Evaluating Content and Design on the World Wide Web

I. The Need for Evaluating Information on the Web.

   A wealth of material can be found on the World Wide Web that covers an incredible breadth of subjects. But, the ease of finding materials often obscures an important issue: how reliable or accurate are these materials? Before the advent of the World Wide Web, print and broadcast media were the principal sources of information for most people. We have come to rely on the accuracy of print media because of the tradition of tacit controls that affect their publication. For example, print newspapers usually require the verification of stories and sources. Articles in scholarly journals are subject to peer review which serve to corroborate their authority. Abuses of accuracy have often resulted in libel suits and loss of public confidence. These and other factors have caused us to accept the accuracy and reliability of sources found in print almost without question. Unfortunately, this complacency is not warranted. Recently, a number of newspapers and broadcast media have been forced to admit inaccuracies and improprieties in their reporting. Some scholarly or research sources have also been disclosed as fraudulent.

   But Web materials should be scrutinized with an even greater "grain of salt." First of all, the socio-economics of Web publishing are entirely different from that of print media. There are a number of important factors that differentiate Web publishing from other forms. These include

- easy, open access
- lack of review mechanisms
- anonymity of sources
- lack of safeguards for published materials
- timeliness of published materials

Almost any individual or group can publish on the Web. Most Web materials are posted by individuals or groups directly without any intermediary. This means that most materials are not subject to any form of review. In fact, the delivery of Web pages do not even guarantee that their sources are known reliably. All that we know about a page is its address (a URL). Web pages can be easily fabricated. Worse, Web sites are subject to tampering by outside agents who can modify their content. Recently, the New York Times, for example, found that their Sunday edition had been "hacked" by an outside group that installed competing pages. In this instance, the changes were obvious; but in others it might be more subtle. Finally, the timeliness of Web materials is itself a double-edged sword. Information can be posted and updated quickly on the Web. This makes it an extremely useful source for the most current news and information. At the same time, the desire to publish as quickly as possible does not always contribute positive results. There are numerous examples of unsubstantiated reports that have hit the Web, because speed was valued over accuracy. Ironically, the timeliness of Web materials have also rendered their shelf lives much shorter than most other media. Items that are several months or even weeks old are often suspect because of it.

Traditional Print Evaluation Criteria.

It is generally agreed that print media can be evaluated based on at least five basic criteria: accuracy, authority, objectivity, currency, and coverage. These criteria and how they might be applied to specific published works are summarized in the box below.

Five Criteria

Criteria	Considerations
Accuracy	How reliable and free from error is the information?
	Are there editors and fact checkers?
Authority	What are the author's qualifications?
	How reputable is the publisher?
Objectivity	How biased is the point of view of the author?
	To what extent does the material try to be persuasive?
Currency	Is the work up-to-date?
	Is the publication date clearly labeled?
Coverage	What are the topics included in the work?
	Are the topics explored in depth?

While these may be effective for evaluating the merit of print publications, they do not strictly apply to most Web materials.

Adapting These Criteria to Web Resources.

There are several challenges for applying these conventional criteria to Web materials. One must be careful to distinguish the objectives and motivations of their sources. It is also important to consider the special circumstances of their publication. Each of the criteria should be modified to extend to these and other special circumstances.

Accuracy. Almost anyone can publish on the Web. Currently, there are no standards for ensuring the reliability or accuracy of information posted on Web pages. Instead, the reader must look for indications that the source is generally reliable.

Authority. It is often difficult to decide on the authority of Web sources, because it is difficult to determine the authorship of these resources. Even if the author is listed, qualifications are seldom included. The reader must assess a Web page's authenticity and authority often by appealing to independent sources.

Objectivity. The motivations of individuals and groups for posting materials on the Web are not always evident. Many Web sites are nothing more than "soapboxes" for special interests and

agenda. Readers should be careful to distinguish the purposes of the pages before accepting their content at face value.

Currency. While Web materials often include dates, it is not always clear what these dates signify. Is it the date produced? posted on the Web? last revised? The currency of the sources used for their content are seldom listed. For example, a page may be newly posted, but is based on references that are outdated.

Coverage. The extent of coverage for a topic or issue often depends upon the purposes or intents of the individual or group that publishes it. For example, a news report about scientific research differs significantly in coverage from a scholarly journal article about the same research. On the Web, sources vary even greater in the amount of detail or coverage that they offer.

Distinguishing Different Types of Resources.

   A useful strategy for evaluating Web content is to first distinguish what type or category the Web page/site fits. Applying the criteria differs to some extent depending upon its type. For example, claims about the performance of a product would be evaluated quite differently depending upon their source. We would be wary about claims from the manufacturer, but less so if reported by a news agency. Some of the most common types or categories of Web pages are listed below.

Different Types of Web Pages or Sites

Category of Web Page/Site	Characteristics
News	pages supported by news agencies, newspapers, newsmagazines, wire services, and other journalistic enterprises.
Information/ Reference	pages that contain lists, dictionaries, encyclopedia, thesauri, and other reference works.
Business/Marketing	pages posted by corporations, businesses, organizations that are attempting to promote goods and services, and other commercial enterprises.
Advocacy	pages posted by individuals, groups, or organizations that are attempting to influence public opinion on specific issues.
Personal	pages posted by individuals for reasons of self-promotion or entertainment.

II. Analysis of Design

Design criteria can be difficult to specify, since how a page looks or how a site is laid out can be an objective matter. ("To each their own", you know.) But a number of basic rules of thumb have emerged. We consider some of them now. As you consider a site on the Web -- or one that you are writing -- you might ask yourself these questions:

Criterion #1: Less is More

As is the case with so many other things in life, it is usually best to show some restraint when authoring Web pages.

