

HYPERLINK USE ON PERSONAL WEBLOGS

by

Kara M. Kerwin

April 25, 2005

A thesis submitted to the

Faculty of the Graduate School of

The State University of New York at Buffalo

in partial fulfillment of the requirements

for the degree of

Master of Arts

Department of Communication

## TABLE OF CONTENTS

<b>ABSTRACT .....</b>	<b>iii</b>
<b>INTRODUCTION.....</b>	<b>1</b>
<i>Defining Weblogs .....</i>	<i>3</i>
<i>Defining Hyperlinks.....</i>	<i>9</i>
<i>Internet Use and Blogging.....</i>	<i>11</i>
<b>NETWORKS AND HYPERLINKS .....</b>	<b>15</b>
<b>FOCUS GROUPS.....</b>	<b>22</b>
<i>Participants .....</i>	<i>24</i>
<i>Ethical Considerations .....</i>	<i>25</i>
<i>Methodology.....</i>	<i>27</i>
<i>Results .....</i>	<i>30</i>
<i>Personal presence.....</i>	<i>33</i>
<i>Social speech. ....</i>	<i>36</i>
<i>Public promotion. ....</i>	<i>41</i>
<i>Summary.....</i>	<i>45</i>
<b>CONCLUSIONS AND APPLICATIONS .....</b>	<b>49</b>
<b>APPENDIX A: RECRUITMENT MESSAGES .....</b>	<b>56</b>
<b>APPENDIX B: REMINDER MESSAGE.....</b>	<b>60</b>
<b>APPENDIX C: ADMINISTRATIVE/OPENING COMMENTS.....</b>	<b>61</b>
<b>APPENDIX D: THANK YOU MESSAGE .....</b>	<b>62</b>
<b>REFERENCES.....</b>	<b>63</b>

**ABSTRACT**

Weblogs operate as personal communication tools and mass media outlets, allowing individuals to publish content for a broader audience while creating hyperlinks to original content and external information. To date, no research has examined the reasoning and motivations behind the creation of hyperlinks on weblogs. This thesis will compare and contrast hyperlink creation on weblogs with the use of citations in academic publications. A series of focus groups asked bloggers for reasons why they add hyperlinks to their sites, and how they chose to create them. The focus group responses are grouped into themes – personal presence, social speech and public promotion – providing reasoning for the use of hyperlinks as a tool for civic journalism, group formation, marketing and promotion, and activism.

## INTRODUCTION

Internet research exists on a spectrum from *content-oriented* areas of hypertext theory, rhetoric, and hyperlink network analysis, to *human-oriented* fields like computer-mediated communication and human-computer interaction, and on to *technology-oriented* topics of online presence, information transmission, and innovations. Weblogs manifest elements of each of these areas, as they represent a way to publish content, a channel for communicating with individuals and groups, and an information distribution mechanism. The question, *how do bloggers use hyperlinks?*, will be answered by drawing upon citation analysis and Internet research on hyperlinks and web sites. This research will involve a series of focus groups that will ascertain the behaviors and motivations of bloggers in practice.

The advent of blogging as a media technology and a communication method offers an alternative to broadcast media models and an opportunity to extend traditional theories of mass communication. Weblogs represent a convergence of mass, interpersonal, and mediated communication. The presence of weblogs on the Internet provides their authors with a limitless, easily accessible audience. Weblogs feature for interpersonal communication tools that facilitate social interaction. The intrapersonal aspect allows individuals to express inner thoughts through text, images, sounds, and hyperlinks, and to engage in self-exploration.

## INTERNET CONCEPTS

Weblogs are web sites maintained by individuals or organizations that contain dated entries, as in a diary or journal, and may permit visitors to add comments to those entries. The hyperlinks that appear on weblogs, as posted by the blogger or by visitors, add to the richness of page content. Blood (2000) documents the evolution of weblogs from their early origins as link-driven web pages, and references a broad, inclusive definition of a weblog, offered by Eaton (1999): “that the [Web] site consist of dated entries.” By offering a new way to create and to maintain an online presence, individuals can outline daily activities, political opinions, and connections to individuals and groups online and offline.

This project will define the act of blogging as creating an original digital work, with text, images or a combination of each, and uploading or otherwise publishing this work in the form of a dated entry on a web page. The blogger to whom this project refers is one who composes and publishes main entries on a weblog, maintains complete control over the content, and may be responsible for the design, layout, maintenance and promotion of the weblog. A blogger is conscious of herself and of her writing. A blogger is aware that others, meaning, anyone with an Internet connection, may view her weblog (barring security and password protection features), and that the hyperlink from her weblog connects it to another page. This definition will be used to identify and to solicit focus group participants.

Hyperlinks are the foundation of the Internet – the paths that connect discrete pages and sites - and as the world continues to rely upon the Internet for information, entertainment, commerce, and communication, understanding the way that bloggers use

and perceive hyperlinks will be critical in advancing marketing techniques, changing news delivery, and managing information.

News sources report about weblogs using the same hooks they use for reporting on the rise in the Internet's popularity: citing anecdotal examples of online relationships, political campaigns, libel, celebrities, and scandal. While news features and magazine articles deem those observations and opinions as appropriate, it is possible to take those same concepts and explore them in a social scientific context – describing, explaining and predicting their potential effects.

As weblog entries may be a mixture of fact, fiction, and speculation, asking actual bloggers for their thoughts and perceptions captures their raw perspective on how they use hyperlinks. A focus group is a convenient and information-rich way to find patterns and consistencies in a narrow audience. It is an important first step, and builds a foundation for future survey projects and content analysis.

### *Defining Weblogs*

Walker (2003) expands on Eaton's "dated entry" designation by explaining the tendency of weblogs to use hyperlinks to external information and to other weblogs. Walker defines weblogs as "serial and cumulative," meaning that they do not need to be read as a story or an article – one can be read piecemeal or at random intervals. That perspective is one that influences researchers who examine rhetorical and interpretive interests; Walker's work (<http://huminf.uib.no/~jill/>), and that of Clancy Ratliff (<http://www.culturecat.net>) and Torill Mortenson (<http://torillsin.blogspot.com/>), stand out in this area.

Interestingly enough, as Walker wrote the definition, she published a draft on her weblog with an invitation for visitors to add commentary and suggestions. This action speaks to the idea that academic research can be conducted with collaboration through weblogs. A hyperlink with a description of the research can be posted on a weblog, and reposted at other weblogs, with the expectation that assistance can be proffered by those who see the topic.

As for the structure of a weblog, the defining element is the dated entry (Eaton, 1999). It may be a picture, a word, one sentence, or several paragraphs, but content is accompanied by the date it was posted, and possibly the time (figure 1). These entries remain on the page, chronologically, or otherwise accessible in an archived format. A commenting system may be enabled, allowing visitors to leave comments about an entry or the site itself, along with their e-mail address and/or home page. Past archives, by month or by week, are generally listed in order along somewhere on the main page.

The image shows a screenshot of a personal weblog titled "TIPPYKAYAK" with the subtitle "MUSINGS OF A SARCASTIC OPTIMIST". The page is dated "WEDNESDAY, MARCH 30, 2005". The main content area contains a "Welcome" message and a paragraph about "Wild Mountain Organics" with a hyperlink to "http://www.wildmountainorganics.com". A comment by "Steve Caratzas" is visible, saying "Enjoy!". The right sidebar includes sections for "ABOUT ME", "BLOGS I LIKE", and "PREVIOUS POSTS". Annotations with lines pointing to specific elements include "entire post" pointing to the main content area, "hyperlink" pointing to the URL, and "comment" pointing to the comment box. A "I Power Blogger" logo is also present in the bottom right.

**TIPPYKAYAK**  
MUSINGS OF A SARCASTIC OPTIMIST

entire post

WEDNESDAY, MARCH 30, 2005

**Welcome**

My first post - my first attempt at blogs. This should be interesting.

Who the heck knows what will end up getting posted here. Suffice to say that I will, no doubt, shamelessly plug my company - Wild Mountain Organics - all natural/organic body care. Please visit and buy! <http://www.wildmountainorganics.com>

Also - we are going through a website update so check now and return in a week or so.

hyperlink

POSTED BY TIPPYKAYAK AT 10:45 AM

1 COMMENTS:

Steve Caratzas said...  
Enjoy!  
12:30 PM

POST A COMMENT

<< Home

ABOUT ME

**TIPPYKAYAK**  
**ALDEN, NEW YORK, UNITED STATES**

I will try anything at least once, more if I like it, lots if I really like it.

[VIEW MY COMPLETE PROFILE](#)

BLOGS I LIKE

[Kara Kerwin](#)  
[Lori Vallon](#)

PREVIOUS POSTS

archives




Figure 1 Annotated example of a personal weblog, available at <http://tippykayak.blogspot.com>. Used with permission.

Looking at the evolution of web content, early personal home pages allowed individuals and institutions to create their own presence in a new, “virtual” medium. Given the technological limitations imposed by the software, connection speeds, lack of knowledge and resources of the time, such sites were updated infrequently. In the late 1990s, early developers like Noah Grey (<http://www.greymatter.com/greymatter>) and Pyra Labs (<http://www.blogger.com>) created software solutions – scalable and easy to use – that grew in popularity over time. Software that allowed a blogger to post entries from any Internet connection added to their attractiveness, as it meant a person didn’t have to be tied to a home computer. One could blog from school, work, or while traveling since the software needed to update the weblog was available remotely.

Currently, photoblogging, audioblogging (from cellular phones), podcasting and moblogging (from a PDA) are finding a niche among early adopters of the newest mobile technologies. Wordpress and Moveable Type continue to proliferate among bloggers new and old, and the hosting sites that provide weblog software (Livejournal, Blogger) are growing exponentially.

Blogging services have emerged to facilitate the blogging process. One such service is the blogroll. Blogrolling is a popular service and concept run independently at [blogrolling.com](http://blogrolling.com) as a way to store a list of weblogs that you like to read, and it is automatically displayed by adding some code to your weblog. The advantage to blogrolling over traditional bookmarking systems is that the list can be maintained from any internet connection. This has found some competition in the last year or so from RSS (Really Simple Syndication) and software used to manage those RSS feeds, like Bottomfeeder and Bloglines. RSS feeds work like a stock ticker, on a much grander

scale. RSS relies on XML, a language akin to HTML that associates content with meta-information that can be interpreted in a standard way. By monitoring content, notifying a user when that content is updated, and providing a means to see what others are monitoring, RSS has incredible potential. As weblog software made creating a weblog accessible to a section of Internet users who wanted to publish content, RSS will make that content accessible to a broader audience looking for news and entertainment.

