

Susan Beck, in her presentation of “Evaluation Criteria” (from her 1997 online *The Good, The Bad, and the Ugly: Or Why It’s A Good Idea to Evaluate Web Sources*), lists three issues of currency in analyzing the academic usefulness of web sites:

- 1) Is the page dated? (i.e. Is a date displayed?)
- 2) If so, when was the last update?
- 3) How current are the links? Have some expired or moved?

While the ORB would score top marks according to her other criteria (Accuracy, Authority, Objectivity, Coverage), and while the ORB is better than most sites at refreshing itself, expired and moved links are a chronic problem. Building a consistently reliable page for internet resources necessarily involves monitoring a whole lot of shifting sand, and only a brief tour of our own and other academic web sites demonstrates how quickly and frequently we can lose our footing. I would like to focus first on issues of link-maintenance, followed by some brief observations on problems arising from expanding the number of links to external resources.

Currency in linking

At the moment, my Anglo-Saxon page has 102 links (external and internal). On average, one of these becomes broken or redirected every week. If I find myself in the midst of a busy month, this can grow to be a significant problem fairly quickly. The most embarrassing problems are broken links (those returning 404 errors or other ‘not found’ messages), although these are also the easiest to detect. More insidious, and more common, are redirects. Many of these are innocuous enough, and might be invisible (redirecting medievalist.net to www.medievalist.net for example). Others can be more severe. Often, a site manager, on changing a URL, has placed a temp page at the previous URL with either a link or an automatic, slightly-delayed redirect to the correct site. An example of the former is the frequently-linked Voice of the Shuttle page, which has recently changed its domain from humanitas.ucsb.edu to vos.ucsb.edu. This is easy enough to fix, and only has to be dealt with before the temp page is taken away (although of course it looks more professional to avoid these temp pages altogether). More difficult are automatic redirects, like that of the recently changed Christian Classics Ethereal Library page, from ccel.wheaton.edu to www.ccel.org. Depending on the length of redirect delay (several seconds for CCEL, but very

short for many others), this redirect becomes a serious problem, as the ORB user has difficulty clicking back to the ORB page (for some of these, I find myself clicking the back button as fast as I can several times to return). A good example of this sort of quick relay is Richard Stracke's online Latin and Old English Paris Prose Psalter. This site is linked from several academic websites, and has been for some time. Some months ago it disappeared (at which time I deleted it), but has since resumed at an address that is very similar, but not quite the same (minus one subdirectory). A redirect page has been set up at the old address, but the relay is so fast that it is almost impossible to return to the originating page. This in many ways can be more off-putting than broken links, as the user feels compelled to begin again at her ORB entrance point. Therefore, while most redirects are unobtrusive, it is generally desirable to detect and correct them along with broken links, as often as possible.

Manually checking each link is impractical for those with thick pages, but thankfully there are several good link-checker programs out there which can (partially) address the problem. Many online checkers like NetMechanic.com and CoolResources.com simply require typing in a URL from your web browser, returning lists of good and bad links (CoolResources simply labels each 'OK' or 'BAD'). More useful are some of the downloadable link-checkers. The one that I have found most useful is Xenu, the URL of which you will find on the handout. Xenu is much more configurable and is particularly apt (as many of these are not) at spotting redirects. After an initial survey of the webpage and all ancillary links (including graphics), a sample of which is printed as handout 2, Xenu compiles a particularly useful HTML summary. Broken links (see handout 3) are presented by link and by page (in case your site has several internal pages). In this case, the first two 'broken links' were temporary server problems (time-outs), and can be double-checked on the spot, or a bit later. The third was indeed a dead link. Next we are given a list of redirected URL's. Most of these are invisible to the user. The first, third, fourth, and sixth here cause no problems. We might go ahead and correct the first three of these, but with the sixth we may want to leave the redirect alone, to retain the simplicity of <http://bede.net>. The second and fifth are more troublesome, as they represent medial pages to moved sites (the first, the Voice of the Shuttle, with a link, the second, Oxford University Humanities Computing, with an automatic, delayed redirect) and really need to be smoothed out. In any event, the HTML summary allows us to check each on the spot to determine whether or not it might present a problem. Finally, Xenu gives us a list of ftp and gopher links for manual checking and a site directory (I have two internal pages, pages linked from my

