

Gender and Communication Styles on the World Wide Web

Human beings are defined, in part, by their styles of communication. Business people contract and consult. Artists strip down to emotions and impulses. Scientists relay data across space while interchanging theories. All of these humans are attempting to share their experiences in life with other humans. All of them have separate, vital styles which not only identify them to each other but in many ways, identify them to themselves. All human beings "shift gears" as they change roles, using one style during a conflict in the office, another while giving advice to a friend, meanwhile endlessly cultivating various other styles, to be displayed as life and experience alter the content of their message and the nature of their audience.

When humans study each other attempting to communicate, they must often be tempted to shrug, smile and turn away. The sheer number of factors conspiring against human communication occurring *at all* are remarkable. Attempts at communication must first surmount the physical world, with all of the noise, distortion, interruption and physical failures present in the environment. The communicators must then somehow overcome language barriers, cultural norms, societal misconceptions, and misconstrued body language before any experiences can even begin to be shared. The fact that we ever manage to communicate *anything* useful to each other is amazing in itself.

Past And Present Communication Theories

One way human communication has been investigated is by examining failure.

What literally happens when people are unable to decipher their messages to each other?

Why are some people seemingly unable to communicate with others? Are there specific patterns that might explain why one human is not successful in exchanging ideas with another individual? After sifting through myriad factors including age, social position, speech traits and environmental aspects, researchers have isolated gender as one possible point of contention in the study of communication over the last ten years.

Deborah Tannen, a noted linguist, proposes that women and men speak differently in face-to-face conversation because human children are socially molded and trained to speak separate languages, based on their sex. She dissects the patterns of interruption, deferral, apology, and argument that make up ordinary adult conversation and supports the notion that socialization has created a clear difference in the way humans of different genders interact (Tannen 1993).

Theoretical offshoots of this socialization theory argue that existing power structures, whether economic, ideological or political, automatically value and support their own communication style, reducing the value of any "inferior" communication traits. Betty Friedan suggests that language itself, the everyday utterances of most human beings today, has been invented, controlled, and defined by a particular power structure. This would explain why women are trained to defer, apologize, hesitate, and

smile while men are encouraged to interrupt, argue, command, and "speak up." (Friedan 1997).

Other gender-based theories imply that there are spiritual differences related to human gender: that women have intangible, emotional qualities that men lack and vice versa. These biologically-based theories are often interwoven with interpretations of the "value" of these differences and the expression of variations. "Good" men express themselves in certain patterns, just as "bad" women do and so on. This approach assumes that each individual is wholly one gender or the other, suggesting that "imposters" should be easy to recognize and that there are recognizable patterns shaped by the gender of the communicator which do not generally alter throughout a communicator's life (Gilligan 1982).

Susan Herring has taken this concept a step further, studying how men and women communicate with each other when they cannot directly determine the gender of their audience. Her study group was made up of adults posting to electronic discussion groups and her research supports the idea that even though these humans cannot see each other (and so miss many of the physical cues about gender and status), it is still possible to pinpoint specifically gendered forms of communication. "My basic claim has two parts: first, that women and men have recognizably different styles in posting to the Internet and second, that women and men have different communicative ethics-- that is,

they value different kinds of online interactions as appropriate and desirable” (Herring 1994).

Herring concludes that male messages are generally longer, more aggressive, and more likely to contain argumentative or authoritarian language than the messages from the women within the same group. Men also made up more than 70 percent of the active respondents in the observed groups, even when equal numbers of both men and women subscribed-- and even when the topics were specifically women-oriented. The women in Herring’s study tended to apologize frequently, ask for group input, and submit far shorter messages. Their focus was on forming and maintaining the community, even at the risk of reducing or eliminating their individual roles.

Another approach to explaining the effects of gender in communication relates to the perceived audience. Does your *perception* of the gender of the person you are communicating with shape your message even further? Cyberspace has historically been predominantly male, although to what degree depended on the specific location. CompuServe has estimated its female membership at twenty five percent for the last several years, AOL claims thirty eight to forty percent, and best estimates are that women make up about one-third of Internet users (CompuServe 1998).

A critical aspect of this approach suggests that the communicators' perception of her audience is at least as important as her own gender. "Just as when in Rome most people do as Romans do, the behavior of women and men depends as much on the gender they are interacting with than on anything intrinsic about the gender they are. In

other words, the difference between men and women online may not be determined by their own gender but by the gender they believe their correspondents are" (Grossman 1997). This would mean that women attempting to communicate only with other women might use entirely contrasting techniques than men would use when communicating with other men.

