

Chapter 2: The Development of the Blog and its Infrastructure

2.1 Introduction

6 The Internet is enabling conversations among human beings that were simply not possible in the era of mass media.

9 These networked conversations are enabling powerful new forms of social organization and knowledge exchange to emerge.

38 Human communities are based on discourse—on human speech about human concerns.

--The Cluetrain Manifesto, 2000.

Envisioning the Internet as a place where conversations take place is nothing new. Newsgroups, email lists, and discussion forums sprung into being in the early nineties and still serve a particular purpose, typically bringing people with specific interests together. The web as a collection of “pages,” however, was shaping up to be more of a broadcast medium. Most websites, even personal ones, were designed to convey information and did not allow visitors to interact with them, beyond a link to an email address or guestbook. Corporate web sites, including media sites such as The Washington Post's and the New York Times' sites include flashy ads that look like shorter versions of something the advertisers might show on television. In fact, many of these sites often appear to imitate television, forcing visitors to watch short ads before viewing content.¹ Some sites have used a cable or print metaphore and require subscriptions for visitors to read content on their sites. The New York Times, which used to be completely open, now has its opinion column behind a pay firewall and the Wall Street Journal

¹ Both Salon.com and Newyorktimes.com often require visitors to view a short video ad before reading an article.

Online has always followed this business model. As David Weinberger explains, in the early days of the web explosion, “Businesses by and large were worrying about the Web as another way to 'build brand,' 'move produce,' and, most of all, to 'gather eyeballs' (xi).

Blogs, like newsgroups, discussion forums and email lists, disrupt the notion of web sites as a passive medium. Unlike these earlier dialogic forms of online writing, blogs have an infrastructure that allows them to be more successful at this disruption. Blogs maintain the element of broadcasting that corporate sites have, but have a better mechanism by which to do that. Blogs are automated in a way that discussion forums are not. They have also developed ways of being optimized for search, such as having categories or keywords that are machine-readable and thus easily picked up by search robots. Also, behind most blogging software lies an RSS feed, an automated way of letting thousands of sites know that a particular site is updated. The addition of comments and trackback allows visitors to interact with a blog in a way that they just can't with a standard web site. Though blogs are simple to use, understanding the infrastructure behind them allows a blogger to maximize the potential impact of his or her blog. In this chapter, I will explain how the blog infrastructure evolved from the hand-coded versions of it that existed in 1997 to the robust system that exists today. I will explain the components of this infrastructure and how to use them.

2.2 History of the Blog

Software connects Weblogs with Weblogs, and writers with readers, knitting together the community. Every element that I can't reproduce leaves me invisible.

--Rebecca Blood, "How Blogging Software Reshapes the Online Community," Dec. 2004

One day while I was having lunch with a technically-savvy faculty member, the conversation turned to having students put their work on the web, completely publicly

available. The conversation went something like this:

Faculty: I thought that by having them put their work on a web site that they would put more effort into it, that they would care more about their writing. That just didn't seem to be the case.

Me: Do you know how many people visited the students' sites?

Faculty, raising his eyebrows in a way that said he'd never considered this before:
No, no I don't.

Me: Did you have any way for people visiting the site to provide feedback to the students?

Faculty: No, I didn't.

If anything is true about the web now, it is that it's easy to get lost in. There are billions of web pages and despite the prevalence of search engines like Google and Yahoo, the probability of a single site being indexed and discovered quickly is slim. Alberto Barabasi, who has done extensive research on the topology of the internet, estimates that as much as 60 percent of the web is completely unindexed, meaning it cannot be found via a search engine (164). Further, he explains that the web is not as navigable as one might think. "Starting from any page, we can reach only about 24 percent of all documents" (165). If you want to take advantage of writing in the public eye, then you must have a public eye for whom to write. Otherwise, it's not much different to the students from handing in their work to the professor. In fact, standard web sites are not particularly good venues for gaining a public audience, unless they already have a large audience. If, in the case discussed above, the students' work were featured or linked to from the college home page or admissions site, the

professor would have been guaranteed more of an audience for his students' work since those sites already receive regular visitors from prospective students, employees, and current students and staff. If, however, that's the only incoming link, the site has “less than a 10 percent chance of being noticed by any search engine” (Barabasi, 174). Of course, the professor still may not know that an audience is there and the audience still had no way to interact with the students' work. Building a web site does not guarantee that people will visit it and a standard site with no opportunity for interaction does not keep people who do visit coming back. Blogs offer both the opportunity to attract visitors and for those visitors to interact with the content on the site primarily because of the technology at work behind most blog software.

The term web log was coined in 1997 by Jorn Barger, proprietor of [Robot Wisdom](#). Robot Wisdom was (and still is) a literal web log, a log of hyperlinks to sites that Barger found interesting. Other accounts point to similarly early sites such as Dave Winer's Scripting News, also begun in 1997, or Netscape's “What's New” page as early weblogs. Both were simply lists of links to other sites (Stone, 37). The term was shortened to blog by Peter Merholz in 1999 and this is the term most commonly used today; the authors/creators of blogs are called bloggers (Blood “Weblogs,” 7). Blogs evolved from news sites such as [Slashdot](#), which was established in 1997 (<http://slashdot.org/faq/slashmeta.shtml>). Slashdot, and sites like it, not only linked to sites or stories but included brief commentary on the story and allowed visitors to the site to leave comments much like a traditional discussion forum. These kinds of sites that provided both the links and commentary on the content of the linked site are often referred to as “link plus commentary” or filter type blogs. Both on Robot

Wisdom and Slashdot, links and commentary were frequently updated, with newer information posted at the top of the page and time-date stamped. This practice of posting information in reverse chronological order is still one of the key defining characteristics of blogs (Blood “Blogs, A History and Perspective,” 8). The frequently updated nature of blogs distinguished them from standard web sites that were their predecessors. They also differed from the discussion forums from which they also evolved. Whereas forums might be described as a democracy with lots of voices all with equal weight, blogs might best be described as benevolent dictatorships. A main voice dominates, but others are allowed to participate and share in the discussion. Blogs represented a shift in the way that visitors viewed a site; they could now participate more actively. Cameron Barrett, owner of Camworld, distinguished home pages and standard web sites from blogs in this way:

Home pages are places where you put pictures of your family and your cats. . . . for a close circle of family and friends. Weblogs, however, are designed for an audience. They have a voice. They have a personality. Simply put, they are an interactive extension of who you are. (Barrett, 30)

Like standard sites, however, early bloggers created blogs mainly by hand using hypertext markup language (HTML), a language that is interpreted by web browsers and that displays the text we see on web sites in a readable format. Thus, the early blogs were written primarily by people in the tech industry who had skills in HTML and other web-based technologies that allowed them to create dynamic and interactive sites (Barrett “Anatomy of a Weblog,” 28). At the same time that these blogs were being created by hand using HTML, software companies were developing applications to allow people without the ability to write

in HTML to publish online. In 1996, Xanga, a web-based interface for the creation of what they called online journals, was launched. With a simple box for entering text, Xanga allowed anyone to be able to publish text to the web. Xangas, as the sites that were created by the application are sometimes called, were different from the sites that evolved from Robot Wisdom and Slashdot. They did not contain links, but were longer personal musings. They did however, make links to other Xanga users, creating a kind of community. LiveJournal, launched in 1999, followed a similar tactic, focusing on journal writing and creating a community of users within their own site.

