

CROSS-CULTURAL UNDERSTANDING OF METAPHORS IN INTERFACE DESIGN

VANESSA EVERS

*Institute of Educational Technology, The Open University
Walton Hall, Milton Keynes, MK7 6AA, UK*

This paper describes a study that will investigate the use of metaphors in interface design for culturally diverse users. Previous studies were generally in the area of technology acceptance and cross-cultural attitudes towards computers. These studies mostly established that culture indeed has an impact on interface acceptance and many of these conclusions are inadequately based on self-reports rather than on direct evidence. The research discussed in this paper will focus on metaphorical aspects of design using direct observation methods. Metaphors are used in interface design to describe abstract objects in a more familiar way. Understanding of these metaphors is likely to be influenced by the users cultural background.

The research will be performed in two phases: First, a pilot study will be carried out to test the methods to be used and to find a focus for the main research. The results will hopefully show what use of metaphors in interface design are most problematic (e.g. textual, virtual, graphical, or combinations). Also, results may give some indication of how users' understanding of metaphors differs cross-culturally. In the study, subjects will participate in half an hour individual observation sessions in which they will work through a Web site of a virtual campus guided by a task sheet, and comment on how they understand the textual and graphical metaphors.

The following phase will be influenced by the findings from the pilot study. Each culture to be evaluated will be assessed by three activities. The first activity will involve evaluating users' understanding of a non-localised North American product by observation sessions and think aloud protocols. The subjects will be from several cultural backgrounds and will be tested in their everyday environment performing an everyday task. The aim is to find out in what way the users' cultural background influences their understanding of metaphorical aspects of interface design.

The second activity will make use of the data from the first activity and will involve the design of a small prototype system for each participating culture. The system will have some basic functionality presented by a graphical

interface and will show metaphors that accommodate for the users' cultural background. The third activity will then involve observing users' understanding of the prototype interface.

The aim of the research is to find out whether an understanding of metaphors in interface design is indeed culturally sensitive; to provide an addition to current questionnaire based studies on cultural aspects of interface design; and to provide a portfolio of appropriate metaphor usage for the cultures involved. Findings are hoped to contribute to a better understanding of how meaning of metaphors varies across cultures. The research may also provide some directions on appropriate intercultural interface design.