A final aspect of gender in communication is the possibility of its elimination in an electronic environment. Carol Tavris has challenged much of the scientific evidence purporting to show that women and men are intrinsically different:

Are women really kinder, gentler, and more interconnected with people and the environment than men are? Are the qualities of peacefulness and connection to others endemic to female nature, or are they a result of the nurturing, caretaking work that women do because of their social and family roles? For that matter, are these qualities truly more characteristic of women than men, or are they merely human archetypes--stereotypes of female and male--that blur when we look more closely at actual human beings? (1992, 50.)

Might it be theoretically possible to eliminate all traces of gender specificity in electronic communication? Is this desirable? How much of each person's identity is intrinsically gender-based and how much of that identity can be "neutralized" in an electronic landscape? Traditional human communication stereotypes have evolved over long periods of time. Eliminating such deep-seated, often subconscious, human perceptions would seem to require a massive shift on the psychological scale. Donnelly proposes that new electronic environments may allow and even provoke such a widespread shift in perception:

The very technologies of communication cause social change, regardless of their content or intended use. Certainly one of the compelling facts of history is that major developments in communications technology create, or cause, new social structures to come into being. This was true of writing, printing and broadcasting, and it will be true of the new electronics. (1986, 112)

Is it possible that the social constructs which define gender-based communication styles might be disregarded in Cyberspace? Could people effectively communicate without the clues and cues of gender-based codes? This study proposes to create a "snapshot" of Web communication styles, in order to examine how a small number of separate individuals manipulate existing gender-defined communication styles in Cyberspace, specifically within the confines of gender-related topic sites on the World Wide Web.

Why The World Wide Web?

According to Matthew Gray of the Massachusetts Institute of Technology, 650,000 sites attached to the Internet in the last eight months of 1997. As the technology to mount pages becomes increasingly cheaper and more available, this number continues to grow so rapidly that it is almost impossible to accurately monitor (Gray 1998). The Web, a distinct and specific sector of the larger Internet, is often the first area to be explored by new computer users, since many Internet Service Providers (ISP's) and currently available operating systems build in tools to automatically connect users to the Web. Additionally, a typical Web site is made up of recognizable graphical elements

which require little training to use, unlike some of the more esoteric Internet tools such as newsgroups, chat areas, discussion lists and textual FTP sites.

Until now, observing gender-based communication styles has been restricted to watching and recording humans as they converse with each other, face to face, in real time. Recorded research material has only become widely available over the last twenty five years and students have historically been forced to "eavesdrop" on self-conscious subjects, who attempted conversation despite the observer's note-taking intrusion. Opportunities to watch how people attempt to express themselves, both to themselves and to others, have been limited by the availability of real, live subjects, talking out loud. Even Herring's electronic discussion groups were limited in the same way that face-to-face conversation would be: the participants were involved in many aspects of real-time self-identification and social posturing common to face-to-face conversation, while engaged in the actual transmission of their message.

On the World Wide Web page, humans have seemingly found at least one small way to share their experiences in life while reducing language barriers, cultural norms, societal misconceptions and misconstrued body language within the process of communication. The Web can supply an endlessly changing stream of entertainment, statistics, and "information" in many guises, quickly and simply. "Surfing the Web" has become synonymous with Internet use in public discourse, much to the annoyance of the "Netizens" who actively use the vast expanse of the "real Internet's" electronic

resources available *outside* of the highly commercial Web for many high-minded and thoroughly useful pursuits.

In any case, the urge to communicate is strong within humans and the non-judgmental tools a computer provides are encouraging for many people. The appearance of 650,000 sites in the last eight months of 1997 suggests that many people who begin by “surfing” the Web sites of others might end up constructing sites of their own. The levels of skills, tools and equipment used vary astonishingly across the non-corporate Web, but at every level, behind every page, there sits a human trying to communicate her or his life experiences, sometimes for the benefit of others, but frequently simply for her or his own pleasure. Do these individuals embed recognizable, gender-specific communication patterns in their electronic communication? Does it make a difference if these individuals are attempting to communicate with other members of the same gender? What will they subconsciously include and what might they intentionally avoid or emphasize?

A longstanding theory related to Web communication says that although physical objects don't accompany you into cyberspace, your personality and your experience of the real world do (Grossman 1997). "Snapshots" of current Web pages should reveal traces of existing communication styles. If previous theories of gender-based communication are accurate, gender-based communication styles should be one aspect of human communication which are very difficult to leave behind.