Xanga and LiveJournal, and to some extent Blogger, encouraged a kind of writing that was very different from the filter-type blogs of the hand-coding days. Since many of the people using these tools for blogging didn't know HTML, they couldn't create links, so they simply wrote journal entries. Frequently, when blogging appears in news articles, especially in association with young people, it is this type of blogging that they refer to. Like writing itself, blogging cannot be neatly placed into one category. As Biz Stone, an early blogger himself and co-founder of Xanga, explains:

A blog is a collection of digital content that, when examined over a period of time, exposes the intellectual soul of its author or authors. Blogging is the act of creating, composing, and publishing this content; and a blogger is the person behind the curtain. Part social software and part web building, blogging is peer-to-peer publishing—the future of our connected lives. (Stone, 35)

The content on blogs ranges in topic from politics to knitting to technology to personal life musings. Even individual blogs themselves may vary in the topics they cover.

Blogs got a second push into popularity with first, the September 11th attacks and second, the resulting wars in Afganistan and Iraq. On and just after September 11th, people used blogs to let people know they were safe and those outside of New York logged on to them to find more first-hand accounts of events and links to good news stories covering them. The same was true of the wars. Soldiers on the ground kept blogs and people at home read them to find out what was really going on. As a result of these events, political blogging, perhaps the most written-about blogging, evolved (Stone 171-2). Currently, there are some 23 million blogs, according to the popular blog search engine Technorati (<http://technorati.com/about/>). Blogpulse, another blog search engine, reports a slightly lower number of blogs, 19.7 million (<http://blogpulse.com/>). Both report blogs being created at a huge rate. Technorati claims that about 70,000 new blogs are created *each day* while Blogpulse reports about 40,000 a day. Given that the great majority of these blogs are text-based, that's a lot of people writing a lot of text. And, according to the Pew Internet and American Life Project, a great many people are reading that text. According to their latest daily report from December 5, 2005, about 7 million people on a given day "read someone else's web log or blog" (http://www.pewinternet.org/trends/Daily_Activities_12.05.05.htm). At the end of September, 2005, Pew reported that over 39 million people had ever "read someone else's web log or blog" (http://www.pewinternet.org/trends/Internet_Activities_12.05.05.htm).

2.3 Components of the blog infrastructure

Before explaining some of the technical details of blogging behind the scenes, it might help to know the parts that make up a blog. The meat of a blog are the individual

entries, called posts which usually have a title, a time-date stamp and a byline. Most blogs incorporate other items as well. Figure 1 shows the typical blog components.



Figure 1: Typical blog

Briefly, the parts are as follows.

1. Title of the blog. Often this is also a link back to the main page of the blog.
2. Date of a post. These may also appear after a post.
3. Title of a post.
4. Body of the post.
5. Author of the post. Generally the same person, but on blogs with more than one author, this is important information. Often the name of the author, when clicked on, provides a list of posts made by that author.
6. Time stamp. This also serves as the permalink (explained below).
7. Link to read or make comments. The number in parentheses indicates the number of comments on this post.
8. Link to see trackbacks. Again, the number in parentheses indicates the number of trackbacks.
9. Picture of the blogger which links to a profile or about page. Often this is simply a text link.
10. Blogroll or list of other blogs the blogger recommends or reads.

