

# Chapter 13

## A Framework for Thinking about the Maturity of Cultural Usability

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### ABSTRACT

*Interaction design and usability have become important contributors to economic and cultural development in emergent economies in today's global distribution of the use and production of IT, but research and practice that incorporate cultural and non-western perspectives on software and interactive products are still in their infancy. This chapter presents theory of cultural cognitive styles and standard usability, and a framework for thinking about the maturity of cultural usability. The framework has five levels. Level I concerns the localization of the user interface, Level II focuses on the localization of the usability evaluation methods, Level III emerges with new user groups, Level IV concerns historical changes in the concept of usability itself, and Level V deals with managing a complexity of user groups. The chapter uses recent empirical results from studies of culture and usability to illustrate the need for the framework for thinking about the maturity of cultural usability.*

### INTRODUCTION

Interaction design and usability have become important contributors to economic and cultural development in emergent economies in today's global distribution of the use and production of information and communication technology. Despite this mega trend, research and practice that incorporate cultural and non-western perspectives

on usability of software and interactive products are still in their infancy. See Figure 1.

The Danish picture in Figure 1 is a good introduction to the topic of cultural design. It is a sign that can be found in front of schools in Denmark to warn car drivers to lower their speed so they don't run over children who are crossing the road on their way to school. I found the crossing sign on an international website that displays signs like this from all over the world. The owner of this web site is very happy about this Danish sign.

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*Figure 1. Cultural aspects of the design of traffic regulation signs. How much is culturally different? The form of the warning sign? Design-style? Gender roles? Haircuts? Dress and shoes? Bags? Placement of the children? Walking styles? Pictures from Mecánico (2009) (© 2009 elve.net. Used with permission)*



In his opinion, this sign is craftsmanship without any compromise. He tells us to look at the legs, observe the ankles, the waist, the neck, etc. He asks us to notice all the very nice little details in this sign (see, Mecánico, 2009). So the question is, of course, how much in this sign is culturally specific. You might have a very easy answer to that, but when the question is asked in Denmark, people tend to believe that everything on the sign is or should be the same all over the world. But if you look at some of the other signs in Figure 1, you see some of the differences. For example, you could expect that the shape of such a sign would be universal because car traffic signs are relatively new things in the world, but it is not. You could expect that people everywhere would have feet, but in some places like in China you can see that people apparently do not have feet to walk on (sic). You could expect that everywhere children would walk to school, but in the Netherlands this poor little girl seems to be chased to school by her big brother, or as the website owner (Mecánico, 2009) suggests: “Dutch children are in a hurry to absorb more knowledge. Or... are they leaving school?” or as one of the anonymous reviewers of

this chapter suggested: “Two children of different ages running to class”? Also, in the Indian sign the child is really in a hurry to get to school. You could expect that everywhere the big one would be in front protecting the small one, but that’s also different in different places. The owner of the web site suggests that in the Cambodian sign we may see the boy wearing a soldier’s cap, the girl a helmet? Maybe they are afraid of stepping into a minefield? (Mecánico, 2009).

The rest of the chapter introduces a psychological definition of culture that is relevant for interacting with technology, discusses issues related to cultural and mainstream usability, and presents a framework for thinking about the maturity of cultural usability. The framework has five levels. Level I and II will be developed in greater detail than are the other three levels. The first level concerns the localization of the interface. The second level focuses on the localization of the methods that we use for evaluating the interface. The third level relates to when a new cultural usability actor emerges because we have new user groups. The fourth level suggests some historical changes in the concept of usability itself, and the

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