Methodology

This study identifies the most highly visible Web pages within five given interest areas. The resultant ten sites- five representing women and five representing men- were compared on the basis of content (purpose, audience, technical specifications, interactivity and theme) and design elements (layout, graphics, text, effects and navigation.) in order to examine the styles and patterns within each and also to determine which, if any, gender-related aspects of human communication have successfully migrated to Cyberspace.

Search Engines, Interest Areas, Topic Selection and Sites

Search Engines

The intent of this study was to locate the most widely viewed English-language Web sites within given topic areas. In order to determine *which* sites were most widely indexed, a variety of search engines were needed to sort the selected topics.

A listing generated from three meta-index sites (InferenceFind, Yahoo and MetCrawler) in August of 1998 yielded URLs for over 300 separate search engines.

Those engines which yielded fewer than three hits in the five interest areas of this study were eliminated, as well as those which were extremely specialized, either geographically or technically. Non-English engines, those which required fees/memberships, and those related only to commercial interests were also removed from consideration. This narrowed the 300 available search engines to twenty three.

Each of the twenty three engines were used to search on each topic. (See Appendix A for a listing of search engines URLs)

Interest Areas

Since this study was designed to collect and compare gender-specific Web sites, it was imperative to select diverse but gender-related interest areas. The topics would need to be separated into distinctly gender-specific experiences. They would also need to avoid commercial and overtly political presentations, since the objective was to capture gender-based communication among individuals and communities, rather than gender-based communication as blatant advertising tool or promotional device. An emphasis was placed on sites created and managed by people directly related to the interest area. Any ties to organizations that might edit or influence content were avoided. This eliminated governmental, university and corporate sites.

The five general interest areas selected were:

- Medical
- Legal
- Sports/recreation
- Bereavement
- Childhood social activity

Topics

Medical topics provided the broadest spectrum of choices. Although breast cancer is one of the most widely indexed health topics on the Web, it is not limited

exclusively to women. Other life-threatening cancers/diseases also seem to cross gender lines and are often closely tied to medical institutions or organizations. Disease survival seemed more likely to produce fruitful ongoing communication when compared with more profit-oriented areas such as exercise, drug use or diet. Ovarian and prostate cancer were selected because these diseases are strictly gender-specific, the survival statistics are low for both diseases, the community of survivors of both cancers appears to be active on the Web and the powerful process of battling such a serious condition might reveal strong, unedited communication preferences. The number of personal pages devoted to these two diseases were large and survival groups appeared to be widespread.

Legal issues presented a much smaller set of choices. The sites again had to be created and maintained by people who were not influenced by formal institutional agendas. This eliminated all commercial sites and governmental agencies. The sites needed to have a specific gender-related subject, which eliminated general civil rights issues. Divorce was not universally divided by gender, as a topic. Legal sites related to reproductive health usually veered off into political, religious and philosophical areas that were seldom unique to either gender. Child custody issues seemed to fit this topic most closely. The topic of fathers rights in custody disputes and mothers rights in custody disputes fills the requirement of gender specificity, individually maintained pages and ongoing communication.

Surprisingly, recreational topics were one of the trickiest interest areas to compile. "Fan" sites for spectator sports are too narrowly focused on advertising and promotion to reveal any other communication style. Participatory sports were more promising, but the selected topic had to have an amateur base, be strongly supported by an online community and be reasonably accessible to both genders. Amateur hockey fit these requirements. The game is not entirely restricted to particular geographic locations, economies or age groups. Adults and children regularly participate, the amateur associations are active online and both genders are represented non-professionally.

The choice of bereavement as a topic was based on the desire to include some type of universal human experience. However, many death experiences are not viewed as gender-related in any clear-cut sense. Surviving the loss of an infant proved to be the most easily isolated topic in terms of gender-based communication. Parental bereavement provided a very large and active interest area, which included a variety of ages, backgrounds, and both genders.

Isolating a childhood experience which would reflect gender-based communication also seemed problematic, since the topics should be comparable in numbers of participants, cost of participation, widespread availability and appeal. The choice of Girl Scouts and Boy Scouts somewhat violated the preference for sites with no

formal agenda, but these two organizations provided the closest thing to gender-based, non-denominational, child-centered activity currently available to examine on the Web.