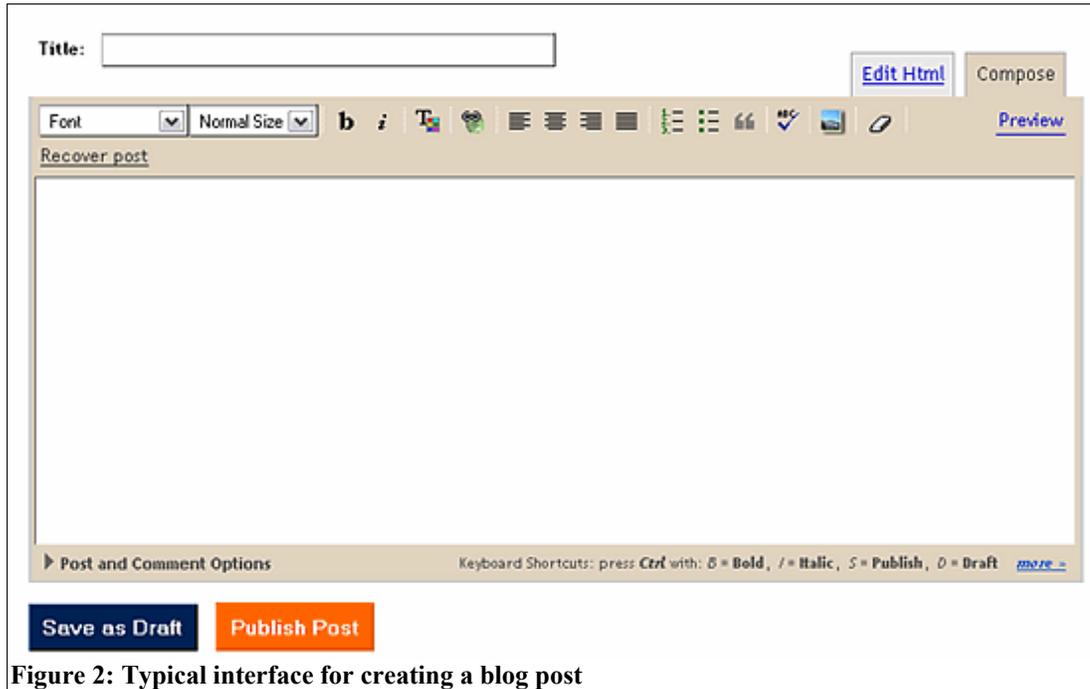


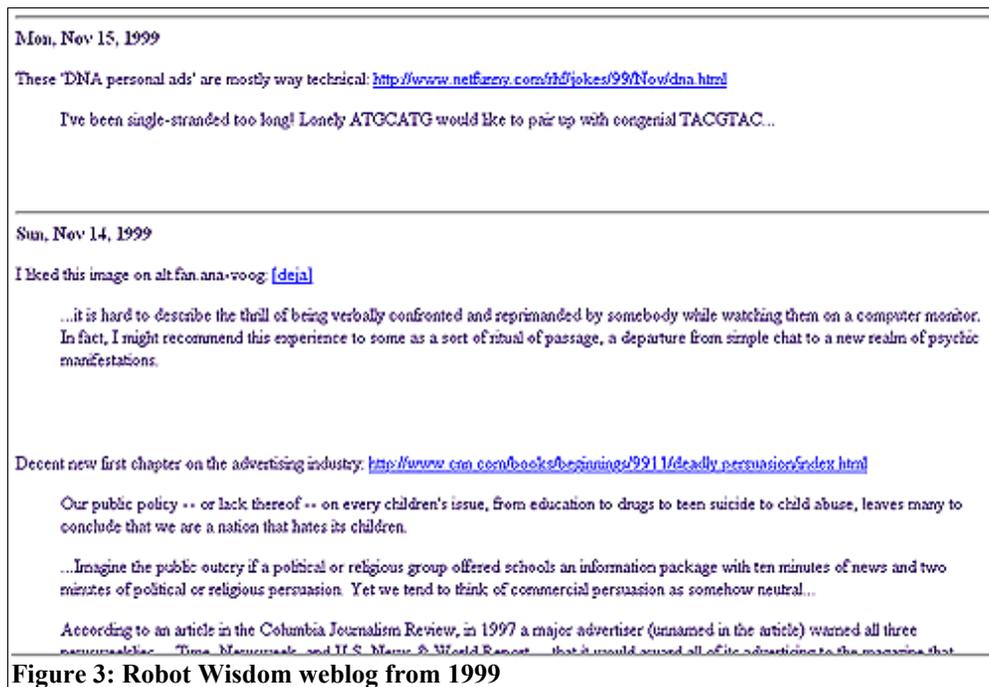
Figure 2: Typical interface for creating a blog post

Figure 2 above displays a typical interface for composing a blog post. This one is from Blogger. The small box above the large one is for the title of the blog post. The body of the post is typed into the large box. Above the box are formatting options similar to what one would find in a word processor. Additionally, a blogger can easily create a link by highlighting the text to form a link, clicking the little link icon (a globe with a chain link above it) and typing in or pasting in the url into the dialog box that appears. Most blog software provides these formatting and linking options, making it very easy for even a web novice to begin blogging. Blog software comes in different flavors and many options exist for those interested in trying out blogging. Some schools host their own blog software for use by faculty, staff and students. The functioning of most blog software is similar, varying only in their features. For an extensive list of available blog software and its features, see Appendix I. The features discussed below are common to many blog software or are easily added.

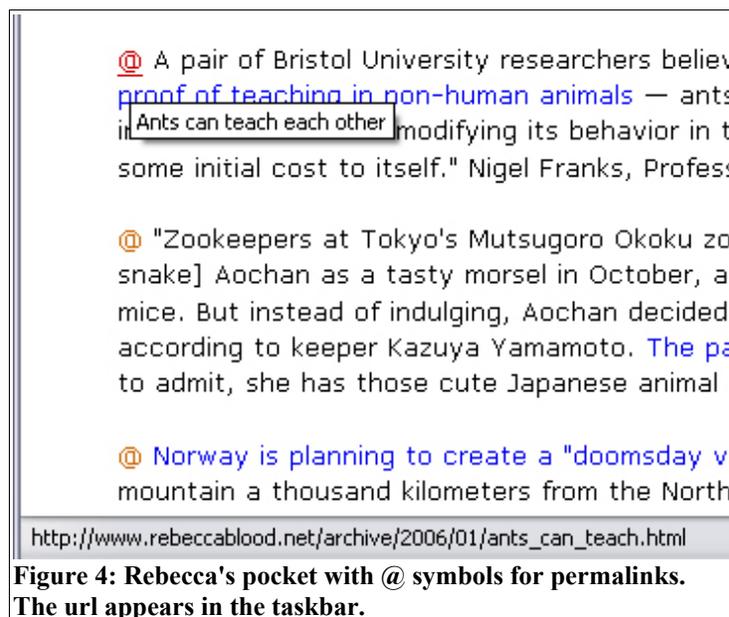
2.3.1 Links

The most basic element of web technology, not unique, of course, to blogs is the hyperlink or link, for short. A hyperlink is simply a reference to another web site often displayed as underlined text which can then be clicked on and the web site is immediately opened in the browser window. This simple bit of web technology forms the basis for much of the other technology that enables one to draw in an audience to a class blog. When blogs were hand coded, links were the primary content; however, when blog software such as Blogger came along, links temporarily took a back seat as the software simply presented a box in which bloggers could type whatever they wanted. Since many people who used blog software were not technical by nature, they did not know how to code a hyperlink (Blood “How Blogging Software . . .” 54). Thus, blogs began to be more and more linkless. Early bloggers were dismayed by the lack of links since links were the foundation of blogging. Filter-type blogs where bloggers posted a link and then commented on it ruled the day, until blog software de-emphasized the link.

But the link as a fundamental aspect of blogging had not completely disappeared and its primacy rose again with the creation of the permalink. A permalink is a link to an individual blog post as opposed to simply linking to the blog site as a whole. When blogs were hand-coded, bloggers often posted everything on one page, at most perhaps archiving older posts by month and moving them to another page. In Figure 3 below, there are three posts over two days. There is no way to link to these individual posts or even the individual day. When other bloggers would link to Robot Wisdom and try to reference one of these posts, they might, as Blood points out, have to explain how far to scroll down the page or



count down to the third entry (which would change every day or even within the hour!) (Blood "How Blogging" 54). Thus, it was very difficult to reference any individual post. In 2000, Blogger introduced the permalink which assigned a unique url (or hyperlink) to each post published by a blogger. Figure 4 below shows a screenshot of Rebecca's Pocket taken



when the cursor is hovering over the @ sign. Each @ sign represents a permalink. Clicking on this sign would open the url shown at the bottom of the screen, in this case, which would be just that individual post. This may not seem very useful from within the blog itself, but it allows other bloggers to create a link just to this post using the url indicated. Different blog software indicates the permalink differently. Sometimes it's a symbol (such as @ or #) or just the text "permalink." In Figure 1 above, for example, the time-stamp text is also the permalink.

