## Cultural Differences—A Personal Story

In the early nineties I briefly visited Japan under the auspices of a consortium whose aim was to produce radical advances in HCI. As part of the trip, my host arranged a series of visits to R&D labs, each of which put on a demonstration for me.

One of the demonstrations, at a lab whose identity I will suppress, was of a face and expression recognition system. The researchers were clearly proud of their system, and were so confident of it that they proposed to demonstrate it using me as a subject. I sat down in a chair, they positioned the camera, and began the demo. The system promptly crashed!

Now, to me, this was not a big deal. My demos—especially back in those days—crashed so often that I had a stock phrase for the occasion: 'Notice the seamless integration with the debugger.' However cultures differ, and to my hosts this was quite embarrassing—a loss of 'face.' Apparently, in Japan, one does not demonstrate buggy software to visitors! After receiving several apologies, I went on to the next demo and forgot the incident.

That, however, was not the end of the matter. A few demos later, the researcher who had run the expression recognition demo returned. He was, if anything, more embarrassed. The problem, he explained, trying with some difficulty to find appropriate words, is that, well, most Japanese have hairlines. (It is difficult to be tactful in a second language!) I, on the other hand, have what I prefer to refer to as 'a high forehead,' though I will admit that a camera might have difficulty detecting a hairline. Even worse, at least from the gesture recognition software's point of view, is that I also have a beard, something also uncommon in Japan. That gives me a hairline, but one that runs beneath my mouth. The face recognition system, in an interesting example of how cultural biases can be reified in software, had a facial model that assumed that hairlines were always above eyes, and hence was unable to cope with my facial 'geography.'

While I had known for quite some time that cultural differences are both deep and subtle, I had tended to associate them with ways of thinking and behaving. This was a nice reminder that cultural assumptions lurk everywhere, and that our assumptions about people, whatever they may be, often surface in our designs in very unexpected ways.

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