The specific topics selected were:

- ovarian cancer survival and prostate cancer survival
- child custody by the mother and child custody by the father
- women's hockey and men's hockey
- mothers recovering from the death of an infant and fathers recovering from the death of an infant

- Girl Scouts and Boy Scouts

Sites

In order to isolate workable numbers of Web sites, some concessions to the enormity of the Internet and the World Wide Web in particular were made. Even using the filter of gender and the above topics to isolate and sift Web sites, a certain amount of timeliness was built into many of the selected Web sites. Sites continuously changed location, host, owner and sometimes viewpoint. As far as could be determined by this study, the selected sites were independently created. None were openly controlled, funded, supervised or edited by any over-riding institutional agenda. (The exception to this requirement were the respective Girl Scout/Boy Scout sites: the selection method of relying on the most heavily indexed sites overwhelmingly returned the official homepages of both of these organizations, which have clearly stated agendas.) Several large international communities are included within the final selections, but all are non-profit groups, specifically created for communicating among the members of the given

interest area. Sites merely selling products, services or memberships were intentionally excluded, as the purpose was to witness individual communities of people communicating, not to merely witness corporate transactions.

The sites used in this study were accessed between August and October, 1998 and were limited to English-language servers. Each site was accessed at least three times by a variety of the twenty three search engines. Sites were sifted according to the frequency of their appearance within the search engine index. (See Appendix B: Site Listings)

Findings:

Each site was analyzed using a spreadsheet constructed of major points in the Sun Microsystems "Writing for the Web" checklist (See Appendix C for the site analysis spreadsheet, adapted from <http://www.sun.com/980713/webwriting/>.) The sites were compared on the basis of content (purpose, audience, technical specifications, interactivity and theme) and design elements (layout, graphics, text, effects and navigation.) The homepage of each site is printed in Appendix D. The results by topic are detailed below.

Findings: Bereavement

A common response to a heavily-accessed topic on the Web is the formation of "Web rings", a non-commercial way to connect individual pages related to the same topic. The number of Web rings related to surviving the death of a child is enormous. An outside observer is forced to conclude that there is something deeply therapeutic in the act of creating a memorial- and the death of a child seems to cut across all other social and gender-related communication rules, producing a flood of grief that does not seem, at first glance, to recognize gender at all. The studied Web sites on this topic were excruciatingly personal, much more so than any other selected topic including cancer survival and child custody. The outpouring of grief which flows from these sites is a heart-breaking confirmation of the human need to communicate.

And yet one of the remarkable aspects of searching for sites related to fathers surviving the loss of an infant was the *lack* of father-specific communities online. While many of the most extensive and agonizingly desolate sites within the personal Web rings were created by fathers, very few resources were widely indexed for groups of fathers (not just “parents”) to communicate with each other.

The two most heavily indexed sites, one for fathers and one for mothers, do vary considerably in the way they communicate their terrible messages.

“Men’s Grief” (<http://www.bereavement.org>) is a stark site, with plain black text centered on an absolutely white background. Only one graphic appears in this entire site: a single, large, colorless icon on the homepage, depicting a helmeted man holding his face in his hands. Emphasis on authoritative advice is strong: obtaining information is more important than sharing personal experience, although connecting with other men is part of the site’s purpose. Stress is placed on privacy and the possibility of talking to other men . Throughout this site, there are few graphics, photographs, WAV files (background music), or extraneous design detail. There is no color used. The site contains links to non-moderated interactive conferences, sponsored by the Bereavement Research Network, a Canadian organization conducted by a well-known Canadian minister. The site is specifically non-denominational, although clearly Christian in focus. Discussion topics are presented on the opening screen, including “How to deal with

immediate pain”, “Concentrate on the job” and “Taking it Like A Man.” This site is part of an ongoing project and is divided into a professional area, for counselors and researchers, and a public forum for men anxious to talk to other grieving fathers. Rules for the professional include “This is a 'no holds barred' debate and review conference. NOT FOR THE WEAK HEARTED OR INSECURE SCHOLAR. Please refer to the BRN Mission Statement for the rules of engagement and registration instructions.” This is a spare, simple site with a clear purpose.