2.3.2 Comments and Trackback

By giving individual blog posts their own link, the permalink "elevated Weblog commentary to a legitimate form of discourse A link is, after all, a link. Whether it leads to a Weblog entry or a syndicated column, each link on a page has equal weight" (Blood "How Blogging" 55). It also made interblog conversation centered around one blog post more likely to occur. Two other inventions increased the ease with which this interblog conversation could happen. The first of these was comments. In 2001, Blogger was the only software that did not have commenting. "For many, Weblogs are unthinkable without comments and the community of readers that comments make visible" (Blood "How Blogging" 55). Comments do not simply allow readers to leave feedback about the blogger's work, but in addition, most comment systems, including Blogger's (finally added in 2005!), allow a commenter to leave a link back to their own site. The link can be left in two ways. One, the system may have a space specifically intended for leaving a link, or two, the commenter, using simple HTML coding, can leave a link to their blog as a whole, a specific post, or some other web site. A typical comment box on a blog includes space for putting in

a name, an email address and a URL or link and a larger space for typing in the comment itself (see Figure 5). Most of the time, leaving this information is optional and, of course, the information can be made up. Because most people want to draw visitors to their site, however, they will often leave a link. In essence, this links the two blogs together. At the very least, the blogger might be interested enough in what the commenter has to say to visit their site and maybe even leave a comment of their own. Others visiting the site may also be



The image shows a comment form with the following fields and content:

- Name:** Laura
- Email:** lblanken@gmail.com
- URL:** http://geekymom.blogspot.com
- Comment:** ?

Below the fields is a large empty text area for the comment, and at the bottom is an "OK" button.

Figure 5: Comment box

inclined to visit the commenter's site. If the blog where the comment was left is a popular one, leaving a link there has the potential for driving quite a bit of traffic to the commenter's site. Figure 6 shows a typical comment thread, the results of filling out the box above. Each comment is followed by the person's name, a link to their email address and a link to their homepage, usually a blog. Also, someone has left an internal link in the first comment,



sending visitors and the original poster to another site. Each comment also has its own permalink, represented by the # sign allowing someone to link to individual comments as well. Therefore, a highly linked conversation around a particular topic can take place, not only within the comment box, but also outside of it, via the links that might be created to it.

Although commenting allows interblog dialog, most comment boxes are small and some even limit the number of words that can be written there, limiting how much can be said. Someone might want to “comment” more extensively on a specific blog post not by leaving a simple comment there, but by writing about the post on his or her own blog. They would do this by creating a link to the blog post using the permalink that is hopefully provided by the blogger. Unlike writing a comment though, the blogger may or may not know about the link and commentary that has just been created. Other than emailing the blogger (if an email is even provided), how does one let the blogger and his or her readers

know that there is a new post related to their own post? Enter the trackback. Invented by Movable Type, trackbacks leave a link automatically at the other person's blog (Blood "How Blogging" 55). Usually, these show up immediately and are displayed either within the comment section or above it. The way it works is each post has a trackback url. In a trackback system, the person who created the link puts in that url into the system. This url is usually slightly different from the permalink mentioned above because it is a way of communicating with a machine rather than creating something a human can click on. To create a trackback, one copies this trackback url, pastes it into their trackback system. Figure 7 shows a manual trackback system where one must past the url both to trackback to and from. Figure 8 shows how this trackback would show up on the blog itself. First you see the trackback url. This is the url to which one sends a trackback. Beneath that, there is the post



The image shows a web form for a manual trackback system. It contains five input fields and a submit button. The fields are labeled as follows:

- Your Blog Name ?:** A text input field containing "Geeky Mom".
- Your Blog Post Address (Permalink URL) ?:** A text input field containing "http://geekymom.blogspot.com".
- Your Blog Post Title ?:** An empty text input field.
- Your Blog Post Excerpt ?:** A large, empty text area.
- URL(s) to Ping ?:** A large, empty text area.

At the bottom of the form is a button labeled "Send Pings".

Figure 7: Haloscan manual trackback system



Figure 8: How trackbacks appear

that has trackbacked to this post, “Mad about Mad Cow.” Generally, in addition to leaving a link to the new post, trackbacks leave an excerpt of the blog post. Sometimes this is manually entered by the poster and sometimes, it is automatically entered by the system by taking the first 200 characters or so. The blog software we chose to use allowed an easy way



Figure 9: Interface for entering a trackback in the Drupal blog software

to trackback to posts we were writing about (see Figure 9). After the blog post box, there was also a trackback box, so that if a blogger was writing about someone else's post who happened to have a trackback url, it was simply a matter of pasting that url into the box. In fact, the blogger could put more than one url if they were referencing more than one blog post. The system then automatically copied the title and a select number of characters. Not all blog software has a trackback system or makes it easy to create trackbacks. Also, because the trackback process is basically a way for machines to talk to each other, it is open to spammers who can automatically send trackbacks to thousands of blogs at once. So, while trackback is still a useful tool, it has more downsides than manual links or commenting.

2.3.3 Blogrolls

So far I've been discussing primarily ways to create links to individual blog posts. Another form of blog linking is blogrolls. Blogrolls are lists of blogs that the blogger recommends. They represent, as Blood puts it, "the tribe to which the blogger belongs, or



Figure 10: Blogrolling. Clicking the link in the toolbar brings up the window on the right.

wishes to" (page #). Blogrolls can be hand-coded, but there are also services that offer to keep track of your blogroll for you, allowing you to add and delete links through their service and, through a handy bit of javascript, display your current collection of links along the sidebar of your blog. The most popular blogroll service is [blogrolling.com](http://www.blogrolling.com) (<http://www.blogrolling.com>). To use their service, you sign up for an account. To make blogrolling, or adding a blog to your list of links, easier, they provide a bookmark that you can put in your browsers toolbar. When you're visiting a blogger you like, you can click on this bookmark and they will be automatically added to your list. Figure 10 shows what this typically looks like. Unlike trackbacks and comments, however, the blogger to whom one links via a blogroll may or may not know that a site has linked to them. Discovering these links requires more sophisticated technology.

