

# MAKING ACCESSIBLE WEB SITES WITH SEMIOTICS

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## **Introduction**

One of the great joys of the World Wide Web is that it's truly a medium of communication between a huge number of people who may be widely separated by geography, language, age, culture and physical and mental abilities. You can do a great deal to improve the accessibility of your Web pages by understanding and carefully applying sets of guidelines such as those promoted and continually updated by the WAI. However, as we've suggested, for true accessibility there's no substitute for thoughtful analysis of the overall communication issues.

There are as many ways of thinking about and talking about communication as there are individuals, and it sometimes helps to step back from narrow problems, such as checking all your **ALT** tags, and take a wider view. Many Web sites, magazine or journal articles and books promote the individual author's vision of what makes good, accessible communication. These in turn give access to other, wider views.

Discovering, assessing, absorbing, and applying such ideas is one of the many things that can improve one's skill as a Web site designer. Sharing these discoveries and new perspectives through informal communication, listservs and newsgroups also helps to improve the usability and accessibility of the Web.

## **From the Semiotic Perspective**

In this section we introduce an approach that can be helpful when you are thinking about making better, more accessible Web sites. This approach arises from *semiotics* (sometimes called the science of signs), which is an area of study at the boundaries of philosophy, psychology, sociology, linguistics, and science. Detailed discussion of the history, terminology, and current issues of semiotics is beyond the scope of this course (We have included some online references in the appendix for anyone who'd like to learn more).

However, some semiotic ideas that contribute to a framework for thinking about Web site and Web page design include:

1. Communication between people, from meaning-making in particular to culture in general, depends on a shared understanding of signs. A sign, being the smallest unit of meaning, is a thing that represents something else. For example, using a graphic of a North American mail box to represent email functionality on a Web site doesn't necessarily mean a great deal in China.
2. There are three main categories of sign: *Icon*, *Index* and *Symbol*. Any particular sign may contain elements of all of them.

**Icons** are signs that somehow physically resembles the object it is meant to represent (i.e. the 'signified' to use a semiotic term).

An example of an **icon** is the image of the recycle bin on the desktop of many popular computer systems. It's worth noting that computer people often use the word icon to talk about elements of a graphical user interface that *don't* actually look like something. The Windows control panel 'icon' is a good example. It is an image of a hammer and a screwdriver; does this truly represent a control panel?

**Symbols** are signs that are agreed by convention to stand for something (the signified). The word C-A-T is a symbol - its connection with the real, fluffy, purring object that likes to drape itself over my computer keyboard is entirely arbitrary. In the previous definition of icons, the example of the Windows Control Panel is really a semiotic **symbol**.

**Indexes** are signs that have a direct link (that is, are caused by) the signified. For an example you need look no further than the ubiquitous pointing hand found on all Web applications, or even a mouse pointer, as each *indicates* position or proximity by virtue of its pointing. Or, to continue the cat example, cat footprints across the pages of a book are a semiotic **index**.

3. Signs are not static. Their meaning and the way they are interpreted changes for individuals through time. A trivial example might be a Web counter showing the number of 'hits' per page. People setting up their first home page tend to regard these as 'cool' and desirable, but as they become more knowledgeable and experienced with Web conventions, they see their use as unsophisticated and unhelpful.

4. Each semiotic element (sign or text) can be read in any number of ways other than that intended by the author. As the Web counter mentioned in the previous principle might be.

5. Texts and signs offer statements at a level of power, solidarity and ideology. Numerous Web based examples can be offered. Sites might exclude certain groups by being gender specific or culturally biased. Sites might exclude users of certain browsers, or alternatively show their commitment to accessibility by displaying the 'Best Viewed in Any Browser' logo.

We can recognise the potential for the intended meaning of an individual Web page or site to be radically different from the way it is perceived by some of its users. To minimise the potential miscommunication, and thus improve accessibility, there are some guidelines below that can be followed when you're evaluating other sites, or thinking about the messages your own site conveys. The guidelines are arguably more subjective than the ones offered by the WAI as they operate at a generally higher level.

**Exercise:** Examine the guidelines and select a site to evaluate using them. If possible, do this in conjunction with one or more people looking at the same site. Mark your scores on the checklist and then calculate the overall total. Then consider:

- Is this overall total a fair 'score' of the site's value?
- Does it reflect your gut feeling about the site?
- Do you agree with other people's scores, and their reasons for awarding them?
- Can you identify ways in which the site might be improved that will entitle it to higher scores for one or more of the guidelines?

## Guidelines and Checklist

<b>Semiotic Site Analysis Score Sheet</b>	
<i>Please enter the following information:</i>	
Date:	
Site/URL to be analysed:	
Name:	
<b>How well do you think the site you're analysing succeeds in meeting the following recommendations? (On a scale of 1 to 10, where 1 = No, not at all and 10 = Yes, excellently.)</b>	
1. Does it engender trust?	
2. Do you believe the information provided is verifiable, accurate and trustworthy?	
3. Is it accessible to all cultures, all browsers and all hearing and sight-impaired users?	
4. Is the text as clear as possible?	
5. Does it provide forms for feedback?	
6. Is the site inclusive?	
7. Does it avoid giving off a message of authoritarianism or absolute power?	
8. Does it engender solidarity?	
9. Does it use icons and indexes liberally and take care with symbols (which by nature are vague)?	
10. Do the Web pages seem to be regularly maintained and updated?	
11. Is there a stable and consistent navigator metaphor?	
12. Does the site always give escape routes - back and out?	
13. Are users locked into the site because everything they need is readily available, so they only leave when they want to, not because they have to?	
Overall Score	