Chapter 7.20
Gender Issues in HCI
Design for Web Access

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ABSTRACT

We consider the design and provision of Web sites, with respect to gender issues, from various perspectives. A general view of the field is given, and educational issues are specifically considered in relation to gender differences in the use of IT as an effective educational aid, especially by children. Human-computer interaction (HCI) models at different levels of abstraction are presented, together with how gender issues could impinge at each of these levels. A number of examples, both from the commercial and cultural fields, are discussed as design case studies of home pages for Web sites that exhibit gender-related orientation. Finally, looking to the future, online gaming is discussed in the context of usage. It is hoped that the guidance provided here will help
minimize any gender discrimination on Web sites with respect to their interfaces, increasing
general accessibility in the process.

INTRODUCTION

Everyone has his style when designing a site. There is no such a thing as a ‘feminine design’ or
a ‘male design.’ The most important thing here is to seek inspiration to create something different
each time. (Mark, male Web designer, http://www.redpolka.org)

Even if half the potential users of the Web are female, it is still a rather male-oriented environ-
ment. A study of UK university Web sites has shown 94% of them to have a masculine orienta-
tion, compared with only 2% having a female bias, with 74% of them designed by male-dominated
teams and only 7% by female teams (Harden, 2005; Moss & Gunn, 2005; Tysome, 2005). This
is despite the fact that there are more female than male students. It was found that men preferred
regular, unfussy, formal content and layout in straight lines, whereas women preferred more
colour and rounded forms with less conventional design, formality, and linearity. Both men and
women seem to prefer Web sites produced by designers of the same sex. In general, the specific
area of human-computer interaction (HCI) and gender issues is not well studied in the research
literature. However, Balka(1996)briefly discusses HCI skills with respect to gender and Cassell
(2002)discusses HCI for video games, commenting on how it is often gender biased.

In this chapter we first consider the background to Web interface design with respect to gender
issues. In particular, we look at some educational differences. We then consider some HCI models
at different levels of abstraction, and how consideration of gender preferences could impact on
these. A number of Web sites, both commercial

and, by way of contrast, cultural as well (Baiget,
Bernal, Black, Blinova, Boiano, Borda, et al., 2005;
Gunn et al., 2006), are used to consider various
design issues with respect to gender differences.
Looking to the future as the Web becomes more
interactive, we also consider the issues in online
gaming design. In conclusion, we briefly sum-
marize the current situation, and what could be
done to help rectify it.

BACKGROUND

If you are design-minded you can really do whatever you want (masculine or feminine design).
(Makiko Itoh, http://www.makikoitoh.com)

The question over women and their attitude to
technology continues to be an interesting one. On
the one hand, they appear to be very enthusiastic
users of mobile phones (especially text messaging)
despite the problems there are in the use of these
devices (Faulkner & Culwin, 2005), while on
the other hand, their less enthusiastic take up of
computers still continues to be a cause for concern.
There have been several attempts to look at gender
issues in relationship to design, with technologists
attempting to create designs that will particularly
appeal to women. This section looks at the major
aspects of HCI that need to be considered on the
Web, and how design might be slanted towards
creating systems that will support and encourage
women in their use of the Web.

Harding (1986) argues that “women have been
more systematically excluded from doing serious
science than from performing any other social
activity, except, perhaps frontline warfare.” She
says that a concentration on the hard sciences
means that gender is thus viewed as a variable
that affects individuals and their behaviour, rather
than as an aspect of society and its structures. This
inevitably affects the way in which technology
is designed. As use of technology increases in
the workplace and the home, so it becomes more