2.3.4 Site statistics and referrers

Comments, trackbacks, and blogrolls are more or less direct ways of creating connections between blogs. A blogger makes a link to another blog and that link is directly visible to the blogger on his or her blog. There are ways, though, of connections to form without these direct methods. One way is through what is known as referrers. Referrers are urls that refer to yours. Finding out what urls are referring to yours requires site tracking. Site tracking is a way of tracking the number of visits to your site. The process of site tracking also captures lots of other information such as how those visitors got to your site, where they live, who their internet service provider is, what browser and operating system they use and much more. Drupal, Typepad and WordPress all have site statistics tracking built in, but there are plenty of free site tracking services available. Pictured above in

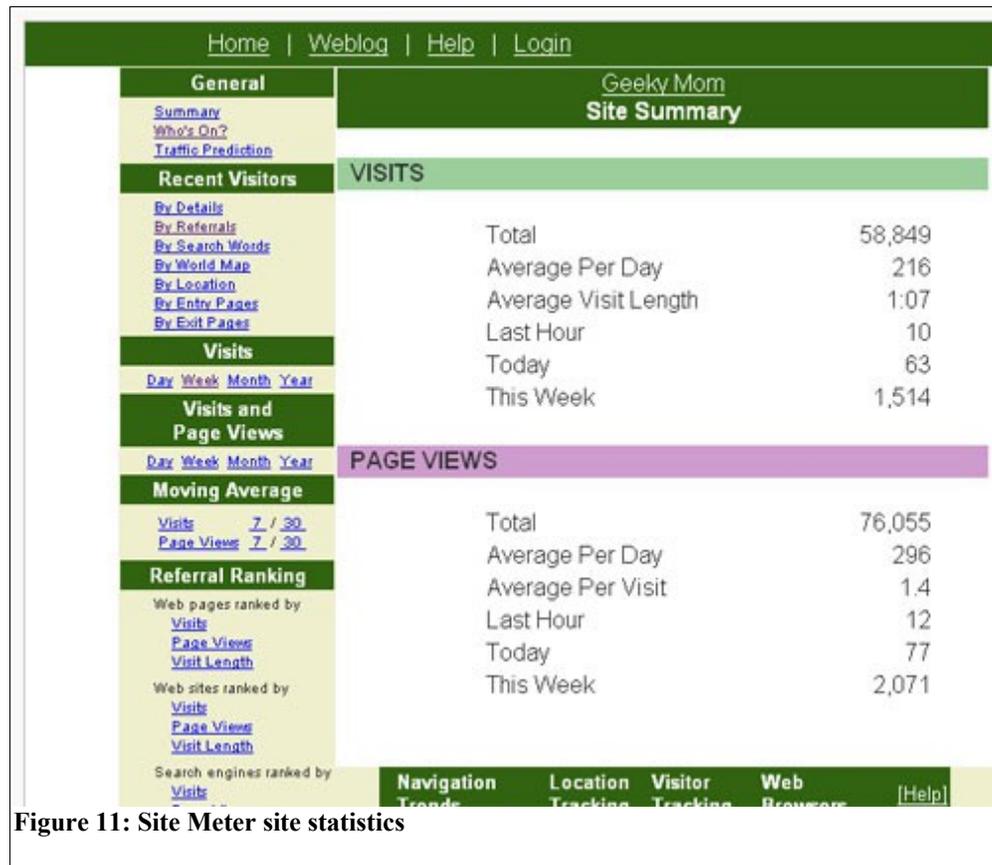


Figure 11: Site Meter site statistics

Figure 11 is Site Meter site tracking software, a popular site statistics software. Clicking on the “By Referrals” link gives you the page pictured in Figure 12 below. The list displays sites via which a visitor has arrived at my personal blog site which means that there must be a link from that site to mine. For example, referrer number 11 came from an individual post on which I had left a comment, demonstrating the usefulness of leaving comments with a link back to your site. Some of the links represent searches that led people to my site. I’ll be discussing the usefulness of search, especially blog-specific searching later in this chapter.

Using site tracking tools also provides important information about visitors that might help student writers target their writing to their actual audience. For instance, information about location, sometimes down to a city level, is often available. In addition, one can look at the times of day people are more likely to visit, the specific posts that people visit most often or visit first. Also, one can see common search terms that lead people to your site. All of this can help open up a discussion about blog's audience, including what kind of topics seem to draw people in more than others. Usually, the site tracking information is available only to the administrator of the site, i.e. the teacher, so that he or she can determine what data to share with the class or how to interpret that data.

Detail	Referring URL
1	unknown
2	http://www.google.co.uk/search?hl=en&q=drinking poem&meta=
3	http://kaitatcatz.blogspot.com
4	unknown
5	http://www.google.de/search?so...2005-08,RNWVE:de&q=mom boy 200
6	unknown
7	http://www.technorati.com/blogs/mom
8	http://kaitatcatz.blogspot.com/
9	http://www.google.com/search?hl=en&q=blogging offline
10	unknown
11	http://scienceblogs.com/ethics...06/01/taking_it_personally.php
12	unknown
13	unknown
14	unknown
15	unknown
16	http://acephalous.typepad.com/
17	http://kaitatcatz.blogspot.com
18	http://writingasjoe.blogspot.com/
19	http://bitchphd.blogspot.com/
20	unknown

Figure 12: List of referrers

2.3.5 Automated linking: XML, RSS, and tags

The tools discussed above rely on manual linking. Although tools such as trackback send a “ping,” or signal to another machine that a connection has been made, the initiation of that process is manual. However, blog software contains within its structure elements that allow for automated ways of pinging other machines. While early blogs were hand-coded

HTML (hypertext markup language), current blogging systems rely more heavily on XML (extensible markup language). The key difference between these two languages is that HTML allows styles to be coded into it while XML is purely the structure of the document. For example, in an HTML document, fonts can be made bold or italics with the language itself. This would be done with the following code:

```
<font style=bold>This is bold.</font>
```

XML adds no styles whatsoever to its code. Instead, the tags, or text appearing inside the brackets, explain what part of the document the text between tags is. Below is an example of an XML file:

```
- <item>
  <title>@Computer</title>
  - <description>
    * Rosi's site<br />* Upload presentation--edit a bit<br />* Put PAET on the ETC site<br />* Instal
    edit<br />* Research grant opportunities for classroom renovation<br />* Research Citation program
    />* Argument for open source software<br />* Investigate possible writing grants/fellowships<br />*
    (writely, whiteboard, autostitch, etc.)<br />* Book air travel for sxsw<br />* Order diploma from U
    BLC conference (July 17): http://novemberlearning.com/<br />* Online tutorials: Blackboard intro ar
    />* Plan 2nd semester workshops<br />* Revise laptop proposal<br />* Instructions for large form
    help documents<br />* More Blog and writing research - try blog and composition or rhetoric<br />
  </description>
  <link>null#%40Computer</link>
  <pubDate>Wed, 18 Jan 2006 21:43:25 GMT</pubDate>
</item>
- <item>
  <title>@Calls and Emails</title>
  <description>
```