Anglo-Saxon page and residing in the same subdirectory on the rhodes.edu server). There are a number of link-checkers out there, but it is important to find one that, like Xenu, can tell you what is broken, what is redirected, and what is multi-linked (linked from several different places in the page hierarchy, as is often the case with large, popular resources like the Christian Classics Ethereal Library). A weekly or biweekly check has certainly made it much easier for me to keep this page current.

Unfortunately, these sorts of programs will not find every troubled link. If the original link leads to a perfectly good page, even if it is one that hosts a link to the new page, it will come up as 'ok'. But quite often when a site is in the process of moving, directory structures change, and these might show up in the redirects. Xenu would not, for instance, have caught the problem of the Paris Prose Psalter redirect. It did, however, catch the CCEL, the Voice of the Shuttle, and the Oxford Humanities Computing redirects. Ultimately, link-checking will still rely on periodic checks of each link by hand, but link-checkers can spot the most egregious mistakes, and give you an initial screen for addressing the rest.

Redirects are easy to fix, but broken links might cause a bit more difficulty. If it was worth posting, it's worth tracking down, although it can be something of a shot in the dark. Extensive and redundant searches on engines like Infoseek and Yahoo, or on multi-engine sites like Google and Ask.com, might recover it, though often as not you'll find the same old references you're trying to correct. If you do need to remove a link, make a note of it, as it may return. Some months ago, after I lost a link to Richard Stracke's Paris Prose Psalter, one search brought up only my own ORB page with its dead reference. After several more searches, all of which returned pages with the same dead link, I deleted the link. It has since returned, and can be found with its original URL on several academic sites (as previously mentioned). I have a list of other academic websites with Anglo-Saxon content which I scan periodically, and this is ultimately one of the best ways to find these transient links. Links found on other sites have to be taken over with caution, of course -- for a time, this link (the Paris Prose Psalter) resided as a dead link on a number of academic web sites, and now remains a redirect that cuts the user off from the originating site (of the five sites I found with this link, none had as yet fixed the redirect. I have reinstated it temporarily as a redirect only to demonstrate the point above). This sort of problem is extremely common in web sites of every quality, but one can stay on top of these things with a good link-checker.

PURL's

Most of the discussion so far has pertained to external links, or links to resources that are not under the ORB umbrella (whether maintained within the rhodes.edu domain or elsewhere). Internal links are generally less problematic, as those maintaining pages or sites within ORB are quite good at keeping us up to date, but one might consider encouraging the use of PURL's, permanent URL redirects (PURL stands for Persistent Uniform Resource Locator, or Persistent URL). It might seem at odds with my previous vehemence against redirects to promote this sort of thing, but PURL's are instantaneous redirects (not by way of a medial page with a timed relay), and the benefit of linking directly (insofar as any link is 'direct') might be outweighed both by the memorable nature of some redirect URL's (such as <http://bede.net>) and the fact that PURL's can follow the page wherever it might be hosted, especially important for transient academics. There are a number of free redirect services, though these tend to require pop-up ads or banners as the price for the memorable redirect. Less troublesome (and recommended by Paul Halsall to several discussion groups a few months ago) is the OCLC's PURL initiative (<http://purl.oclc.org>). I have registered for myself the PURL domain '<http://purl.oclc.org/bedingfield/>' and have linked to my ORB page with the further subdomain '[/anglo-saxon/](http://purl.oclc.org/bedingfield/anglo-saxon/)'. Encouraging those with sites that are ORB internal but not hosted on the rhodes.edu domain to register a PURL might give the site a bit more of a sense of permanence for site users and for ORB page editors (though of course any changes to the PURL target still have to be maintained and checked).

