, carry out business activities, and enjoy diverse entertainment. These devices also enable collaborative communities at an unprecedented level, including political organization to counter oppression, while supporting creative projects that produce music, photography, video, art, and much more.

The list of empowerment experiences continues with professional work, research explorations, entrepreneurial initiatives, and economic transactions. Admirably these activities are largely accessible to users with disabilities, those with low literacy, and marginalized peoples giving them better opportunities in life. Of course, there are many disturbing outcomes such as racial hatred, terror-group recruiting, criminal activities, and malicious hackers. The challenges to personal relationships, loss of privacy, and threats of cyber-attacks undermine the pro-social outcomes, causing critics to raise concerns about whether ubiquitous mobile devices are an overall plus or minus.

Rather than wrestle with the current situation, inspiring visionaries are looking to the future to explore how these technologies can do more than facilitate existing human needs. They seek to develop transformed possibilities and wholly new opportunities to improve human experiences. While robotic and artificially intelligent scenarios may play a role, I prefer to emphasize the unbounded creativity of human beings and their thirst for self-actualization that Abraham Maslow described as early as 1943. He also made clear that the foundations for human success are built on physical safety, necessarily embedded in a non-toxic environment, which also enables good health. Then human beings can pursue their strong needs for esteem and love.

Maslow’s philosophy and many others lead me to believe that the central human quest is not for artificially intelligent masters or even partners, but for tools that assert the primacy of human agency. Therefore, my first principle is that successful future technologies are likely to be ones that promote human autonomy, initiative, independence, and control.

My second principle for envisioning future technologies is based on the belief that humans are inherently social, seeking intimate partners, compassionate friends, and supportive teams. Humans eagerly seek out helpful communities and pro-social organizations, frequently embedded in constructive civil societies that promote social justice and freedom of expression.

I am not alone in considering how human values clarify design principles that will bring a brighter future. For a half-century Aaron Marcus has been an inspirational resource for me and many others. His visible contributions are hundreds of corporate design projects that have contributed to successful products and his extensive writings on user-experience design that have been widely influential. I think of his early and lucid understanding of cultural, gender, personality, and other individual differences that make every human unique, even as they are situated in countries, age groups, markets, religions, races, ethnicities, etc.

Aaron Marcus has also had a profound impact on others that is less visible. His relentless travels to present courses, tutorials, workshops, and other training experiences have influenced thousands of students, researchers, and professionals, including me. Marcus has shared his masterful knowledge, thoughtful principles, and practical guidelines, all delivered through seemingly endless, yet cogent examples, in ways that leave lasting impressions, while productively changing behaviors.

This book collects more than 26 years of his work on mobile device design, and eight years focusing especially on persuasion and motivation. He goes directly for global issues, such as business, energy, and environment, as well as for personal concerns over health/wellness, finances, and happiness. The examples show how perceptual and aesthetic principles, followed by carefully conducted evaluations lead to design evolution. Marcus also provides psychological theory foundations for much of what he shows, enabling practitioners to understand general principles and learn from practical guidelines.

It rare to find a book that is so clearly devoted to promoting human values through technology design. *Mobile Persuasion Design* is a valuable contribution, which will help attentive readers to do their share in building a better world.

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