Figure 13: XML

The tags have names such as “link,” “description,” and “pubDate.” Instead of telling the browser what these areas should look like, they tell the browser how they relate to the structure of the document. Unlike HTML, whose single purpose is to be read in a browser, XML can be read in many platforms and software can be written to parse the data in these

files and reuse it or convert it to a readable format for a new purpose. For example, they can be read and displayed by programs called aggregators or RSS readers or displayed on another web site or even displayed on mobile devices such as cellphones. RSS, or Really Simple Syndication, is a set of standardized XML tags that allow cross-platform readability. The XML file above is an RSS feed. There are many sites out there that pull in these feeds and

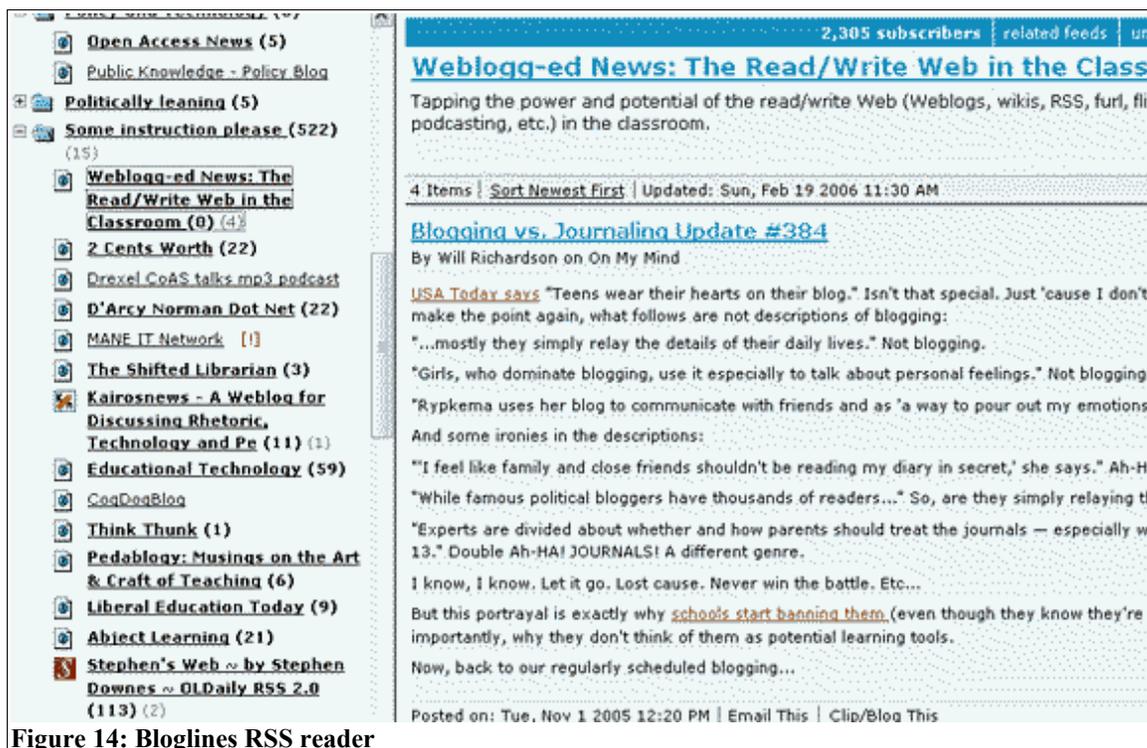


Figure 14: Bloglines RSS reader

republish them. When a blog post is published, the blog software generates an RSS feed, the XML file seen in Figure 13. RSS readers and other websites that are aggregating feeds will see that the site has been updated (via the pubDate tag). Essentially, the blog is posted simultaneously on multiple sites and shows up in readers the same way as an email. Most RSS readers look a lot like an email client. Hundreds of feeds can be displayed in a reader. Bloglines, a popular web-based RSS Reader, pictured in Figure 14 shows the list of blogs on the left. Next to each blog title, which appears in bold if there are new posts, the number of

new posts appear in parentheses. Clicking on a blog title displays the new posts in the right-hand pane. Most people sort their lists by most-recently updated; therefore a site that doesn't update will fall to the bottom of someone's reading list.

There are other systems feeding off the feeds, as it were. Technorati.com and Blogpulse.com are sites that regularly harvest RSS feeds for links and keywords. Technorati also allows bloggers to “tag” their posts. A tag is a special bit of code that one can include in a post that tags that post with a keyword. Some blog software, such as Drupal and Typepad allows users to categorize posts. These categories automatically become tags in Technorati, further automating the system. Tags are very common in lots of social software programs such as del.icio.us (bookmarking) and Flickr (photo sharing). Instead of a machine determining the topic of a post, the blogger herself lets the machine know what the post is about. Additionally, many people create special tags for conferences or special topics, using Technorati as a collection point for these posts. For example, in April, a group of other academics, including myself, created a “poetry month” tag to tag our poetry and poetry critiques that we were writing during that month. Searching on the “poetry month” tag in

...minister is the most powerful public official, with the president serving in a largely symbolic capacity.

Jafari, 59, an intellectual given to quoting poets and philosophers in his public speeches, appeared to be painfully aware of the burden of leading a country still in chaos nearly three years after a U.S.-led coalition toppled Hussein's dictatorship. Iraq is torn by rivalries among Shiites, Sunni Arabs and Kurds. Its infrastructure is in tatters after decades of war and neglect. And the leader of the violent insurgent organization, al Qaeda in Iraq, has sworn to destroy the country's nascent democracy.

WHO'S BLOGGING?

Read what bloggers are saying about this article.

- [The Morning News](#)
- [Watchingpolitics](#)
- [Payvand News Of Iran](#)
- [Full List of Blogs \(18 links\) >](#)

Most Blogged About Articles

- [On washingtonpost.com](#) | [On the web](#)

POWERED BY
Technorati

Figure 15: Washington Post article with links to blogs writing about it

Technorati would bring up all our posts that we had tagged that way, allowing us to keep up with each other's poetry-related posts. Further, Technorati has partnered with the Washington Post and the New York Times to display blogs that are writing about particular articles.

They do this by searching feeds for the url for that article. This means that if you write about a Washington Post article, you essentially have access to the Washington Post readership.

Figure 15 shows a Washington post article with a the “Who's Blogging?” box with links to blogs containing links to this particular article. Now that's something that's not possible with a standard web site.

2.3.6 Blog Search

By now, the average Internet user is more than familiar with search engines such as Yahoo! and Google. These search engines index and find blogs as well, but blogs are in competition on those engines with other web sites such as news and corporate sites which have a lot more traffic and links into them and are therefore ranked higher than blogs. With the dramatic rise in the number of blogs, however, search engines focused just on blogs have also been developed. The most popular one is Technorati.com, which has, as mentioned above, partnered with The Washington Post and the New York Times to display blog search results side-by-side with articles. Technorati and other blog search engines work similarly to search blogs by keyword, but all of them also work with the infrastructure behind blogs, particularly the RSS feed which notifies the search engines when sites update. New posts, then, are searched much more quickly through blog search engines rather than big search engines like Google and Yahoo! which might take several days to find and index that post. The figures (16, 17, 18) above compare a Technorati search, a Google search and a Yahoo!