One of the most intriguing aspects of the site for grieving mothers was the extent to which advice was offered, from the mothers themselves to other survivors and pointedly, to concerned associates and professionals. Rather than seeking professional consultation, this sites emphasizes the power of the personal experiences of the members of this community above all else. The mother's site used in this study, “Mothers In Sympathy and Support” (MISS) (<http://pw2.netcom.com/~jcaccia/miss.html>) surfaced repeatedly in all twenty three search engines. Organized by two Arizona women who each lost an infant, one at birth and one to Sudden Infant Death Syndrome (SIDS), the page links to the various organizations that specialize in maternal grief counseling. Many of these groups use the word “parent” and “parental” in their pages, but the overwhelming number of contributors are women. “MISS” is a pastel site, with elaborate borders, artwork and variously colored text. Painted angels form the

recognizable symbol of the page, most of them contributed by visitors. The site contains a survey, links to family-oriented projects, advice *to* professionals and selections of poetry and journal entries taken from members. Victorian postcard angels either border or background each page. Like the “Men’s Grief” site, “MISS” is also non-denominational, although the heavy use of angel art indicates a Christian philosophy. Discussion topics are presented on the opening screen, including “The Kindness Project” and “Am I Losing My Mind?” Stress is placed on “a safe haven for parents to share their grief after the death of a child.” This site participates in the Empty Arms Web ring, the Mourning Light Web ring and the Pregnancy Web ring.

Emphasis on the mother’s site is on *giving* professionals working advice- NOT in soliciting authoritative advice. Obtaining factual information is less important than sharing personal experience, although the site does sell a book, (all proceeds to the SIDS Foundation), schedule conferences and publish newsletters and organizational data. Throughout this site, there is extensive use of color, both in backgrounds, graphics and text. Artwork, personalized photographs, lines, icons and poetry from members are on each page. There are no WAV files (background music), which do occur heavily on individual pages within the linked grief Web rings. This is an elaborate, haphazardly constructed site with a gentle approach, stressing the mental health aspects of loss (“Those who can’t hear the

music think the dancer is mad”) and highlighting the experience of sharing this experience within a community of both “parents” and “mothers.”

The number of sites designed specifically by and for grieving mothers were myriad. Of course, the direct physical connection between the mother and infant is undeniably different than that of the father, but if the real world is duplicating itself into Cyberspace, then the number of widely indexed sites designed *just* for mothers was so much larger that one would conclude the weight given to a mother's grief is somewhat disproportionate to that of the father.

Findings: Sports/Recreation

The men’s hockey site and the women’s hockey site bear a surface resemblance to each other. Coincidentally, both use an icy background image, mainly white, with large, red, block capital letters for headings.

The content similarities end there, however. The majority of hockey sites, amateur, professional, youth and adult, were clearly written by men for men. (Boys and men still outnumber girls and women in amateur hockey 2-to-1.) The women’s sites were almost purely statistical, with almost no ads for camps, products or paraphernalia: a reminder that support revenue follows popularity and women’s hockey is definitely in the shadow of professional men’s hockey. The men's hockey page was entirely impersonal, with only one email link, no guestbook and no individual or personal references given at all

Web traffic in hockey-related sites is brisk and commercial. For the eighth consecutive season, The USA Hockey Association experienced an increase in membership

registration in 1997-98. More than half of USA Hockey's 470,000-plus ice hockey members were registered electronically in 1997-98. (HockeyGrrls 1998).

The women's site (The "Women's Hockey Web" (<http://www.whockey.com/>) is produced by one individual woman, with no corporate sponsors. This site stresses the community of women hockey players, linking team pages and league statistics with familiar references and casual photographs. A definite feeling of camaraderie surfaces, with team competition a central part of this site. Response to the page is encouraged and the home page gives credit to the participating members for much of the content. Email, guestbook and newsletter all exist to keep these women in touch. The webmistress is highly "visible".

The women's hockey site is also unique in that it *specifies* gender upfront. The vast majority of hockey sites indexed were assumed to be male-oriented, with small areas set aside for women's statistics. This page was the only widely-indexed clearinghouse for women's hockey data found in this study. With few links to commercial sites, "Women'sHockey" instead focuses on international women's teams, both amateur and collegiate. Statistics, league standings and photographs fill the categories of International, University, Player profiles, Tournaments, Camps and Cards. Also included is an extensive index, direct links to team homepages and a personal FAQ from Andrea Hunter, creator of the page and member of Canada's gold medal women's hockey team at the Women's World Hockey Championships in 1992 and in 1994.