Weblogs fulfill a small but growing subset of functions that speak explicitly to the social and communicative applications of web sites. Weblogs can be *collaborative*, permitting individuals and groups to connect, collaborate, and build community. Collaborative weblogs allow multiple users to interact, to share ideas, and to pool resources. The ability to comment on weblog entries facilitates *discussion* and *feedback*, particularly when focused on a narrow topic or interest. The content of a weblog has an *archival* value, keeping a record of events relevant or of interest to the author.

Grohol (2002) notes that weblogs need to be viewed within the larger context of the Internet, making the point that, like Usenet, weblogs are an example of distributed conversation – one that occurs through and because of Internet structure and resources of the Internet. An important point here is that weblogs permit individual expression on an unprecedented scale. Grohol's lament that weblogs make more work for an audience, and more attention from the blogger, glosses over the scalability of this medium, the ability of weblogs to publish current-to-real time information, and the place for "stream of consciousness" writing in journalism. It's not about making more work; it's about changing the way information is produced and consumed.

“Convergence” has become the popular term to describe how media and technology are evolving. It affects whether that evolution occurs among industry actors, delivery and distribution channels, or within the functions of hardware and software. However, the convergence that is taking place between mass and interpersonal communication on weblogs is unique. Weblogs have grown from obscure types of personal home pages to highly complex and connected interfaces with a strong mass media function. Similarly, their initial use by individuals has expanded into use by small-scale communities, large-scale organizations, mainstream media sources, businesses and educators.

Bloggers are starting to collaborate, and to create spaces online where their writings coalesce in one main page; Crooked Timber (<http://www.crookedtimber.org>) is a group weblog where individuals from academic fields post weblog entries. Another technological solution has come from RSS (Really Simple Syndication) and news aggregators also help to reduce the “work” needed from an audience. Where an RSS user would otherwise have to visit multiple pages, one can now read the aggregator at his or her leisure. The active role these audiences are now playing is changing how content is created and received online.

At the other extreme, weblogs have a powerful potential as a media outlet, affecting the gatekeeping and filtering processes, the way journalists operate, while opening media up to collaborative forces (Hiler 2002). Already, media outlets have taken advantage of this new medium (Palser 2002) in ways that work in conjunction with their existing broadcast framework, working especially well with features and opinion articles. In outlining what mainstream media and news sources could learn from weblogs, most

notable was the idea that media could use weblogs for story ideas. Weblogs are being recognized by media outlets, advertising, education, business, and a host of other areas.

Journalists from print media are making a transition from a traditional way of publishing their content to one that incorporates immediate feedback from a readership base. When these journalists already have established a name and presence in their profession, the line between professional journalism and personal blogging blurs. This project will focus on personal weblogs: weblogs with one individual responsible for posting top level entries. This restriction eliminates community weblogs that allow multiple people, either through a registration process or without, to create main entries; it may allow individuals who blog in a professional capacity (e.g. journalists, academics).

### *Defining Hyperlinks*

Hyperlinks can be an integral piece of weblog content, and they form the connective fabric that leads to previous weblog posts, and ties that web space externally to other web sites. Hyperlinks add to page content by indicating an author's interests, opinions, thoughts and ideas. The creation of a hyperlink involves an action, and a hyperlink that remains on the web page is a measurable, documentable result of that action. The "act" of including a hyperlink fits the definition of communication; it transmits information from one part of a social system to another, and between individuals. Hyperlink creation stems from using Internet technology and web design software to create original content or to reproduce un-original content, and to publish this content on web pages.

Hyperlinks provide depth and breadth to web site content. They appear within a web browser as clickable regions of text or graphics. Just as footnotes in a book or

encyclopedia point to related information, hyperlinks on a web page direct the user to related content. Clicking on a hyperlink causes Internet browser software to retrieve a file. When done in sequence, this clicking allows an Internet user to navigate through the Internet. Such navigation leads users to information, which, for this project, refers to anything that can be digitized and presented through a computing medium, including text, images, sound and video. Though usually rendered in bright blue text that leads to another HTML document, hyperlinks can appear as any color, and may lead to a text document, media file, or e-mail address.

With the advent of graphical Internet and desktop software programs, the prefix “hyper” came into vogue as a way to enhance traditional meanings of text and content affected by technology as it offered new ways to create, control, and consume media. From the Greek term meaning over or beyond, “hyper” also means “linked or arranged nonsequentially” when referring to media or text (“Hyper-” 2000). For information that is represented online, a sequential or linear presentation is unfeasible; the vast amount of information on the Internet demands the kind of non-sequential linking that hyperlinks provide.

One definition of a hyperlink parallels the network analysis definition of a link in a social system: a technological capability that enables a specific web site (or page) to link with another (Park, 2003). By this description, hyperlinks are the foundation of the Internet, in that they allow the creation and maintenance of connections between web pages, they facilitate navigation from one page to another, and they represent credibility, authority, content and information (Park, 2003). In telecommunications, information is defined as anything that can be digitized, and that definition is used in this project.

As bloggers add content to their weblogs, a regular practice is to include hyperlinks to other web sites within an entry. A hyperlink communicates interests, opinions, and insight into what forms of media the blogger has seen, or wants a reader to see. Hyperlinks are added to a weblog by either the author or a visitor to the site. Linking involves a conscious choice, and the link either remains permanent and visible on the page, or is included in an entry that eventually cycles off the page and into an archive.

In some cases, these hyperlinks allow the weblog to act as a portal for the blogger and for any visitors, in the same way that the main page on Yahoo.com or MSN.com does. Indexing systems like Technorati.com, Popdex and Blogdex (from MIT) send out spiders to collect the hyperlinks published on weblogs, creating a searchable reference of popular pages, and a way of tracking cultural and newsworthy trends on an almost-real-time basis. Spiders are computer programs that index and catalog content on web pages for later searching.

### *Internet Use and Blogging*

Internet use encompasses a broad range of tasks, including Web browsing, e-mail, instant messaging, downloading and uploading files, publishing web sites and writing for the web (i.e., blogging), and listening to audio and video streams. The content of those processes is archived, transferred, interpreted, and use for interpersonal, intrapersonal, group and mass communication.

Webster and Lin (2002) looked at Internet users as an audience – this is not too far of a logical leap, but formally describing it as such makes it conceptually clearer. Bloggers are Internet users, but they exist as part of an audience and as content creators. Internet use cannot be measured in the way that television metrics are collected, with

Nielsen ratings for individual programs and networks split into demographics and regions. Individuals use the Internet for business, for entertainment, for communication, all dependent on time and circumstance. Painting the picture of the typical Internet user would be like describing the typical human being - there are too many contributing factors to generalize. Instead of relying on individual characteristics, it is more useful to rely on individual motivations.

Moving from radio to television to the Internet, Papacharissi and Rubin (2000) saw similar predictors of Internet use from the audience's perspective. Their research looked at Internet use at a computer-mediated communication (CMC) level – breaking out the use of e-mail, for example, but focusing on interpersonal communication – not its use as a form of media. They grouped motivations to use the Internet under five broad categories: interpersonal utility, to pass time, to seek information, for convenience and for entertainment.

Leung outlines the instrumental/ritualized distinction in usage patterns in a study about chronic loneliness, Internet use (2001) and ICQ use (2004). When applied to fields like management or education – any area with supervisory and supervisee roles – knowing the motivations of the actors in those areas can let you make strides toward increased productivity, and increased predictability of results. Since these areas have clearly defined tasks that can be measured over time, research can cut across those fields to make generalizations about what management patterns work, what reward structures are successful, what sort of constraints work for encouraging attention to tasks.

By understanding the motivations for how weblogs are used, one could extend Leung's research and propose the patterns for success; one would also have to define

what that success would involve. Shirky's (2003) research into power laws and weblogs exposes the growth in weblog numbers, and the factors that will boost a weblog to the top, then to the top of the top.

Fredin and David (1998) developed the Hypermedia Interaction Cycle to model the way that users interacted with media. It proposed preparation, exploration and consolidation of as the phases that best depicted the process of interaction between media and media users. A problem with this model is that the Internet is changing to blur the line between media consumer and media producer – in this sense, modeling this cycle from a user's perspective creates an incomplete picture. Fredin and David's piece illuminate self-efficacy and goals as motivations.

Flanagin (2000) looked at range of Internet functions; they found that interpersonal Internet mediums support conversation, and mass media channels support information-retrieval and information-giving. As weblogs are both interpersonal and mass media, one could look for their ability to support conversations and to facilitate information transmission – do they do one better than the other? Perhaps a better question would be, how do Internet users perceive the ability of weblogs to support conversations and to facilitate information transmission?

Perse and Ferguson (2000) examined the ways that Internet audiences benefit from using the Internet, using an economic based approach of costs and benefits. As with most economic models, lower costs and higher benefits combine to increase the quality and quantity of Internet use and its value to the individual. With weblogs, the costs are low and the perceived benefits can be quite high. Financially, blogging is one of the cheapest habits out there. When hosted on a free service, and updated from a library or

school's Internet connection, no money needs to be spent. The costs in terms of time include setup, which may take at most an hour, and maintenance, which can run from a few minutes a month to several hours a day. That leads to the perception of benefits: blogging is a way to pass the time, to entertain one's self, to learn and to communicate.

Perse and Ferguson's research showed that learning, passing the time and being entertained were strong reasons for web use. This same team (Ferguson and Perse, 2000) surveyed Internet users for their reasons to use the Web, finding that entertainment, passing the time, relaxation, finding social information, and finding information to be the primary motivations.

Paquet (2002) outlined personal and public uses for weblogs, explaining how they can be used to record personal knowledge, to open and continue conversations, to network with other people, and to connect people with information who otherwise would not have come across it. To use a weblog to digitize and categorize one's own knowledge is a logical step. The ability to connect personal knowledge with outside resources should hinge, in part, on the use of hyperlinks in two different ways. First, search engines will index hyperlinks and content, making them available through searching; second, the hyperlinks can be seen and followed by the audience, thus expanding the reach and draw of that information.

## NETWORKS AND HYPERLINKS

Any network begins with nodes, or elements through which information can be communicated. Networks are systems of nodes and hyperlinks that connect those nodes. A social network is one where people, groups or organizations are the nodes, and communicate with one another within the same social system. These networks are defined by their structure, and can vary in size, density and shape.

When the nodes are hardware or equipment, that system is called a *telecommunications network*, with the more narrowly defined version being one of web sites and computers on the Internet or within an intranet, or a *hyperlink network*. Journals, articles and publications are studied using citation analysis or *bibliometrics*, while networks of words within writings and publications are referred to as *semantic networks*. This section will take the relevant and common features of hyperlink networks and citation networks and apply them to hyperlinks as used on weblogs.