Search on the keywords Dick Cheney, just a few days after his accidental shooting of Richard Whittington. In the Google and Yahoo! results, the official Dick Cheney biography pages at the White House site are at the top of the list. The Wikipedia entry on Dick Cheney is also a top result in both searches and each includes a result from a major news source, one CNN and one the New York Times. The Google New York Times result is a link to a topics page which would give results for all stories about Dick Cheney. The Yahoo! CNN link, however, is a link to a story from June 2004 about Dick Cheney cursing a senator, popular for sure, but not particularly recent. Compare these results to the list of blogs given by Technorati, all of which are discussing the shooting. In terms of blog searching, having posts that are topical will bump them to the top of a blog search engine rather quickly. Further, Technorati allows tagging, as mentioned earlier. Thus, a blogger could not only write about the Dick Cheney story and be indexed by Technorati based on keywords appearing in the

<p>Cheney's PR: How Not to Do Damage Control <small>In ajarmischare402 11 minutes ago</small> WASHINGTON -- Damage-control experts in both political parties agree: The handling of Vice President Dick Cheney's hunting mishap has been a disaster, a case study in how not to handle bad news. ... Bush said it was 'a deeply traumatic moment' for Cheney and that Democrats who criticized him as being overly secretive More on Quezon City</p>	 <p>Advertise on Technorati</p>
<p>Miriam <small>In Miriam 13 minutes ago</small> As a failed mediaevalist, I am unable to hear reference to a hunting accident without immediately adding inverted commas. So Dick Cheney has been involved not in a hunting accident but in a "hunting accident". I do not mean to accuse, I am but a product of my upbringing!</p>	
<p>Defending the QDR <small>In New Wars 17 minutes ago</small> Finally came across a mostly pro-QDR review, from the Washington Times: ... Dick Cheney's base force concept of 1992, Les Aspin's bottom-up review of 1993, William Cohen's QDR of 1997, and Mr. Rumsfeld's QD</p>	
<p>Just thought I'd point out that <small>In Heather 20 minutes ago</small> Friends Don't Let Friends ...: According to the Corpus Christi Caller-Times, which broke the story of Dick Cheney's hunting accident, 78-year-old lawyer Harry Whittington has no plans to sue the vice</p>	
<p>No charges over Cheney shooting <small>In nontutorialm719 26 minutes ago</small> Texas sheriffs say US Vice President Dick Cheney will face no charges after he shot a man on a hunting trip.. More on Advantage Skin Care. Read the full story here</p>	
<p>Figure 16: Technorati results for "Dick Cheney"</p>	

[Vice President of the United States - Richard B. Cheney](#)
 Vice President **Dick Cheney** wears a leather jacket given to him by Harley-Davidson CEO ...
 Vice President **Dick Cheney** Learn more about the Vice President's ...
www.whitehouse.gov/vicepresident/ - 32k - Feb 15, 2006 -
[Cached](#) - [Similar pages](#) - [Remove result](#)

[Dick Cheney - Wikipedia, the free encyclopedia](#)
Dick Cheney's political career began under the Nixon administration in 1969. ... **Dick Cheney**
 is the first known Vice President to shoot someone while in ...
en.wikipedia.org/wiki/Dick_Cheney - 97k - Feb 15, 2006 -
[Cached](#) - [Similar pages](#) - [Remove result](#)

[Dick Cheney Biography - WHITEHOUSE.ORG](#)
 Official Biography of the Vice President of the United States of America.
www.whitehouse.org/administration/dick.asp - 29k - Feb 16, 2006 -
[Cached](#) - [Similar pages](#) - [Remove result](#)

[Dick Cheney News - The New York Times](#)
 News about **Dick Cheney**. Commentary and archival information about **Dick Cheney** from
 The New York Times.
topics.nytimes.com/top/reference/timestopics/people/c/dick_cheney/?inline=nyt-per - 54k -
 Feb 15, 2006 - [Cached](#) - [Similar pages](#) - [Remove result](#)

[CBC the fifth estate: The Unauthorized Biography of Dick Cheney](#)
 American Vice-President **Dick Cheney** is one of the most powerful men in the world. CBC's
 the fifth estate shows how he rose to power, at what cost and what ...
www.cbc.ca/fifth/dickcheney/ - 12k - [Cached](#) - [Similar pages](#) - [Remove result](#)

Figure 17: Google search results for "Dick Cheney"

1. [Richard B. Cheney Inside the Vice President's Office](#) 
 Official site from the White House.
 Category: [U.S. Vice President Richard Cheney](#)
www.whitehouse.gov/vicepresident - 32k - [Cached](#) - [More from this site](#) - [Save](#)
2. [Dick Cheney - Wikipedia](#) 
 Hyperlinked biography of the U.S. Vice President, **Dick Cheney**.
 Category: [U.S. Vice President Richard Cheney](#)
en.wikipedia.org/wiki/Richard_Cheney - 103k - [Cached](#) - [More from this site](#) - [Save](#)
3. [MoveOn.org Bulletin: Who is Dick Cheney?](#) 
 Attempts to provide some answers.
 Category: [U.S. Vice President Richard Cheney](#)
www.moveon.org/moveonbulletin/bulletin1.html - 21k - [Cached](#) - [More from this site](#) - [Save](#)
4. [Dick Cheney - Wikipedia, the free encyclopedia](#) 
 ... Your continued donations keep Wikipedia running! **Dick Cheney**. From Wikipedia, the free encyclopedia ... source
 of increasing public attention for **Dick Cheney** in light of the recent same ...
 Category: [U.S. Vice President Richard Cheney](#)
en.wikipedia.org/wiki/Dick_Cheney - [More from this site](#) - [Save](#)
5. [Whitehouse.org: Dick Cheney Biography](#) 
 Offers a humorous look at **Cheney's** biography.
www.whitehouse.org/administration/dick.asp - 26k - [Cached](#) - [More from this site](#) - [Save](#)
6. [CNN.com - Sources: Cheney curses senator over Halliburton criticism - Jun 24, 2004](#) 
 Typically a break from partisan warfare, this year's Senate class photo turned smiles into snarls as Vice President
Dick Cheney reportedly used profanity toward one senior Democrat, sources said. ... Vice President **Dick Cheney**
 was chief executive officer of Halliburton before he became George Bush's ...
www.cnn.com/2004/ALLPOLITICS/06/24/cheney.leahy - 49k - [Cached](#) - [More from this site](#) - [Save](#)

Figure 18: Yahoo! search on Dick Cheney

post itself, but could also tag the post with a "Dick Cheney" tag and increase the likelihood that someone searching for blog posts about Dick Cheney would find their particular post. Blogpulse, another blog-specific search engine, also tracks specific links to news stories and blogs. Clicking on the top news stories gives a ranked list of stories that bloggers are linking to (see Figure 19). Next to each story link is a citations link which gives the list of blogs

linking to that story. In addition, Blogpulse offers a feature called “Track this Conversation” that allows one to see the blogs that link to the story itself and to other blogs writing about the story, offering access to different viewpoints on the same story (see Fig. 20).

