



We humanize computers. Could they treat us likewise?

by Jay Cross

The Media Equation: How People Treat Computers, Television, and New Media Like Real People and Places by Byron Reeves & Clifford Nass (Cambridge University Press, 1996) has changed forever the way I think about media design.

The authors, two Stanford professors, present the results of numerous psychological studies that convinced them that people treat computers, television and new media as real people and places.

Media was simply not an issue during most of human evolution. The brains we inherited from our cave-man (or cave-woman) ancestors aren't equipped to deal with it. Computers, television, and movies fake us out.

People are polite to computers. We treat computers with female voices differently from those with male voices. We don't want television to get too close, to invade our personal space. We don't like computers to criticize us but we think them wiser when they do. We're more likely to believe specialists who deliver the news than generalists, even if the news is exactly the same. We'll accept media as teammates and imbue them with personalities.

Emotional Responses

The authors write that, "Media can evoke emotional responses, demand attention, threaten us, influence memories, and change ideas of what is natural. Media are full participants in our social and natural world."

There's even a halo effect. If I like the friendly specialist delivering the news, I'll also rate the color and picture quality superior.

What does this mean for trainers? Because people take media so seriously, simple animations can evoke as strong a response as an IMAX movie or a video

simulation. It doesn't take much fidelity for video to deliver its message. High visual production values probably add little to training effectiveness.

For designers of multimedia, audio is a good place to invest. It delivers more psychological bang for the buck.

Software should be empathic. I'd like Microsoft Word a lot more if it gave me a pat on the back every now and then instead of just pointing out my spelling errors.

The Turbo Tax CD begins with Marshal Loeb and Jane Bryant Quinn crowing about how much they know. They'd be more likable were they to describe each other rather than themselves. Even cave people didn't appreciate braggarts.

Repetitious Dork

Microsoft Bob didn't go over because he was a repetitious dork who talks down to everyone. Life's too short to put up with the Bobs of this world.

How about an intelligent agent within my computer who's also a good buddy? Who shows me things to my taste? Who compliments me when I'm living up to my values? Someone pleasing? Someone I like?

When the computer performs as a trainer, how about tailoring my lessons to my level of understanding, my rate of comprehension, the content I'll put into practice, my learning style, and whether I feel up or down at the moment?

The buzz in marketing these days is the "One-to-One Future". Mass customization. Services tailored to a market segment of one. Let's apply that to training.

Peak over my shoulder while I'm taking an individualized lesson and you'll see the computer giving me lots of encouragement.

Wildflowers and Claudia Schiffer

Where is my on-screen training room? Put me in a field of wildflowers in the Swiss Alps. Immerse me in a stream of images and stories that keep me alert. My learning coach isn't Microsoft Bob. It's model Claudia Schiffer. She tells me I'm great.

Ah, well. Back in the real world, my computer is not smiling at me. It's inscrutable. Zen computer. The Black Hole of friends. I understand why it's so easy to become angry with this \$&%(\$# machine when it lets me down. It has shown little emotion. Zero bonding. It's a lousy friend.

(Oops. Sorry, machine. I really didn't mean it. Don't want to hurt your feelings.)

This year marks the 30th birthday of HAL 9000, the control-freak computer in Arthur C. Clarke's science fiction novel *2001: A Space Odyssey*.

While surfing the Web, I came upon these remarks from [Hal's Legacy](#), a wonderful compilation of thoughts about HAL:

"HAL is two leaps ahead of today's computers in his ability to recognize emotion. Today's computers are affect-impaired; they blather on and on, filling your view with pages of output, regardless of whether you show interest or boredom.

"Would an intelligent human keep talking nonstop, face-to-face, after you close your eyes and open your mouth in a yawn the size of a barn door? Of course not. Then how can computers become intelligent friendly companions if they are not given at least the ability to recognize such emotions as interest, distress, and pleasure, which some researchers claim we are all born with?"