Isolating an amateur hockey page maintained by an individual man was difficult- the majority were exclusively owned and maintained by businesses and teams. The selected men's page ("Amateur Hockey World Web Site" <http://www.amateurhockey.com>) is a relatively non-profit site, compared to the vast number of professionally created and maintained pages selling hockey-related products and services to men on the Web at large. No personal contacts were included on this site and no sense of community was attempted, although the links to commercial sites were professionally designed and extensive. No photographs, few graphics and little but schedules and announcements was emphasized. Few forms of response were included and little input from the user was solicited.

This site is sponsored by "Hockey Weekly" but the site is has no direct ads for this publication on the opening page and little throughout the site. However, many of the pages within this site bore a disproportionately large number of professional fan sites, replete with advertising, fan products for sale and sports-related trivia. This site basically provided sales links, with a minimum of original content. Schedules, schools, arena information and ads made up the bulk of this site, although the heaviest advertising occurred below the second layer of the site.

Findings: Child Custody

In 1997, according to the Federal Interagency Forum on Child and Family Statistics, twenty four percent of children in the United States lived with only their mothers, four percent lived with only their fathers, and four percent lived with neither parent. The percent of children living with two parents has been declining among all

racial and ethnic groups (Federal Interagency Forum on Child and Family Statistics 1998). Elaine Sorensen, in her Urban Institute paper “Nonresident Fathers: What We Know And What's Left To Learn” reveals some striking contradictions in statistics related to child custody:

Custodial mothers reports are used as a reference point because it is generally believed that their reports of children eligible for child support are more accurate than those of nonresident fathers. Nonresident fathers report a total of 8.6 million children living elsewhere, while custodial mothers report that they have 16.4 million children with a father living elsewhere. This procedure yields 4.3 million nonresident fathers missing, or 44 percent of all nonresident fathers. (1997, 4).

If the discrepancies, confusion and bad feeling that emerge from these statistics are not clear enough, a quick tour through the Web sites related to child custody highlight the anger and frustration in the larger society, glaringly amplified via the Web.

Because more mothers than fathers are given legal custody of minor children in the US, the number of Web sites supporting fathers in this scenario are much larger than those supporting mothers. The built-in legal advantage that the mother seems to possess in many cases apparently limits the need for mothers to communicate widely about this topic. (However, child support enforcement appears to be a heavily indexed topic on the Web).

Just as mothers seemed to have an edge in receiving sympathy and resources related to the death of an infant, fathers appear to have the advantage in Web resources for custody battles- and yet this impression may be somewhat misleading. Of all subject areas visited in

this study, those related to father custody were far and away the most commercially-oriented, even more so than the amateur hockey sites produced mainly for merchandising. The vast majority of father custody sites were direct connections to attorney offices, legal conferences and other for-profit businesses: almost none were actually made up of communities of fathers themselves, even if the official site names implied otherwise. "Dads Against Discrimination" and "Fathers Rights Foundation" are simply fund-raising pages with materials and advice for sale. If Web communication patterns mirror communication patterns in Real Life, men in this situation are definitely given a monetary philosophy: pay for help, hire advisors, use income for power, buy what you need. The most frequently indexed heading under "fathers rights" is "Business and Economies: Business: Law." Opening screens in this topic area are often nothing more than price sheets. More the 90% of the sites indexed in the sifting phase of this study were direct commercial connections, with price tags attached to every item on the screen- and not a support group or toll-free number in sight.

"Single and Custodial Fathers Network" (<http://www.single-fathers.org/aboutscfn.html>) is maintained by a sociology student in Pennsylvania who "had difficulty locating genuine support groups for single and custodial fathers". The site highlights portions of the site owner's doctoral dissertation and includes charts and excerpts from census data. Very little personal data is included (no narratives, photographs, personal responses or opinion). While focusing on "handling" this subject via research and

news, this site also attempts to emotionally connect it's users via built-in communication forms, much more actively than any other examined male subject area.

Sponsor banners are few. There are forms available for Letters to the Editor and email response. Email subscriptions to an active discussion group are available, and include a digested format, suggesting relatively high use. (Digested newsgroup readings compact a larger number of separate email responses into one "digest", to be downloaded once instead of each message emerging individually. The availability of digested mail usually indicates large numbers of participants.)

The home page includes Netiquette suggestions ("Watch how you express your emotions and humor within the mail. Due to the lack of vocal and nonverbal clues to our speech here, we often need something extra to read into a message what was intended"), a formal father-specific research questionnaire, a live chat page connection, a free digital postcard service, an internally supported Web ring with twenty six sites, links to other sites and an extensive message board, which covers topics including dating, cooking, work, education, time management and parenting issues. This wealth of ways to connect was unusual within the men's pages examined in this study. Apparently this topic lends itself particularly well to the sharing of experiences among men.