Weblogs can be described in terms of each of these network types. The research question, how bloggers use hyperlinks, involves looking at hyperlinked networks as a type of citation network. A study that wishes to focus on hyperlinks in weblog content as semantic networks would be well-advised to look at the work of Berners-Lee, Hendler and Lassila (2001), and to examine real-time monitoring of aggregated weblog content and trends (<http://www.blogpulse.com>).

A hyperlink network on the Internet exists between web pages based on the hyperlinks embedded within those pages (Park, 2003) as they structure and organize information. As part of the Internet, weblogs uniquely incorporate elements of other network types— social, citation, semantic, and telecommunications – in their structure as

they link to other web sites and to other weblogs. They exist as information networks, a term that takes into account content as it is created, communicated and received, irrespective of the channel (interpersonal, mediated, mass or telecommunications), the node (a person, a web page, or text), or the type of hyperlink.

Hyperlink network analysis has strong roots in traditional social network analysis (Park, 2003). The in-links and out-links between web pages and web sites are measurable patterns that represent an underlying social system. Hyperlink creation on the Internet, and on weblogs in particular, occurs more quickly than in academic journals or news articles. On personal web sites, the only publication timetable is the one set by an individual.

Referring to a hyperlink as having a meaning and a purpose is a step that has been taken by those who speak of a link economy (Rogers, 2002). By proposing that a hyperlink has a value – a value that varies based on its placement, context, and audience – one can ascribe meaning to that hyperlink. It can then be treated as how, say, academic citations are treated. Those ideas would have meaning as they are written by an author and as they are read by an audience.

As of January 2005, Google's search engine indexed over 8 billion web pages; this represents a mere fraction of the whole. Bergman's (2001) analysis of the Deep Web estimated 550 billion documents that exist "beneath" the surface Web – which most people access through search engines and surfing. Most of these documents are dynamically generated from commercial, educational and governmental databases, but do find their way into permanent links. Searching that content, and indexing the hyperlinks

that connect that content, will become increasingly important as reliance on digital media reaches a saturation point.

Sableman (1999, 2001) wrote of the role of business in determining the legality of hyperlinking, referencing the concepts of “deep linking” (as in, the Deep Web and dynamically generated web pages) and mirror sites. Controversies have erupted over the right to link to web pages, or to information on those pages. Diebold and Ticketmaster are among the many companies that have resorted to (or threatened) legal action to prevent or counteract hyperlinking to content on their web sites. A collection of policies implemented by corporations and organizations that prohibit linking to information hosted on their sites can be found at Don’t Link to Me (<http://www.dontlink.com/>). This is important to note, since the regulations around content and access continue to evolve, and will have implications for the way that Internet content and hyperlinks are indexed, categorized, archived and accessed.

The most compelling description of hyperlink functions comes from Harrison (2002), who applied semantics and rhetoric to the conceptualization of hyperlinks. On one hand, it allows for a concrete description of the networked structures of hyperlinks; on the other hand, it allows for a richer, more abstract ascription of the motivations behind the creation of that structure – from the basic link to the total system. Beyond Harrison’s (2002) questions of “whither” and “why,” the answers remain in terms of “how” those linkages affect online behavior, and “how” those linkages affect the structure of the Internet. The survey will attempt to answer the question of “why” people add hyperlinks, while this content analysis will go after the question of “how” hyperlinks are created.

Hyperlinks can be understood in relation to how they are used by their audience. Harrison's (2002) analysis offers an important distinction between the semantic nature of hyperlinks and their rhetorical purpose (para 26), along with seven categories of hyperlinks: authorizing, commenting, enhancing, exemplifying, mode-changing, referencing/citing, and self-selecting. The piece notes that outside observation cannot determine the meaning behind hyperlinks, as meaning comes from within the reader and that set of experiences. While this project looks at how hyperlinks are used on weblogs, another reasonable question to ask would be, in following what makes a weblog "sticky," (Efimova, 2003), what makes a hyperlink clickable.

While this is true in one sense, it does not take into account that hyperlinks generally lead to externally hosted pages, sites and information, over which the blogger does not have control. Further, beyond the meaning intended by the blogger, there remains the meaning ascribed to the content by a reader. Comments and hyperlinks left by visitors to the weblog also fail to fit comfortably within that framework, as do references to past comments and archived entries. Authors signal intent in generating hyperlinks, and readers create meaning as they encounter that information. However, those two elements may coincide, intersect, or diverge completely.

Hyperlinks do not always lead to information that relates to that which is on the originating page. It may be direct contradiction to that information; it also does not abide by the assumption (from social network analysis) that the nodes exist in the same social system. On the Internet, the distinctions between systems, sections and structures of web sites are perceptible, fluid and constantly changing.

Hyperlinks are also created at a much faster rate than citations within print literature and research, and this has implications for the speed at which measurement has to occur. Further, hyperlinks do not always lead to information that is the same as on the originating page. It may be direct contradiction to that information; it also does not abide by the assumption (from social network analysis) that the nodes exist in the same social system. Hyperlinks largely follow national borders (Halavais, 2000), but that is not a hard and fast rule.

Routes on a road map follow linear paths; hyperlinks on the Internet make their own paths as they are created. They support intricate and complex patterns of information. Efimova used the word “serendipity” to describe a motivation to continue blogging (2003); this term is entirely appropriate to a discussion of the way a blogger uses a hyperlink. Off topic and random information in a face to face conversation, or in a mass media broadcast, would cause confusion in an audience. In an Internet environment, a random hyperlink opens a door to a room that would have otherwise remained hidden, introducing something of value, to someone, including the blogger.

Adding hyperlinks to a weblog incorporates much more than a simple, traditional view of communication. Other media – e-mail, instant messaging, web surfing – are able to be explained as interpersonal or mass channels. Personal publishing on weblogs is always a blend of the two, with some intrapersonal communication and self-expression thrown into that mix. Citation networks lack those things – the immediacy and interpersonal connections upon which hyperlinks thrive.

In journalism, the author is searching for facts and opinions to support an argument or story. In personal diaries, no references are required, but online they can be

included extensively. Academic publications are written about a narrow content area with a specific audience in mind. Citations are tied inextricably to the content; they can be looked at from the level of the source, to show the motivations on the part of the author for their inclusion, or at an aggregate level, to see trends, popularity, and growth.

Citation analysis involves both macro-level or mass communication aspects, and micro-level or interpersonal aspects. Known as bibliometrics, citation analysis measures connections among published works based on source citations. As Internet journals and publications grow in number and in importance, and as they blend with traditional print media, the terms informetrics, cybermetrics, and webometrics also apply. Citation analysis has a fairly rigorous theoretical foundation, methodologies and models, yet it is far from being a cookie-cutter method that can just be applied to weblogs with no alteration.

A journal citation has the components of date, frequency, subject, field, author(s), and journal title. In a hyperlink, those components are the date, the subject of the link, the subject of the content that is linked to, the author, and the address/location of the linked content. Each can be looked at based upon the real or perceived quality of the journal; the author and perception of that author's social or professional value; the content and its popularity; the time the content is published, self-citation and that content's availability (Garfield, 1972).

The transfer of print content, virtually verbatim, to the Internet is well intentioned, yet imperfect, approach to making such information accessible. Although it maximizes the distribution, the two media are different, and the writing for each is different. Measuring the citations of print articles that are now listed online is much different than

looking at the complex, and changing, hyperlinks between web sites. That does, however, play into the availability of articles and information. By citing access to articles as a factor in their propensity to be cited as a reference, Lawrence (2001) begins to bridge the gap between print and online publications. He gives the reasons of greater impact and faster scientific progress, but that improvement could also extend to one's professional career. This access should include availability through journals that have a full-text online presence and those that exist only online. And, those articles that are available through their author's web sites or another location.

In terms of that access, Cameron's (1997) proposal for a "universal citation database" described a system that provides much the same services as Google.com does today, though Google works at a much more ambitious scale. Cameron's proposal left out some next steps to take once that information has been collected, like smarter searching, filtering, adding new sources, adding a rating of credibility or usefulness and culling old ones.

Measuring the citations in print publications can account for changes over time – long periods – but it does not account for the body of information available online, as it excludes exclusively online sources and does not include brand new sources and breaking news. Limiting that measurement to peer-reviewed journals excludes popular references to this material and references from individuals.

## FOCUS GROUPS

The advantages of conducting a series of focus groups using online chat software – AOL Instant Messenger, or AIM – are many. For practical purposes, a chat transcript is generated automatically in electronic form, which facilitates archiving and searching; and, the expense and logistics of coordinating a face-to-face focus group is prohibitive for a student project. Also, a person who blogs may be more comfortable revealing information and communicating by typing thoughts out on a computer screen, rather than through a phone call or face to face interaction. On the other hand, the text-only medium excludes the nuance and emotion that a FTF or phone conversation would provide. It also limits the people who could participate; four sessions were held, and the times may not have been convenient for individuals in Australia, Asia and Europe.

The focus group component of this project was influenced by my personal knowledge of weblogs. I have my own opinions of how weblogs operate, or how they can operate, and a grasp of the technologies behind weblogs. I must understand that this knowledge may not be consistent among all bloggers in general. Given this, every attempt was made to be accepting and inclusive of a broad range of weblogs, irrespective of content, technical proficiency and design. As one of the first studies of its kind, the idea of this research is to discover generalities, not to prove the findings beyond a doubt. A purely quantitative study can be informed by knowing what to measure and how to measure it – something that is revealed through a qualitative study. The results from these sessions may potentially inform future surveys and content analysis done on this topic.

Imagine asking a fiction writer why some of her characters are extraordinary, while others are ordinary and plain. This same question applies to bloggers – why are

some weblogs deemed as remarkable while others are run-of-the-mill? Some weblogs take great care to explain and describe the ideas, and links, included in a weblog post. Others add hyperlinks and content with minimal explanation. These focus groups attempted to discover the purposes behind the action of posting content, specifically hyperlinks. Writers and bloggers go through a creative process to publish content, and a technical process to put words to paper (or digital text to the screen).

Focus groups are based on a simple premise: that one can ask questions of individuals in a group situation to facilitate responses on a topic. The researcher then needs to distill that information and reconcile the discrepancies, if possible, with knowledge from additional research studies, data and observations. Krueger and Casey (2000) outline, in detail, the process for conducting a focus group. Other reviews of focus groups (Morgan, 1997) speak to their value for qualitative research. A comprehensive overview of focus group methodology would delve into the finer points of the interpersonal nature of a focus group. That is to say, such an overview would define the complexities of communication – however brief – between the participants and focus group facilitator. The biases of the researcher, detailed information about the participants, and the benefit of recording these opinions over time have not been presented.