- *How many images are on the page?* Enough to convey the information without being distracting? Does the page look cluttered with images? Advertisements in particular can be easily overdone.
- *Is the use of color appropriate?* Wildly colorful pages often detract from the content, in addition to the fact that certain colors don't mix. (See below.)
- *How many "gadgets" are used?* Does it seem as if the author threw in every fancy effect that he/she has learned? Java, Javascript, animated GIFs, Dynamic HTML, etc. are all undeniably cool, but they should be used sparingly and tastefully. Some pages can get awfully pretentious.
- *How much text is contained on one page?* Like it or not, the Web caters to those with short attention spans. You can't expect someone to scroll through several screenfuls of text without getting bored and clicking to go somewhere else. Break the text up into multiple pages, index it, or find other methods of conveying the information.
- In general, *how cluttered or busy are the individual pages?* One of the beauties of hypermedia is that you don't need to say everything all at once.
- *Is the number of links overwhelming?* There is such a thing as too much choice. Try to limit the number of links in a block of text as much as possible. In particular, don't include several links to the same place when one or two will do.
- *If frames are used, are they used inconspicuously?* There is nothing worse than a page which is broken up into 5 or 6 frames, each calling for your attention. Try to stick to 2 or 3 at the most.

Criterion #2: Efficiency

Visiting a page should not cause a user to become impatient, frustrated or annoyed -- and eventually cause them to become an ex-user...

- *How large are the images?* (And, again, how many are there?) Images take time to download (about 20 seconds for each 20K image on a 14.4Kbps connection). The bigger they are and the more there are, the longer it will take a page to load.
- *Is that Java applet really necessary?* Applets require time to download and in some cases to run as well (particularly if they repeatedly retrieve information from the server). Be sure you need it before you use it, and don't use more than one on a page.
- *How big is the page?* Huge pages of text, even if they are indexed and have few graphics are not only tough to read, but take a while to load.
- *Are frames implemented logically?* Authors using frames often forget to provide an "escape hatch" from the frame structure. Leaving a site but remaining inside one of its frames can be very frustrating.

Criterion #3: Consistency

- *Is there a common "look and feel" to the site?* Are similar color schemes, menu structures, text fonts, layouts, etc. used on all of the pages?
- *Is it clear when you are still in the same site and when you leave it?*

Criterion #4: Ease of Navigation

- *Is it easy to find what you are looking for?* A good Web site will provide various methods for finding specific pieces of information, including a search engine, clear menus with logical content, and possibly a site map.
- *Is it possible to browse the site while maintaining a good idea of "where you are?"* Chaotic site structures with links going all over the place can result in a browser becoming lost, especially in a large site.
- *Can you get back to the home page easily?* A critical design feature is a link back to the home page from most, if not all, pages in a site.
- *Is it clear where links will take you?* A problem to watch out for is the "Click here" syndrome. Make sure that links are descriptive.

Criterion #5: Cross-Browser Compatibility

- *How many advanced HTML features are used?* Though both Netscape Navigator and Microsoft Internet Explorer can handle all of the features of HTML 4.0, many older browsers can't. Thus, features which were introduced after version 3.2 (frames, for instance) might not work properly.
- *How many non-standard HTML features are used?* Microsoft and Netscape are notorious for adding special, non-standard features to HTML that the other browser can't handle (e.g., marquees, fixed backgrounds). It might be best to steer clear of these.
- *Are alternatives to images provided?* Certain browsers (e.g., Lynx) are text-only, and thus are dependent upon textual alternatives to images if they are meant to convey important content. Similarly, users of Communicator or IE with slow connections may choose to avoid loading images.
- *Are alternatives to frames, Javascript, Java, etc. provided?* Pages can look terrible on browsers which don't support these features, or which have them turned off. In the case of Javascript and Java, they may even lock up.

Miscellaneous

- *Is the text readable?* Certain combinations of text and background color render the text indecipherable.
- *Are potentially distracting/annoying features used with care?* Animated images fall into this category if not used properly. And the <BLINK> tag is always in this category!
- *Is the background in the background?* A background image should accentuate the look of a page, not dominate or clutter it.

Please note that this list is by no means comprehensive. During our discussion of various Web sites throughout the term, we may come up with many more.

Homework:

1. After reading the preceding discussion, take some time to review the example sites at [Really Bad Web Sites](#) (Under Links of Interest on class Web site). Note the various "do's" and "don'ts" that are covered.
2. Find out more about the special characteristics of each of these important categories for web pages. Consult the links above.
3. Consult an example of a **business** site. (Choose your own -- not one of those listed on the Widener page.) Apply the criteria site as posed for the Business category to your selected site.
4. Summarize your results in a Word document. Cite the name of the page consulted. How well did it measure up to the criteria tests? One or two well-constructed paragraphs will do. You do not need to explicitly answer every question, but you do have to do a reasonably thorough analysis.
5. For the business site that you already analyzed for content, include an analysis of design based upon the preceding criteria. Add your analysis to the document that you have prepared already and submit them together via e-mail or a print out

Concluding Remarks.

   The issues discussed and illustrated here only scratch the surface of the problem of evaluating the content and design of Web materials. For example, there are other types of Web pages not included in the list above. Can you think of any? Are they important informational resources? There are also a number of issues that are the result of the newer technologies that support the Web. It is indeed a recurring theme: the introduction of a new technology offers improvements yet poses new challenges as well. To find out more about this topic consult the following links for more [examples](#) and further [references](#).