The site is consistent, with a white background, simple black text and bright orange logo headings on every page. There are no photographs, backgrounds, music, artwork or borders but there is use of a simple dark blue and yellow icon of a large human form and a

small human form. There is a \$20 "membership" fee to subscribe to the paper newsletter but all other items on the site are freely available.

While the overall air of this site is quite professional, the personal peeks in around the corners: most members use abbreviated nicknames and an active core of correspondents recognize each other within the chat and board areas, lending a friendly, supportive atmosphere to an otherwise angry and frustrated topic area. This site seems to support a genuine community of men who are involved in this issue. There were no unrelated commercial vendors, generic legal ads or other interrupting for-profit postings.

"Mother-Linc" (<http://www.dhc.net/~lavietes/momlac.htm>) also has a distinctly communal flavor, with an emphasis on sharing the personal and expressing emotion. Maintained by a Texas woman, this is a highly personal site, immediately emotional from the moment the "Mother and Child Reunion" WAV file begins playing. While the "Single and Custodial Fathers" page manages to maintain a tenuous grip on objectivity, "Mother Linc" plunges right into the heart of the matter: "Some of us have had our children torn from us by an unjust court system." (Home page text: "Mother-Linc").

This is a clearly amateur effort, with few exotic design elements: one small heart-line, no borders, simply entered text (all default justified) but plenty of color, several striking photographs of real people (not icons) and haunting electronic music in the background.

The page is composed of fifteen personal page links, and contains nine ways to contact another member (the Non-Custodial Moms Web ring , a guestbook, forms to create a chapter of MotherLInc, email links to three chapters of Motherlinc, a main email list, a monthly email newsletter, a survey (which includes links to Attorney Referral, Child Support Information, Mediation Services, Counseling Referral, Housing,) an email link to the national coordinator, two academic articles, four divorce-issues sites, and links to several other non-custodial mothers organizational homepages,)

Every page of the site has a slightly different background color. Because so many separate personal pages are linked, there is little continuity from page to page. The home page has two large photographs: one of a young boy, looking directly into the camera, and the second, a profile of a woman reading a document while silhouetted against a window. The MotherLinc logo is large and purple, centered between the two photos. There are twelve alternative ways to reach someone at this site, in addition to the pages and links. There are no commercial banners on this page but there are links to two other Web rings.

Both of these site are involved in a highly controversial, emotion-laden issue. The emphasis on the mother's page is clearly on revealing each woman's experiences and the efforts of this community to survive and react, filled with poetry, artwork and short personal writings deigned to share the emotional trauma of this event: "Here is my own personal story." The father's site focused on practical, authoritative advice, even while allowing men to connect electronically. No suggestion about revealing personal details was

given on the fathers site. The emphasis remained on "resources", "organization" and "research".

Findings: Cancer Survival

Amplifying the emotions of the two child custody sites, the two cancer-related sites reflect the fear, effort and anguish that have been invested in the fight against prostate and ovarian cancer.

In 1995, an estimated 26,600 new cases of ovarian cancer were diagnosed in the United States, with an estimated 14,500 deaths that year. In 1996, there were are estimated 317,000 new cases of prostate cancer, accounting for about forty percent of all reported cancer cases in men. Prostate cancer, aside from skin cancer, is the most frequently diagnosed cancer and second leading cause of cancer death in U.S. men The National Cancer Institute also estimates that slightly over 11 million men have a slowly progressive form of prostate tumor development, and since lung cancer incidence rates have reached an apparent plateau, cancer of the prostate gland has become the most common type of cancer among both black and white males.

Both of these cancers tend to be asymptotic (showing no outward signs of the disease) and both are lethal: ovarian cancer causes more deaths than any other cancer of the female reproductive system. Two-thirds of those diagnosed with ovarian cancer die within five years due to late diagnosis. Estimates for prostate cancer are somewhat better if detected early, but an estimated 50% of prostate deaths are at first attributed to other

causes, since the men had no outwardly apparent symptoms of the cancer at the time of death (American Cancer Society 1998.)

Because of the insidious nature of these two cancers, the number of survivors is low. Family members touched by these two cancers have created literally hundreds of personal Web pages, mourning these deaths and working for better information and treatments.