Krueger and Casey describe a focus group as a “carefully planned series of discussions designed to obtain perceptions on a defined area of interest in a permissive, non-threatening environment.” (2000, p. 5) The four sets of discussions for this project, held through a synchronous text-based medium, meet that description. A successful focus group process hinges on a clear plan, directed questions designed to elicit honest responses, and careful, cogent analysis of the responses. The success or failure of this

project will be seen in the quality of the themes raised by the participants, and the usefulness of those results in future focus groups, content analysis and surveys.

The focus group participants were chosen not as experts in the field of blogging, but as experts in what they write and how they publish through their weblogs. Currently, weblog research has a set of self-proclaimed experts who are often quoted in the popular articles that explain the weblog phenomenon and blogosphere to a wider audience. These “experts” are quite versed in expounding upon what they say, though very few actually maintain weblogs of their own. The difference between experts and my focus group is that my focus group can report upon what they do.

### *Participants*

The need to communicate is powerful, instinctual, and essential for humans. It is the element on which societies, political systems, cultures, families, and identities are based. Communication has taken countless forms through human history, moving from cave paintings and the advent of speech, to the printed word, broadcast media, and now, the Internet. The term “blog” has entered the lexicon of the Internet as a noun and as a verb, as well as being used to describe communities, opinions, and worldviews. The tautological definition of a blogger - a person who weblogs – leaves two questions unanswered: what does the act of blogging involve?, and, what does blogging mean?

Thirty bloggers participated in a series of four focus groups held over AOL Instant Messenger in September 2004. These volunteers came from two sets of bloggers who received invitations from me, with one hundred people in each set. The first set consisted of political bloggers who were listed on Yahoo’s Directory of political weblogs as of September 2004. They received an email on September 8, 2004 (Appendix A).

Based on the responses – some were immediate – I scheduled two separate groups the following week, September 14 (Group 1a) and 15 (Group 1b), at 8 p.m. EST. The next week (September 14), another 100 invitations were sent to academic bloggers. Primarily, those invitations were pulled from a lengthy listing on Alex Halavais’s “Scholars who Blog” page (<http://alex.halavais.net/files/ScholarsWhoBlog>), which initially came from a second list at Crooked Timber (<http://www.crookedtimber.org>). These individuals identify themselves, through their writing, as academic professionals in primary, secondary, or higher education, or as independent scholars. Based on that response, I scheduled two more groups on September 20 (Group 2a) and 21 (Group 2b) at 8 p.m. EST. All told, twenty-six bloggers participated, out of two hundred invitations, for an 13% participation rate. Of these participants, one stood out as not contributing to the discussion. At the end of that session (Group 1a), that individual stated that he/she was “a bit overwhelmed.” Besides that, each person contributed from the very start of each session, before dropping out one by one after sixty to ninety minutes.

### *Ethical Considerations*

The risks to participants in this project were minimal. By the nature of e-mail communication, their e-mail address was known to me. These e-mail addresses contained such identifying information as full or partial name, place of employment, or organizations to which they belong, and IP address. Additionally, some revealed their AOL IM screenname to me without prompting, which also could indicate their full name. As per university policy and in accordance with the Institutional Review Board’s approval of this project, this information will remain known to myself and my advisor, until those records are purged in three years.

The Association of Internet Researchers (AoIR) created a set of ethical guidelines for academic professionals to use when conducting Internet research (Ess and the AoIR ethics working committee, 2002). These guidelines were established through the collaborative efforts of leading Internet researchers who constitute the vanguard of this growing field. AoIR stresses the need for interdisciplinary study, and recognizes the contradictions that may occur when balancing the needs of medical research with those of humanistic studies. This project will be guided by those protocols and suggestions in terms of collecting, analyzing and storing data (transcripts and surveys), while recognizing that the Internet allows, and demands,

The AoIR guidelines pose several relevant questions for the scope of this study. One overarching question speaks to the age of the subjects under investigation: “Who are the . . . [authors] . . . of the material under study?” Weblogs and other web sites do not, as a rule, have the age of the author posted. Even if it is, there is no way to judge its accuracy (it may be outdated or deliberately false). Consent cannot be assumed to be given by the authors of online content, but every effort will be made to protect identifiable information and to prevent it from being published. The analogy can be made that online content is like letters to the editor in a newspaper. Establishing consent from those authors would be prohibitive to the study, and gathering it from anonymous authors impossible. Weblogs are published in a public space, and should be treated as such. However, content that is obviously, or potentially, published by individuals under the age of 18 will be excluded from the study. Examples may include the mention of activities in high school, middle school or elementary school, or the explicit use of their birthdate or age.

Another question raised by AoIR: “Are participants . . . best understood as . . . authors whose texts/artifacts are intended as public?” Internet publications and content are considered to be public spaces both legally and conventionally. In terms of the collection of e-mail address to which to send invitations, the weblogs being accessed are available to anyone by existing in a public space, and no identifiable information will be published in a final draft or seen beyond myself and my advisor. The information added to weblogs goes through a process (Pollard, 2003) which can be aborted, amended or deleted at any time. They are, in the language of AoIR, “publicly accessible archives,” and can be treated as such.

Voida et al (2004) presented the impact of using instant messaging as an interview tool. By framing instant messaging in terms of a conversation, they spoke to the added benefit of persistence – that is, being able to refer back to the written text, immediately. Portions also referenced the awareness of etiquette and privacy concerns, both of which are important in obtaining the trust of a subject in any research situation. Gumbrecht (2004) used an ethnographic study to examine how bloggers felt about their weblogs as “protected space,” as they balanced the privacy concerns of who is viewing their site, and what those audiences are seen.

### *Methodology*

In the e-mail invitation (Appendix A), I explained that the responses are not completely anonymous, and identifying information on authors and their sites will not be revealed from the focus group transcript in any results or publications resulting from this research. Participants were unaware of the identities of the other participants, though any written text that is revealed during the focus group was seen by the other participants.

Affirmative responses to the invitation received follow-up messages with further instructions (Appendix B). The full transcripts of the focus group will be seen only by the investigator and faculty advisor, though excerpts of the transcripts may be published, without identifying information, in any publications from this research. Participants were also asked to refrain from posting to their weblog the transcript or any portion thereof of their focus group; however, they were not discouraged from publishing their own opinions or reflections from their experience. A search done after the focus groups had concluded did not find anyone who posted an account of their participation.

All participants were given a web site address to which they can go if they are interested in seeing the results of this research (<http://www.karakerwin.net/wp>)<sup>1</sup>. This focus group used a Waiver of Informed Consent in the original Institutional Review Board package to ensure that it is in compliance with the standards and guidelines of the University at Buffalo Social and Behavioral Sciences Institutional Review Board.

The day before each group, I sent a reminder message (Appendix B) to each volunteer that included a unique screenname and password. These screennames had been created beforehand, and followed the convention of “blogresearch####.” Some screennames were reused in later sessions, after the password was changed. I plan to make those screennames and passwords available to any researcher who plans a similar line and method of research.

Of the ten confirmed participants for Group 1a, all ten (100%) participated in the session. For Group 1b, of the seven confirmations, four showed up. My original goal in my proposal was 7-10 bloggers, so fourteen was an encouraging number from the first

---

<sup>1</sup> [karakerwin.net/wp](http://www.karakerwin.net/wp) is now redirected to [karakerwin.net/blog](http://www.karakerwin.net/blog). Participants who indicated they would like to see the results of this research will be notified of this change.

invitations. Group 2a included six academic bloggers (out of six confirmed), and Group 2b included six bloggers (of nine confirmed). Again, this was an unexpectedly high rate, and quite encouraging. Even when not taking into account the individuals who responded that they would like to participate, but would not be available, a 13% participation rate (26/200) was more than anticipated. The original plan was for 7-10 bloggers from each group.

On the evening of each session, I was available on AOL IM (as kerwin79) approximately one hour before the assigned start time. This gave a few participants the chance to test their software, and in some cases, use it for the first time. AOL IM was chosen for its cost (free), and its compatibility with most operating systems. There were several comments from participants, asking if they could use their own primary IM name; they were told that for reasons of anonymity, the assigned screenname must be used.

After dispensing with some administrative comments (Appendix C), the focus groups began in earnest. As the facilitator, I began each session with the question: "How do you use hyperlinks on your weblog?" The results of that discussion are described in detail in chapter four. I moved the discussion along by posing some predetermined questions (Table 1) when there seemed to be a lull in the conversation. Those lulls, however, were infrequent. Most of the questions and comments I made were for clarification and explanation, and occasionally to bring the conversation back on topic.

Table 1 *Questions for focus groups*


---

How do you use hyperlinks on your blog?

---

What makes you create a link?

---

Where are you likely to find the things you link to?

---

What do you think about citing yourself?

---

Do you have way to navigate your blog, and if so, how do you determine what links you use?

---

Are you linking to someone, just because they are linking to you? Why?

---

Do you think of yourself as creating, reporting or consuming content?

---

Do you see yourselves as reporters or consumers of news?

---

Do you give commentary (positive or negative) to explain and give more meaning to the links you create?

---

Do you add links to your weblog because you agree with the content to which it leads?  
Or, because you find fault with it?

---

Do you see yourself as having an audience?

---

Linking to the sites of people you know, or who you want to know, is a way to indicate social connections. How do you decide to add a social link to your weblog?

---

*Results*

Weblogs are complex, taking ideas from other places, other people and from the self. They are spaces where a blogger will distill that information into content, just as mainstream media sources do. With the interpersonal communication that a weblog can

foster, a feedback loop may begin where correspondence is retained through asynchronous and synchronous forms of communication.

The guiding question of this project was, *why do bloggers create hyperlinks on their blogs?* This question recognizes that bloggers have a unique, public and personal space in which to express opinions and to connect to other people and to outside information.

Each focus group session lasted for approximately one hour. I began with the same text for each focus group (Appendix C). Throughout the sessions, I was struck by the sensitivity and savvy with which the participants responded to my questions, and to each other's comments. They displayed an awareness of themselves and their position within the larger framework of the Internet, media, and their own blogging sphere. The discussions did go off into tangents at times, spanning a range of topics from their perceptions of their audience to their own thoughts of themselves as a news source.

The energy and enthusiasm brought by many have encouraged this researcher that the form and methodology of the AOL IM focus group was a success, and would be useful in the future. The transcripts of the electronic conversations are invaluable when reviewing the sessions and would be perfect for using content analysis software. Being comfortable in the instant message medium, a tool used by some bloggers extensively, makes that method quite attractive.