Currency in Content

When I took over this page last summer, apart from updating broken and redirected links, I was determined to expand the page considerably. My hope was, of course, primarily for expansion in original essays, but I also saw a need for a list of external resources for teaching and research in Anglo-Saxon. My primary interests were threefold, compiling and maintaining lists of online electronic editions and other online texts, of online teaching modules for Old English, and of databases of historical, artistic, and archaeological resources for Anglo-Saxon England. Sites have been developed in all three of these areas in the past few years, but access to these resources has been scattershot, and the ORB provided a perfect home for it (we have since incorporated as our

own the best of the online teaching modules, Professor Murray McGillivray's *Old English: An Introductory Course*). I expanded the Anglo-Saxon page from about 25 to over a hundred links. Most of the expansion came from repeated keyword searches on search engines and, most importantly, from other academic link lists, filtered and selected as appropriate for the ORB format and purpose. Mailing lists such as Ansaxnet and Mediev-L have been particularly helpful in keeping track of what is a dynamic and shifting corpus of online teaching modules, electronic editions, and contextual resources.

This proliferation of external links opens itself up to a range of potential problems. Greater expansion to some extent means greater relaxation of quality control, and this can be dangerous. One danger has to do with site incompleteness. Many sites, such as Daniel O'Donnell's edition of Caedmon's Hymn, are still under construction, and a link implies endorsement of a site that cannot yet have been reviewed in its entirety. In this particular case, the author of the site is something of a known quantity, the opening page makes clear that the site is under construction, and the pedagogical benefit of including this page amongst the small but growing list of e-editions outweighs these problems (to my mind), but often that will not be the case. A greater danger involves links to pages that are academically weak. Casually-composed pages or sites for medieval enthusiasts (sites like *ƒa Engliscan Gesiþas*, rich in texture but not especially 'academic', might be desirable links as examples of Medievalism, but must be somehow separated from academic resources) confront us daily, and we categorize or reject them on a case-by-case basis. However, at times these dubious sites might have internal resources that, in a limited way, prove extremely useful for teaching and research, such as many of the Maps of Anglo-Saxon England linked from my page, or the photos of Maldon, to which I have linked directly rather than through the central site (directly to the HTML page hosting the photos, not to the photos themselves). The best example of this sort of thing are the Readings of Old English poetry from *ƒa Engliscan Gesiþas*. These are terrifically useful pedagogically, and I have linked to them directly under teaching resources, despite the fact that the site generally might not warrant extensive cross-linking. Attempts to expand a page to be more useful and complete will necessarily draw an editor into these sorts of objectionable gray areas. Most often, I have decided cases like this based on whether they have been helpful or misleading to my own students (by this standard, the Online Readings are in, photos of living history enthusiasts bearing reconstructed arms and armour, for example, are out).

The Online Readings involve a third danger of site expansion. This page requires

RealAudio to hear the readings. Many sites, such as Brown University's Old English Lessons, require current versions of popular web-browsers. Professor McGillivray's Online Old English course, now part of ORB, incorporates Java applets as exercises. Tim Romano's e-edition of *The Wanderer* has recently moved from an HTML/frames-based site to a Javascript site. While most users (arguably) can now handle RealAudio files and Java applets, online resources will continue to embrace technologies that allow them more power and flexibility, especially in online teaching exercises and electronic editions with contextual material, but that might not be supported by the systems of many of those navigating the ORB. Whether or not to include them, or to include them with certain caveats or warnings or explanations, depends partly on their importance and utility. I have tended to include these more often than not, especially in the case of on-line teaching modules, for (as a recent ORB user has brought to our attention) online Old English teaching is currently in demand, and users unable to find these resources through ORB will get in the habit of looking elsewhere. Sites using newer (though not entirely uncommon) programs such as Shockwave, Liquid Audio, or Streamworks, might be more problematic, and the desire for currency in technology must be weighed against the tremendous benefit of technological simplicity.