1. [ABC News: EXCLUSIVE: The Secret Tapes -- Inside Saddam's Pal](#) [\(citations\)](#)
2. [Salon exclusive: The Abu Ghraib files \(News at Salon.com\)](#) [\(citations\)](#)
3. [Vote: Should the U.S. heed the U.N. panel - U.S. Security -](#) [\(citations\)](#)

Figure 19: Blogpulse list of top news stories

Conversation Seed:
+<http://www.abcnews.go.com/Nightline/Investigation/story?id=161>

- 02/15/2006 ["SADDAM TAPES" REQUIRE A CAUTIOUS APPROACH](#) (from: Right Wing Nut House)
 - 02/15/2006 [WMD UPDATE : ABC'S NIGHTLINE WILL AIR TAPES OF SADDAM](#)
 (from: RightWinged.com)
 - 02/16/2006 [Iraq's WMD "Smoking Gun"](#) (from: Suitably Flip)
 - 02/16/2006 [How To Kill A Mockingbird](#) (from: All Things Beautiful)
 - 02/15/2006 [The WMD Program And Nightline](#) (from: Brainster's Blog)
 - 02/15/2006 [Saddam Speaks on Nightline](#) (from: Macsmind - News, Conservative Commentary and Common Sense)
 - 02/15/2006 [Cartoons, the MSM, and Unintended Consequences](#) (from: ShrinkWrapped)
- 02/15/2006 [To Be Revealed: The Saddam Tapes](#) (from: [Blogs for Bush: The White House Of The Blogosphere](#))
 - 02/16/2006 [The Saddam WMD Tapes, Update](#) (from: Flopping Aces)
- 02/15/2006 [Breaking News On Saddam WMD](#) (from: PoliPundit.com)
 - 02/15/2006 [THE BARNUM & BAILEY MEDIA](#) (from: Michelle Malkin)
 - 02/15/2006 [CaNN :: No Dhimmis Here!](#) (from: CaNN :: We started it.)
 - 02/15/2006 [Abu Ghraib Part II](#) (from: Stop The ACLU)
 - 02/15/2006 [Another Black Eye For The MSM](#) (from: All Things Beautiful)
 - 02/15/2006 [Take the plank out of your own eye](#) (from: Think Sink)

Figure 20: Conversation tracking in Blogpulse

The benefits of blog-specific search engines are two-fold. First, they offer another way for readers to find the blog, but secondly, they offer a way to find stories and blogs to comment on or write about. When bloggers write about and link to the blogs and stories that are prominently featured in the results of these searches, they are more likely to be noticed

and draw visitors to their site. This effectively embeds the blog into the infrastructure as bloggers find ways to write about current events that might get them linked to, thus showing up in search results. Further, bloggers can comment on, for example, the blogs that show up in a search result or Blogpulse's "Conversation Tracker," or send a trackback to that blog post. In other words, these blog search engines offer ways into the conversation for bloggers and offer ways to draw readers in to their side of the conversation.

2.4 Technical Recommendations

The best aspect of blogging is its ease of use, and thankfully, most available blog software contains the components mentioned above. Having some technical support such as an instructional technologist or colleague with experience using blogging software can be useful. Many colleges and universities now host their own blog sites and it may be desirable for a class to make use of those available resources. Many site administrators, however, mindful of some of the drawbacks of being baldly public have disabled some of the components listed above that would drive more traffic to the site. Some even have commenting turned off to avoid comment spam. Further, it may be desirable to go off site or set up a separate site for the class so that you and your class can foster community among yourselves without competing for attention with others blogging in the same space. Appendix 1 offers an extensive list of available blog software with its pros and cons. My main recommendation which should apply to everything mentioned below is to use what you are comfortable with. Features can always be added throughout the semester or next time the class is taught. To achieve optimal results in terms of drawing an audience, however, I recommend being as public as you can and providing as many ways of connecting to outside sources as possible.

Here, then, are my basic recommendations. In chapter four, I explain more precisely the specific setup we used for our class.

1. Have students all blogging on one site so that they only have to visit one site to see everyone's posts. In other words, establish a group blog rather than individual blogs.
2. Allow commenting where commenters can comment without registering and can easily leave a link to their site.
3. Make sure the software generates an RSS feed.
4. Allow categories that are picked up by Technorati and other blog search engines.
5. Have a way to track visits to the site, especially referring urls.
6. Have a way of displaying recent comments, recent posts, archives, and popular posts.
7. Include a blogroll to blogs you wish to emulate or that your students are reading.
8. If you are unfamiliar with html, choose blog software that enables easy linking to external urls without needing to know the html.

In most cases, enabling the above features is a matter of checking off a check box during setup. Also, I hope some of the explanations above will assist you in setting up a class blog.

2.5 Conclusion

It should be clear now that blogs are more than just frequently updated web sites. Behind the scenes, blogs can be readily interconnected, giving students a web of resources and feedback from which they can begin to learn. It should also be clear that students cannot simply sit back and wait for the audience to show up. They must actively pursue it by providing links to their sources, commenting on other sites, searching for entries into existing conversations. They must make decisions about what and how to write in way that will

cause their work to appear in a search engine, that will generate commentary, that will get people to link to them, that will keep visitors coming back for more. Early on in my class, I let the students know that one of the most famous political bloggers, Atrios, was a former Bryn Mawr professor. When I told them that a link from him to my personal blog had generated 9,000 visits in one day, a student got really excited and asked, “Can we ask him to link to us?” “It doesn't work that way,” I said. “You have to deserve that link. You have to write in a way that gets you noticed.” The student was temporarily disappointed, but also determined. And while we never got a link from Atrios, we got other links that we deserved and worked hard for. The blog infrastructure provides both the means and motivation for better writing. But, as I will explain in the next chapter, there is more to it than that. It must be connected to a pedagogical infrastructure that exploits the blog infrastructure for learning.