Chief among the recommendations for analyzing the results of a focus group is the identification of themes that participants raise. To that end, the reported results for this project will include the questions posed to the participants and their answers grouped into themes. The conceptual basis for the focus groups was predicated on the fact that

weblogs differ from other forms of communication; namely, weblogs differ from mainstream media sources and interpersonal communication, forming something new and unique. With mainstream media sources, ideas are distilled into content, with the media source serving as a gatekeeper, agenda-setter, and arbiter of what will be seen and what will be omitted from the audience. With interpersonal communication, individuals send and receive messages, creating content as they go, and responding to the messages they receive.

The overall tone of the focus groups was cordial and good-natured. Each person indicated that s/he would be interested in seeing the results of this research, and most wished me luck as I continued the process. Of all the discussion, some comments were thought-provoking enough to merit inclusion here. I wish I could include them all, but the transcripts run to 40 pages (single spaced). The main question of my research is how do bloggers create hyperlinks? Above all, these participants recognized a process through which they culled and created information. In general, the participants expressed that creating a link involved deliberately tailored to an audience, accompanied by commentary, and followed by an internal evaluation that affected their future postings and reactions. The focus group responses answered this question along three major themes.

Another way of looking at motivation would ask, what is the goal of creating a hyperlink? Based on these focus groups' results, bloggers will use a hyperlink to represent one's self (a personal presence), to connect with known others (social speech), or to be recognized by a public audience (public promotion).

Table 2

*Themes for motivations for hyperlink creation on personal weblogs*

Theme	Definition	Examples
Personal presence	hyperlinks that present a glimpse of one's self	<ul style="list-style-type: none"> <li>• A link to a photo gallery</li> <li>• A link to a personal resume</li> </ul>
Social speech	hyperlinks that communicate to known others and as a form of public speech, with the possible effect of generating discussion	<ul style="list-style-type: none"> <li>• A link to a news article on a topic the author has referenced before</li> <li>• A link to a weblog that the author recently discovered</li> </ul>
Public promotion	hyperlinks that are, by convention or conviction, used to promote the weblog and its ideas	<ul style="list-style-type: none"> <li>• A direct link to search engine results based on the name of the weblog</li> <li>• A link to a weblog's Technorati profile</li> </ul>

*Personal presence.*

The responses on this theme spoke to how the weblog is an extension of one's personality, and how the writing of weblog content represents an internal process. A thought forms and is transferred to paper or a computer screen, and possibly revised.

With a weblog, thoughts are represented by words, pictures, and hyperlinks. The most telling comments from the focus groups included:

- “I’d like to post less and post more deep thought, but the nature of blogs almost controls me.”
- “I think actually I could make a case for it as a social psychological disease. Inner speechmaking disorder.”
- “My blog is definitely a mix of everything. it's a brain dump of what's in my brain.”

Among the political and academic weblogs, the consensus was that links to sites that hold opposite views also hold value to being placed on their weblogs. The main points of this view included: it keeps the weblog balanced, it provides a starting point from which to present their own (opposing) views, and occasionally “to rip them apart.”

The view of weblogs as personal diaries was seen with a strong sense of disdain among political bloggers. The topic did not explicitly come up in the sessions with academic bloggers. As one person stated, “personal diaries of where someone went and who they talked to are boring. Those are ego blogs. Not serious blogs and not worth my time.” More to the point, they don’t generally have the volume of hyperlinks within the content or on the page. Far from having “nothing to say,” they allow individuals to speak more of personal feelings and experiences, removed from the world of news and politics.

As for what bloggers link to, they started by saying that they link to weblogs and web sites that they “like,” including news sites and organizations. Fleshing out what “like” means would require more empirical study, but from the focus group responses, like could signal agreement, entertainment, or affiliation.

The sites to which these bloggers linked seemed dependent upon the types of weblogs they published. In their telling of what they link too, many took into account what would fit in with their site, in terms of content and tone. One person admitted, “I actually only link to articles in media stories, which makes me a crappy blogger, I guess, but that has to do more with the nature of my site.” Others admitted to linking to previous posts of their own and archives, especially to reference their previous work on a subject.

These sessions also brought out the type of content that drives their linking. In terms of linking to sites that coincide with their own opinions, one participant offered, “I constantly link to things I don't like, and I'm considering using the rel attribute to differentiate links in support from links in disgust.”<sup>1</sup> The “rel attribute” refers to HTML code that distinguishes types of links. See <http://www.w3.org/TR/REC-html40/struct/links.html>, section 12.1.2, for additional specifications.

Some exceptions were noted, including those that “are told with humor and insight into American life (or life elsewhere).” Generally, the bloggers to whom I spoke wanted to link to facts when they could, and their writing was not about these individuals.

One participant made a very astute observation when I asked, “what makes you write about that fraction of stuff that makes it to your site?” The response: “Who knows? What makes you crack a joke when you're sitting around watching TV with your friends?” This comparison highlights how very personal a weblog can be, even when the readers and writers are separated by geography and time. A person indicated that he uses his weblog to stay in touch with friends, as they will check in “when I haven't blogged in a few days.” Two others agreed with that statement subsequently. Still another person said that “sometimes it can be like chatting with friends.”

*Social speech.*

The responses on this theme spoke to how the focus group participants contributed to group weblogs or community weblogs, and how their own weblogs functioned as a group or community weblog. Several participants indicated that they had a set of regular visitors who contributed content and who responded to the participant's postings.

These focus group participants recognized the utility of links – incoming and outgoing – and that their weblogs' traffic depended, in part, on the popularity of sites that contain links to them. Some, particularly in the political weblogs, indicated that they will frequently link to sites with which they do not agree. One included the caveat, “except for the libel suits, bias and errors.” This was done for refutational purposes – as a conscious effort to discount and/or discredit the opinions of those others. One person said he would link to someone which whom he disagrees, when “when I like the way the read or the points they make.”

The participants perceived weblogs as a way to share information with a defined audience, and “the best way to do that is to use links.” They described the links in various ways, from an “active footnote,” to explicitly stating that they “support (your) content” and “expand on points I'm too busy or lazy to do myself.” As one person put it, “they (hyperlinks) are not the content itself . . .” Instead, they are adjunctive to the content – a way of aggregating information with commentary, and providing legitimacy to an argument. As one person stated, “Without them, I'm just some guy commenting about stuff.”

There was one strong dissenting opinion for this. Unless a post was “obviously ahistorical,” that person would not link to someone on the opposite end of their political beliefs. As it was eloquently put: “It doesn't make you a crappy blogger, it just makes you a different kind of blogger.”

As for what types of sites were attractive to add as hyperlinks, one person opined “good writing or smart thinking usually does it in terms of links.” Overall, it wasn't the graphical flashiness or widgets on a site that made it a good prospect for linking. It was the content and point of view.

Among the political bloggers, most said that they point to mainstream news stories. Two particularly vocal participants in the political chats stated that he “usually [won't] link to big blogs,” while another person followed that up with “I try to link to small blogs because my traffic is big and I like to share it.” Still another person reflected: “i'll link to whomever I think has something good to say on the subject--big or small, doesn't matter.” Those opinions took into account the nature of the site to which they were linking.

With weblogs being used as tools for discourse and outlets for rhetoric, one participant noted, “I have a theory that we all secretly want to make speeches. And blogging is a great venue for it.” The speech aspect of weblogs is a double-edged sword. Yes, a “speech-like” posting can be published to a weblog with the potential audience of millions.

Far from being the link farms that portal sites like yahoo.com, msn.com, and the myriad other search engine sites present, these participants tried to limit the number of links they included. This ties in with the theme that these participants recognized that a

hyperlink to a site implies endorsement. Beyond this, they included links to Amazon.com and “tip-jar” types of sites, links to political causes, and to weblog software sites (blogger.com).

When asked whether they include links to friends, most did. In addition, several participants linked to bloggers that they enjoy reading, absent any outside contact. Other reasons included:

- “I usually just link to people who are doing good work”
- “If they report on the same story that I did or something they wrote inspired my post.”
- “If their politics are similar to mine I link them.”
- “i link to one guy who i kind of hate now because of his views but he supported me early when i was starting out”

Most groups indicated that the generative idea behind a post existed on a spectrum between pure thought and analysis to just a link. An example of this came from one comment: “A post that focuses on a topic that has been brewing in the most of my "thinking" pieces feel like they reflect something I've been watching for a while, not something that just came up.”

For one political group, I asked the question, are the links in blogging more about quantity or quality? Overwhelmingly, participants said that links should be based on quality. As one person put it, “I don't have much choice on that, fishing from a limited pool. Completeness is quantity. . .”

Conventional wisdom states that once something appears on the Internet, it is available forever. That is not exactly true. Some pages are available indefinitely through

web.archive.org or Google's cache, but some content, especially news stories, expires and becomes inaccessible to the average reader. This also applies for sites that require registration or premium (paid) access. One person saw this as affecting his writing, as he made every effort to link to pages that wouldn't disappear. As for what appears on the blogger's site, one person offered, "If I see a topic I want to write about. I'll take a quote from the site in question and use the link to back up what I said."

As for the point of negative linking, I did ask about how they, as bloggers, felt about linking to site's that had ideas with which they did not agree. The response was exemplified by this answer: "I'll link to people I don't agree with in a post. Usually to point how they are wrong. But never as a perm [permanent] link." When the links are created to points with which the blogger does not agree, the link is generally accompanied by a rebuttal. Another view on this described it by saying, they will write about those opposing views, but they won't include a link that will give that person additional traffic.

### *Comments*

A discussion of whether or not comments were allowed on these weblogs is in order, as comment-enabled weblogs have an easier interface for giving the weblog's author feedback. Positions were mixed on whether their weblogs accepted comments. An aversion to allowing comments was present among these participants, but was outmatched by other's need for feedback and comments. Those who did not allow comments did allow for feedback, mostly through e-mail responses and forms, something that most bloggers indicated that they did.

When I asked, “are commenters ever a source of content?” to the political groups, the response was an emphatic yes. One person did indicate that the option for comments depends on the post. It’s worth noting that some weblog services and software allow you to select the option for enabling comments.

As for the frequency of comments, one participant lamented, “I wish more than one out of one hundred readers would comment,” while two others recognized that leaving comments on other blogs drives traffic back to their own blog – something they’ve seen on their own blogs, and those of more popular weblogs. (Note: when leaving a comment on a weblog, you may have the option to leave your own URL and e-mail address with it). Some thrive on comments; it gives them the change to see the results of their work through their readership. On the other hand, one person referred to the “continual concern with blogging comments” as “overkill in socialization.”

I brought up the ideas of consensus and debate amongst commenters and the bloggers, asking them: “are your posts designed to garner consensus? or to provoke debate?” While most seemed to enjoy the challenge of debate, they also wanted to form a consensus by persuading their readers to come around to their point of view. One must keep in mind that sometimes that debate takes place over e-mail, and is not published on the blog. One could surmise that it isn’t the content of the comments that counts – it is the fact that people are reading one’s posts and becoming engaged in those ideas. As one person stated, “I like smart and ignorant posters... both serve a purpose,” as “The ignorant ones provoke the smart ones to make your argument for you.”

As for filtering or deleting comments with which they don’t agree, one person contrasted weblogs with talk radio. Talk radio programs can screen their callers and

control who gets to be on the air. Weblogs do not always have that option. The general attitude of these participants was that they rarely delete comments; the only exceptions would be to change or remove comments that threaten harm to others, dangerous personal attacks, violations of personal privacy, and racial bigotry.

*Public promotion.*

The participant groups did not include any so-called A-list bloggers (Marlow, 2004). Some are well-known among a small subset, but the true celebrities of the blogosphere were not involved. Considering these were average users, they were incredibly savvy about the relationship between themselves and their audience, their content and their related links, and those links and the rest of the Internet. They are both the source and the recipient of requests to read other weblogs, exemplified by the following comment: “I purposely link to blogs bigger than me, hoping to grab their attention via trackback, and maybe, just maybe I'll get a reciprocal link. Or maybe they'll start reading me.”

Based on this set of participants, the sentiment of public promotion was weak. Most wrote and published for the sake of publishing, and to connect with an audience who embodied similar traits and perspectives. As one participant stated, “I just try to write interesting stuff and hope (just like "Field of Dreams") they'll come.”

Reciprocal linking was discussed. Reciprocal linking can be described as including a link to another site after seeing, or being told, that the site includes a link back to you. Feelings on this point were mixed. One person said, unequivocally, that “I also won't do reprocial (sic) bloggrolling.” One person said that they occasionally get new

bloggers who ask for a link to be added back to them. This person said they usually will do that, because they know that would generate traffic for them.

This brings up the point of a blogroll. Reasoning for using a blogroll (whether or not it was an actual Blogrolling.com blogroll), included:

- My blogroll is like the bibliography of a book - it's where I get most of my material.
- I put someone on my blogroll because I read and enjoy their blog.
- Only sites I read on a daily basis or near that.
- i link blogs that I enjoy reading and can tolerate on a more or less daily basis.
- blogs that I come back to, or that give me something new or funny.

Blogrolls were characterized as “a recommendation.” They generally are independent of the hyperlinks posted within a dated entry.

Personally, I can say that having a blogroll reduces the time I spend looking to see which sites have new content. Also, it’s always nice to discover that a weblog shares links in common with the ones on my own, and to further explore those links in the hopes of finding new content.

One person very accurately stated his view of a blogroll: “the basic question in my ‘blogroll’ is: if a reader likes what they see on my blog, and wanted to read more, what 10 (or so) sites would i send them to?” Still another noted that if they had to make a page of links to sites to which they frequently visit, “that decision would be hard.” When speaking of the types of sites to which they linked, oftentimes they were described by the participants in terms of being another weblog. As for the future of blogrolls, one person

suggested that “blogrolls are going to fade away. the search technology is getting better all the time.”

Several admitted to actively seeking out advertisement as a way to gain new readers and to promote their ideas.

- I have a ton of marketing links on a sub page to all these places that will help generate traffic - tecnorati, bl ogs, blog hot or not – anything
- links are the lifblood of blogs. But they are not simple pointers to other sources. They are legit business tools that can make or break a blog

Another person had strongly integrated their off-line activities with their blog, choosing to hand out business cards and promoting the weblog through posters and print media and radio. One participant added, “the best marketing is a big audience that can tell others.” It makes sense that some of that marketing would occur through face-to-face interaction.

Several indicated that they purposely linked to “bigger” weblogs, in the hope of grabbing “their attention via trackback, and maybe, just maybe I’ll get a reciprocal link. Or maybe they’ll start reading me.” Posting a comment with their name and URL to another weblog generates an interest in who is doing that posting.

Of course, the sentiment was not shared by everyone. One person wrote that he doesn’t “actively seek new readers. i just do my thing. if people find it, cool by me.” Some participants thought of blogging strategically. One offered: “I tried a couple different strategies at first. I found that if I picked up on a little-known but popular story and did my own independent research and reporting, that got the most attention.”

*Self promotion*

In communicating with these bloggers, I had the distinct sense that they were aware of themselves as authors. Their knowledge of self-promotion surprised me. They are aware of their “brand” – how their name can become known, and how that knowledge can spread. Beyond that, they know that increasing one’s name recognition is possible. They know that when they post a comment to another blog, rather than staying anonymous, they can post their name and web address. This drives traffic back to their site as the other blogger looks to see who is reading them. It feeds off itself. The more traffic the other weblog (or discussion board, or listserv) is getting, the larger a potential audience there is to come visit your own site.

The impact of Google on how these participants operate was interesting. As one person put it, “I’m always trying to move upward” (in Google search results). One recognized that a high Google ranking on a specific subject (or key phrase) can generate increased traffic and new readers. Most other bloggers shared similar sentiment, though one was particularly opposed, stating:

- “I don't care about google rankings. My google searches make me sick sometimes.”
- We're simply taking advantage of new technology.
- Blogs that are more than just LexisNexis.
- The blogosphere needs to stop talking about the damn blogosphere.
- “The best marketing is strong writing, but I was always happier when people would link to me, not because I had hard data or other links that were useful, but because of my original content.. i.e., what I had to say.”

- And on a similar theme: I prefer to be linked to for my writing rather than my reporting, so to speak. I find though, you get the most traffic when you offer something truly original or well-done

### *Summary*

The focus groups shared another general theme: that the hyperlinks enhanced what was being written, and they were not the sole focus. That enhancement was described as “proof,” “backing up your thoughts,” “as a quote,” “to confirm anything I would write about,” and “evidence.”

Bloggers recognize that links – both by their mere presence and by where they lead – could influence views of credibility and feelings of trust among their audience. As one political blogger stated: “People don't want to believe anything that is outside their comfort zone. If you intrude on that you have to be able to show that you are credible.” This was aligned with other comments from participants; they saw that their audience had a clear “comfort zone,” and to some extent the content of the site is written with that audience in mind. This area in particular would be an interesting tangent – what is the relationship of a blogger with her audience? For all the research done in demographics and psychographics for mass media outlets, surely this new media outlet of weblogs would be ripe for similar research.

The results of these focus groups bring to mind the uses and gratifications research that grew out of the rise of mass communication channels in the 1970s. McQuail et al (1972) proposed that individuals use mass media channels as a way of fulfilling personal needs. The theoretical framework posed a question of “why do people use media,” branching off from previous inquiries into what types of media people used.

In moving from a descriptive analysis to one that was more explanatory, McQuail et al (1972) made continued steps toward recognizing the interaction between media and the audience. The framework of uses and gratifications, as of thirty years ago, saw this interaction was one way, from the media to the masses. Now, with that blurring of where media ends and where the masses begin, McQuail's ideas need a few simple refinements in order to work with weblogs and hyperlinks.

Uses and gratifications (1972) posits four reasons for people to use media:

- to gain information about the world;
- to see one's own identity and values reflected in the world as represented in the media;
- to see social interaction at work;
- for entertainment and diversion from one's own life.

McQuail (2000) went further by explicitly including interactivity in the uses and gratifications discussion, and the way that Web technologies have changed the way that space and time affect media consumption. Uses and gratifications works well for unidirectional communication; the early research looking at newspapers and television conceived of the media source and the audience as two separate (but equal?) entities. The interaction between the two was limited and divorced from the media's content.

To liken uses and gratifications to the findings of this project is appropriate. In terms of gaining information about the world, the intertwined processes of reading and writing weblogs contributes to the obtaining of information about the world – at an even larger scale than what was possible before the Internet. Twenty years ago, to find out what life is for researchers in Antarctica, you would have to go to a library and search for

an encyclopedia entry or book on the subject. This information would be outdated, and distilled through layers of edits and rewrites. Today, searching the Internet for “Antarctica” and “blog” yields tens of thousands of results, dozens of which lead to first-person narrative weblogs directly from those researchers. With weblogs, the information gained about the world is more timely, more personal, and more interconnected with related information.

In terms of seeing one’s own identity reflected through the media, weblogs allow an individual to create a channel and accompanying content that uniquely reflects her. More than this, those channels can be segmented into separate facets of that person’s life. There are countless examples, but the most generic would be an individual who maintains a weblog for professional/academic interests and connections, another for keeping friends and family updated about her life, another private weblog for personal thoughts and reflections, and a final weblog for pictures and podcasts. No other medium has had the capacity for such a fractured representation of the self, and it leaves that choice up to the individual, not a media’s filter.

The social interaction referred to by uses and gratifications implied that the viewer was observing the interaction between others. Weblogs don’t take that away. By reading a weblog with comments, a reader can see the discussions – ongoing, divergent – begin, evolve, transform and die. They open up ways for social interaction to be participatory, not just observed.

I stated before that the processes of reading and writing weblogs are intertwined. That statement also makes the assumption that reading and writing weblogs are a process. Whether those processes hold some entertainment value is in the eye of the reader or

writer herself, and as a diversion, blogging can be used in tandem with one's other Internet activities. E-mail, instant messaging and voice communication can all be integrated into a weblog.

Early uses and gratifications research focused on newspapers and television, which have minimal interaction between content creators and content consumers. A weak and fleeting framework for the representation of personal identities existed with those media channels. Letters to the Editor, feature-type profiles, and even in-depth personal interviews all went through that mainstream media filter. With weblogs, that filter is not necessary. That is not to say that all content on weblogs is real. That is to say that the potential for true, raw and unfiltered content is available and thriving.

Uses and gratifications looks at the use of content, not the content itself. The Internet relies on content, but it shouldn't be examined without including that usage factor. Those two aspects – content and use – cannot and should not be separated. A weblog is a weblog, whether it is read on a computer screen, a wireless laptop, a PDA, a television or a cell phone. It is still a weblog when it is printed on paper, though it loses much of its interactivity and dynamic qualities.

## CONCLUSIONS AND APPLICATIONS

Weblogs fulfill a small but growing subset of functions that speak explicitly to the social and communicative applications of web sites. Weblogs can be *collaborative*, permitting individuals and groups to connect, collaborate, and build community. Collaborative weblogs allow multiple users to interact, to share ideas, and to pool resources. The ability to comment on weblog entries facilitates *discussion* and *feedback*, particularly when focused on a narrow topic or interest. The content of a weblog has an *archival* value, keeping a record of events relevant or of interest to the author.

Technology has changed the ways in which people communicate, but this change is best thought of as an evolution, not a revolution. The Internet is not the first medium to affect communication, nor will it be the last. The people who use this system, and indeed the system itself, give that change a forceful potential. Weblogs are only a narrow slice of this system. But they possess unique social and technological characteristics that will see them grow in both number and influence. Hyperlinks are proliferating on the Internet, as is their role as primary navigation routes and as content.

Napoli (1998) cautioned against focusing solely on the Internet's "revolutionary" potential, highlighting its similarity to the medium's mass communication roots. His work identified three components to "massification" as based on media receivers, media producers, and the market. It is based on the way the audience acts, the way the media acts, the way that market forces affect the audience and the media, and of course interaction between the three. With weblogs, those components blend together, conjoining the three into something recognizably derivative of mass media, but something altogether different from its roots.

The research being conducted into the shape and size of the Internet is essential. A person can't understand her position on the planet without a clear sense of geography, navigable routes, obstacles and topography; it is silly to assume that a person could understand her location on the Internet without a clear sense of those same aspects. The analogy of roads between cities with hyperlinks between pages is not so far fetched (Halavais 2000). When one digs deeper, the reasons for why some routes thrive while others die off can be catalogued and calculated.

For example, the number of visitors to my site, [karkerwin.net](http://karkerwin.net), and to a popular Web site, [Slashdot.org](http://Slashdot.org), can be reasonably estimated for a given week. When I post a hyperlink to a recent news item about computers, the audience would be counted in dozens. The likelihood of visitors to my site seeing that hyperlink, following it, and publicizing it further is not very strong. When a hyperlink appears in a post on [Slashdot](http://Slashdot.org), the audience is counted in the tens of thousands. The likelihood of visitors spreading that information further: very high.

It's like the difference between standing on a box in the middle of an empty room, talking in a quiet, reserved tone about an opinion, fact or comment, and flying through the sky with a banner behind a plane, broadcasting that same opinion, fact or comment for crowds and crowds of people to see. As with all information, the sources have to be considered as to their credibility value and reliability.

This study sets a precedent that focus groups conducted over instant messaging software are useful in collecting information from individuals about their technology habits, specifically, blogging motivations. To research a technology and its users, you must use tools and a format that those users recognize and with which they are

comfortable. To be true to this, an interesting, though not very reliable, way of gauging motivation on weblogs would be to create a Web site (perhaps in a weblog format) that accepted anonymous submissions – individuals could add the links that they created on their own weblog and the context in which it appeared. This would be a relatively easy way to collect data for a content analysis work, and I think this project would inform a project like that. One could ask submitters to indicate under which theme, personal presence, social speech or public promotion, their hyperlink fit the best – or choose multiple, if appropriate.

Identifying the motivations and reasoning behind the creation and maintenance of hyperlinks would go a long way toward strategizing how to build hyperlinks and keep routes between pages open and thriving. Search engines can only go so far; the connections between web sites in the future will be built on the paths that humans create. Algorithms can evaluate the number and strength of hyperlinks, but the true value of a hyperlink can only be confirmed by a person in her search for information – for now.

Informatics can be simply described as people, information and technology working together. The creation of hyperlinked information, by people, using weblog technology is a clear example of one track in this growing field. As a project that looked at the people, the technology and the information, this research is a model for how future informatics projects should work.

The participants in these focus groups each had a weblog as part of their life online. For some it remains a novelty; for others, it's a full time job. For each, it is a way of using information and technology to communicate. And for now, we should recognize

that the power of weblogs lies in their strength as a quasi-permanent archive of information, robust hyperlink connections, and their ability to spread information.

In the introduction, I mentioned the potential of weblogs and hyperlinks as tools for a range of topics, from civic journalism to group formation, from marketing and promotion to activism. No matter what the field or profession, keeping in touch with the newest, most credible information is essential as more people rely on electronic information. The so-called news cycle has been stretched and stretched like an overblown balloon, so much so that one can't see where any of it ends. To take that balloon metaphor one step further, a big part of news now is just empty space. It looks like news, since it's contained within that sphere, but with so many channels and so many Web sites, there is a lot of space and time to fill. Stepping in to counter that drive toward vacuousness are weblogs written and maintained by individuals. They create the content, they add the links and they pull in the readers who are attracted to original content that is connected to other original content. Those connections are hyperlinks.

Marketers and branding experts are getting into the blogosphere a bit late, but as we've seen in other fields, they catch on quickly. One form of marketer, the comment spammer, has already exploited the creation of links to gambling or credit report sites on a massive scale in unsuspecting, and unwitting, weblogs. If marketers can start to internalize what makes individuals create hyperlinks on their weblogs, they can be one step closer to having these individuals work for them to promote products, services and ideas. This was recently shown with a company called Marqui (<http://www.marqui.com/>), which used "blogvertising" or sponsored weblog posts to engage a core set of users and to use them to sell their service. This company paid people to write about them, in a

positive or negative way – that didn't matter. The evolution of this would be to convince people to create hyperlinked content without having to compensate them. Appealing to individual motivations of personal presence, social speech and public promotion would be a good start for that.

The choice to use *personal presence*, *social speech*, and *public promotion* as themes for these results is admittedly simplistic. It is also necessary at this stage of weblog research. By isolating the ideas that there are I'm sure others will theorize on this phenomenon of creating hyperlinks from a psychological perspective, or as political action, or as a sociological response. From a more quantitative approach, collecting the data from RSS feeds and news aggregators will be a worthwhile future opportunity to gauge the types of hyperlinks added, and their frequency, with follow-up questions to test the results of this initial work. In the course of writing this, these other avenues of research continually presented themselves. The motivations to create hyperlinks on weblogs and on web sites in general will continue to play a role in the development of Internet marketing strategies and development.

To apply the results of these focus groups, I would eventually like to take two different directions: one academic, and one practical. That is not to say that these are mutually exclusive tacks. That is to say that one will have a sharply delineated methodology, drawing on an academic tradition, and the other will be a matter of trying out ideas and seeing what works.

At an academic end, I would like to categorize weblog hyperlinks based on these three themes – personal presence, social speech and public promotion. With an accompanying survey to define the blogger's gender, age and profession, I can explore

the likelihood of younger vs. older bloggers to engage in social speech, for example, or for women to focus on personal presence over public promotion. For future research, researchers must pay attention to the growing trends toward syndicated content (RSS), the proliferation of mobile technologies and their use in the creation and consumption of Internet content, and the popularity of personalized and rich media content (audio and video). Future content analyses and associated surveys can describe those trends.

On a practical level, I would like to develop a set of guidelines and strategies for using personal presence, social speech and public presence to create weblog content. Already, I have identified three Web sites that I would like to work with to develop a strong Web presence that is uniquely “them,” facilitate communications between their sites and others, and promote their site among their peers and related Web sites. Much of this will depend on the strength of the ideas. For example, one Web site is for a local law student who is running for political office. The potential there is great, since he represents a generational group that is technologically savvy and highly connected electronically. Should his ideas and policies be popular with an initial subset of people who see his Web site, that’s going to make his ideas and themes spread. Radio can’t do this. Newspapers can’t do this. Weblogs can.

Weblogs are going to change. They are affecting the way information is delivered to and processed by the public. The hyperlinks that lead to and from weblogs will help to determine how many people will read them, what kinds of people will read them, and whether or not they will return. To study weblogs, instant messaging is a reasonable medium. Those who use and frequently read weblogs are naturally online, and instant messaging is a convenient, accessible and free communication method.

Most professional weblog pundits would never admit to this simple fact: with so many factors and so many weblogs and so much change and so much content, conclusions and predictions at a global level are just guesswork. It's not just about describing what has happened with weblogs or predicting what's going to happen. It's about predicting what might happen for some, and how it could be useful, and who it will be useful for. Weblogs have a future, and the hyperlinks that connect those weblogs to the rest of the Internet, and to each other, will form a foundation for communication, social organization and news consumption.

## APPENDIX A: RECRUITMENT MESSAGES

[This e-mail message was sent as a plain text e-mail to individuals who I identify through their publicly available weblogs.]

From: kmkerwin@buffalo.edu

To: (to be filled in)

Subject: invitation to participate in a focus group | Kara Kerwin

Hello [name] –

I am inviting you to participate in a focus group and discussion about weblogs and hyperlinks. You were selected to participate in a focus group based on the fact that your weblog, [name of weblog], is primarily an [academic/political/journalistic/A-list] weblog. Each focus group will consist of approximately 6-8 other individuals with weblogs like yours. I will facilitate a discussion about how hyperlinks are used by bloggers on their weblogs by asking you questions and recording your responses. You will be asked to complete a short survey before the focus group begins to gather some basic information about you.

This focus group is part of my thesis research in the Department of Communication at the University at Buffalo, State University of New York as I work toward my master's degree. Your participation is completely voluntary, and if you choose to participate you may opt out at any time.

There are risks associated with this survey: namely, by submitting information to me via e-mail and participating in the focus group, your response is not anonymous. During the focus group itself, you may reveal information that may indicate your identity, or the location of your weblog. Participants may reveal their own observations and comments about the focus group after it is completed, but I would ask that you refrain from publishing or distributing the content of the transcript to anyone.

The transcripts of this focus group will be kept confidential, and only myself and my advisor will have access to them. Your individual privacy will be maintained in all data and publications produced from this project, and the data will be stored in a secure location, available only to myself and my advisor, for a maximum of 3 years, after which they will be destroyed (as per my University's policy).

Participation in this focus group will contribute to a greater knowledge about weblogs and hyperlinking behavior.

I plan to hold this focus group within the next few weeks, on a weekday, between 5 p.m. and 9 p.m. EST. Your time commitment will last approximately one hour. If you are under the age of 18, you will not be able to participate. This focus group will be held online using AOL (America Online) IM (Instant Messaging) software, which is available for download at no cost. To participate you will need to have access to a computer with AOL IM software (or comparable) software installed, and an Internet connection. If you

have questions about this software, please contact me or visit their web site

([http://www.aim.com/help\\_faq/starting\\_out/index.adp?aolp=](http://www.aim.com/help_faq/starting_out/index.adp?aolp=))

If you wish, please reply to this message, and indicate your availability to participate. I will send you a unique screenname and password via e-mail, along with a date and time for the session.

Should you want a copy of my findings and analysis or have any questions about this project, please contact me (Kara Kerwin) at [kara@karakerwin.net](mailto:kara@karakerwin.net) or [kmkerwin@buffalo.edu](mailto:kmkerwin@buffalo.edu). My faculty advisor for this project is Dr. Alex Halavais ([halavais@buffalo.edu](mailto:halavais@buffalo.edu)); 325 Baldy Hall, Buffalo, NY 14260.

For questions regarding the rights of participants in research, contact the Social and Behavioral Sciences Institutional Review Board at 716/645-3321(United States); 515 Capen Hall, Buffalo, New York 14260-1611; or by e-mail at [SBSIRB@research.buffalo.edu](mailto:SBSIRB@research.buffalo.edu).

Thank you very much, and take care,

Kara Kerwin

### **Followup Message**

From: [kmkerwin@buffalo.edu](mailto:kmkerwin@buffalo.edu)

To: (to be filled in)

Subject: focus group participation details | Kara Kerwin

Thank you for your interest in participating in this focus group on weblogs and hyperlinks.

The focus group has been scheduled for (date and time). Your AIM screenname will be (screenname1), and your password is (password). Your screenname and password are known only to you and me, so please contact me if you lose this information before the focus group session. You will need to have access to the Internet and AOL Instant Messaging software.

If you will not be able to participate at this time, please let me know. I may be able to schedule you in another session. I will be sending a reminder message on (the day before).

Thank you!

Kara Kerwin

**APPENDIX B: REMINDER MESSAGE**

[This was sent approximately 24 hours before the scheduled focus group time to individuals who have indicated their willingness to participate in this project.]

From: kmkerwin@buffalo.edu

To: (to be filled in)

Subject: reminder – focus group – tomorrow evening

Reminder – please sign in to American Online Instant Messenger (AIM) tomorrow between (time EST). If you need me to send your screen name and password again, please let me know as soon as possible. If you have any questions about using AIM, please email me. My screen name will be kerwin79.

I look forward to chatting with you tomorrow evening.

Take care,

Kara Kerwin

## **APPENDIX C: ADMINISTRATIVE/OPENING COMMENTS**

Just a few questions before we begin:

Q1. Would you like to be notified when my project is complete?

Q2. Do you agree that you will not distribute or publish the text, in full or in part, of this chat transcript? (You may distribute or publish your own perceptions of this experience and this research).

Q3. May I contact you in the future in regards to this research? Answering "No" will have no impact on your participation in this focus group.

All participants answered "Yes" for each question.

Opening statement:

I will have a few questions to start this discussion, and these questions will be open-ended, and will range from general to specific.

It may go without saying, but please give other participants the same respect that you would like to receive from them. Online chats can become confusing, but please do not worry about "talking" over other participants.

If we have moved on from a topic, but you still have something that you want to contribute, by all means, post it.

The main question of my research is, how do bloggers use hyperlinks?

With that in mind, I'd like to start by asking how, and if, you use hyperlinks on your own blogs.

**APPENDIX D: THANK YOU MESSAGE**

[This message was sent the evening of or the morning after each focus group session.]

From: kmkerwin@buffalo.edu

To: (to be filled in)

Subject: thank you!

Thank you for participating in the focus group. I have seen and experienced how weblogs can foster a sense of community, and your willingness to help me in my pursuit of a master's degree is greatly appreciated.

I hope to have a final draft of this research in the coming weeks. Please check at <http://www.karakerwin.net/wp> for updates on my progress. You may also contact me at kara@karakerwin.net or kmkerwin@buffalo.edu with any questions or suggestions you have.

Sincerely,

Kara Kerwin

## REFERENCES

- Berners-Lee, T., Hendler, J., and Lassila, O. (2001). The Semantic Web. *Scientific American*. <http://www.scientificamerican.com/2001/0501issue/0501berners-lee.html>
- Bergman, Michael. (2001). The Deep Web: Surfacing hidden value. *The Journal of Electronic Publishing*. 7(1). Retrieved December 20, 2003 from <http://www.press.umich.edu/jep/07-01/bergman.html>
- Blood, R. (September 7, 2000). Weblogs: A history and perspective. Retrieved April 1, 2003. [http://www.rebeccablood.net/essays/weblog\\_history.html](http://www.rebeccablood.net/essays/weblog_history.html)
- Cameron, R.D. (April 7, 1997). A Universal Citation Database as a catalyst for reform in scholarly communication. *First Monday* 2(4).  
[http://www.firstmonday.org/issues/issue2\\_4/index.html](http://www.firstmonday.org/issues/issue2_4/index.html)
- Eaton, Brigitte. (1999). Eatonweb portal. <http://portal.eatonweb.com/>
- Efimova, L. (2003). Blogs: The stickiness factor. *BlogTalk: A European conference on weblogs*. Vienna, Austria, May 23-24, 2003. Retrieved March 10, 2005 at <https://doc.telin.nl/dscgi/ds.py/ViewProps/File-34088>.
- Ess, Charles, and the AoIR ethics working committee. (November 2002). Ethical decision-making and Internet research: Recommendations from the AoIR ethics working committee. Retrieved January 20, 2003 at <http://www.aoir.org/reports/ethics.pdf>.
- Perse, E. M., & Ferguson, D.A. (2000). The benefits and costs of Web surfing. *Communication Quarterly*, 48, 343-359.
- Flanagin, Andrew J., Farinola, Wendy Jo Maynard, and Metzger, Miriam J. (2000). The

- technical code of the Internet/World Wide Web. *Critical Studies in Media Communication*. 17 (4, December), 409-428.
- Fredin Eric S. and David, Prabu. (1998). Browsing and the Hypermedia Interaction Cycle: A Model of Self-Efficacy and Goal Dynamics. *Journalism and Mass Communication Quarterly*. 75 (1, Spring), 35-54
- Garfield, E. (1972). Citation analysis as a tool in journal evaluation. *Science*, 178: 471-479.
- Grohlo, J.M. (June 12, 2002). Psychology of weblogs: Everything old is new again. Retrieved February 2003. <http://psychcentral.com/blogs/>
- Gumbrecht, Michelle. (2004). Blogs as “protected space.” Retrieved on November 20, 2004 from <http://www.blogpulse.com/papers/www2004gumbrecht.pdf>
- Halavais, Alexander. (2000). National borders on the world wide web. *New Media & Society*. 2 (1, March), 7-28.
- Harrison, C. (2002). Hypertext links: Whither thou goest, and why. *First Monday*, 7(10) [http://firstmonday.org/issues/issue7\\_10/harrison/index.html](http://firstmonday.org/issues/issue7_10/harrison/index.html)
- Hiler, J. (May 28, 2002). Blogosphere: The emerging media ecosystem. *Microcontent News*. Retrieved January 21, 2003. <http://www.microcontentnews.com/articles/blogosphere.htm>
- Hyland, K. (2003). Self-citation and self-reference: Credibility and promotion in academic publication. *Journal of the American Society for Information Science*, 54(3), 251-259.
- “Hyper-.” (2000). *American Heritage Dictionary of the English Language*. Houghton Mifflin.

- Lawrence, S. (2001). Online or invisible? *Nature*, 411(6837): 521.
- Leung, L. (2002). Loneliness, Self-Disclosure, and ICQ ("I Seek You") Use. *CyberPsychology & Behavior*, 5(3), 241-251.
- Kling, R. and McKim, G. (1999). Scholarly communication and the continuum of electronic publishing, *Journal of the American Society for Information Science*, 50 (10), 890-906.
- Krueger, Richard and Casey, M.A. (2000), *Focus Groups: A Practical Guide for Applied Research*. 3rd Edition. Sage Publishing, Thousand Oaks, CA., 2000.
- Marlow, Cameron (2004). Bringing the Weblog Back Down to Earth: Content, Processes, and Structures in the Blogosphere. Presented at the International Communication Association, May 28, 2004.
- McQuail, D., J. Blumler & R. Brown. (1972). The television audience: A revised perspective," in D. McQuail (ed.): *Sociology of Mass Communication*. London: Longman.
- McQuail, D. (1987). *Mass Communication Theory: An Introduction*. 2<sup>nd</sup> edition. London: Sage.
- McQuail, D. (2000). *McQuail's Mass Communication Theory*. London: Sage.
- Morgan, D.L. 1997. *Focus groups as qualitative research*. 2nd Edition. London: Sage.
- Napoli, Philip. (1998). The Internet and forces of "massification". *Electronic Journal of Communication*. 8 (2).
- Palser, B. (July-August 2002). Journalistic blogging: Mainstream news organizations could steal an idea or two from blogs. *American Journalism Review*, 24(6), 58-60.
- Papacharissi, Zizi, and Rubin, Alan M. (2000). Predictors of Internet use. *Journal of*

Broadcasting & Electronic Media. 44 (2, Spring), 175-196.

Park, H.W. (2003). What is hyperlink network analysis?: New method for the study of social structure on the Web. *Connections*, 25(1), 49-61.

Paquet, Sebastian. (2002). Personal knowledge publishing and its uses in research. Seb's Open Research, published October 1, 2002. Retrieved November 20, 2004 from <http://radio.weblogs.com/0110772/stories/2002/10/03/personalKnowledgePublishingAndItsUsesInResearch.html>

Perse, Elizabeth M., and Ferguson, Douglas A. (2000). The benefits and costs of Web surfing. *Communication Quarterly*. 48 (4, Fall), 343-359.

Pollard, D. (July 2003). The blogging process. Retrieved August 2, 2003. <http://blogs.salon.com/0002007/2003/07/30.html#a346>

Rogers, R. (2002). Operating issue networks on the web. *Science as Culture*. 11(2), 191-213.

Rogers, R. and Marres, N. (2000). Landscaping climate change: a Web mapping technique for understanding science and technology debates on the World Wide Web. *Public Understanding of Science*, 9(2): 141-163.

Sableman, Mark. (2001). Link law: Internet linking law at five years. *Berkeley Technology Law Journal*. 16. <http://www.law.berkeley.edu/journals/btlj/articles/vol16/sableman/sableman.pdf>

Shirky, C. (2003). Power Laws, Weblogs and Inequality. Retrieved December 21, 2004. [http://www.shirky.com/writings/powerlaw\\_weblog.html](http://www.shirky.com/writings/powerlaw_weblog.html)

Voida, Amy, Mynatt, Elizabeth D., Erickson, Thomas and Wendy A. Kellogg. (2004).

Interviewing over Instant Messaging. In *Proceedings of the ACM Conference on Human Factors in Computing Systems*. New York: ACM Press, pp. 1344 - 1347.

Walker, Jill. (June 28, 2003). Final version of weblog definition. Retrieved August 2, 2003,

[http://huminf.uib.no/~jill/archives/blog\\_theorising/final\\_version\\_of\\_weblog\\_definition.html](http://huminf.uib.no/~jill/archives/blog_theorising/final_version_of_weblog_definition.html)

Webster, JG & Lin, S. (2002). The Internet audience: Web use as mass behavior. *Journal of Broadcasting and Electronic Media*, 46(1), 1-12.

Wolff, P. (2003). The Blogcount Estimate. Retrieved June 30, 2003 from [http://dijest.com/bc/old/2003\\_06\\_23\\_bc#105638688729256217](http://dijest.com/bc/old/2003_06_23_bc#105638688729256217)