At first glance, the two most widely indexed personal cancer pages are quite similar in content. Both contain information about reaching other support groups, both contain reports and literature related to the disease itself and both contain links to the organization that sponsors the page, in both cases non-profit volunteer groups of survivors or family members. Neither site is exclusively tied to health professionals, medical facilities or vendors of any kind.

But some interesting differences in layout and design choices, which actually constitute the language of communication on the Web, are quite striking.

While both sites are attractively designed, with light backgrounds and clear text, the "US TOO, International" (<http://www.ustoo.com/>) prostate cancer site is definitely oriented to a factual approach. There are no photographs, no graphics, no color and no personal references at all- not so much as a name to contact. The site has a definitely impersonal feel, almost clinically cold, with its factual content and plain black text. This page consists of a small purple logo, a brief descriptive paragraph and 14 links. The "features" are made up of factual data: national broadcast dates for a new video, a Chicago Tribune article

about vaccines, a National Cancer Institute highlight, the results of the latest Harris survey, (including questions about "quality of life", treatment options and side effects of treatments) and three extensive "data sheets".) There are also links to the organizations email, a list of support groups, organizational pamphlets and publications, a section on treatment, clinical trials, an intriguing "advocacy" area containing an email petition to Congress to increase research funding and a form for more information.

In sharp contrast, one of the most graphically voluptuous sites in this study was the "National Ovarian Cancer Coalition" site (<http://www.ovarian.org/m2b/m2b.shtml>). This site is the largest of all sites considered (women's hockey contained more links but fewer organized pages) with over 30 full, separate pages, filled with many layers of discussion, chat, email, links and other sites. Each page has elaborate, full color borders and intricate artwork, with many layers of photographs. "The Garden" is collection of over 80 photographs of survivors and victims, powerful in an intensely personal way. "The Quilts" contains dozens of photographs of the four different groups, many of whom have since died of their cancer, working on quilts, with detailed instructions on how to participate.

The emphasis on this site, despite a heavy stress on political activity, is on sharing the experience of living with this disease: "Coping", "Discuss it", and "Lets chat" are only a few of the many pages directly related to sharing this experience. "Judith's Story" relates the hour-by-hour details of a NOCC members death, written in great detail by her husband

and extraordinarily powerful in its simplicity. Active participation is at the heart of this page, filled with pictures of real people and real deaths.

The gender-based communication patterns are strongly evident within these two sites. The male site relies on authority, research, professionalism and privacy. No personal reaction from the viewer is solicited. Few response forms are included. The female site is made up of the personal- photographs, art, narratives, and layers of private experiences, shared in detail with very little authoritative material involved. Personal stories are the core of the site.

Findings: Childhood Social Activity

According to the World Association of Girl Guides and Girl Scouts home site:

In 1909, the first Boy Scout rally was held at Crystal Palace in London, and the founder, Lord Baden-Powell, was taken aback when a number of girls attended, proclaiming themselves to be girl Scouts. He decided that if they wanted to join in, they should have their own name and Movement, and a programme suited to their needs. (WAGG 1998)

The result was 'The Scheme for Girl Guides' which appeared in the November 1909 issue of the Boy Scout Headquarters' Gazette. Today, the Girl Guides/Girl Scouts Association continues to thrive and grow. Nearly ten million girls and young women are members, in 136 Member Organizations worldwide. The Boy Scouts of America, an entirely separate organization, claim a national membership of 5 million. (WAGG 1998)

While there seems to be some blurring between international organizations, the Boy Scouts of America and the Girl Scouts of America, as displayed on their respective homepages- are distinctly separate entities, with specific message delivered to their visitors.

The Boy Scout Page, (<http://www.bsa.scouting.org/programs/18-074.htm>) while creatively designed and graphically elaborate, contains *no* response mechanism at all- not a single live email link is included. All links on this page are self-referential. This handsome site is clearly to be seen--but *not* responded to. The "Boy Scouts of America" (site attempts inclusive language ("youth", "young people" "Explorers", "Scouts") and exclusionary references to gender are subtle: girls are allowed in the 14-18 year old Explorer program, where the members are referred to as "young people." But elsewhere the rest is clear: " The purpose of the Boy Scouts of America, incorporated on February 8, 1910, and chartered by Congress in 1916, is to provide an educational program for boys to build character , to train in the responsibilities of participating citizenship, and to develop personal fitness."

This site makes striking use of Norman Rockwell paintings for backgrounds, muted khaki borders, vivid photographs, no animation and very few icons, beyond the traditional symbols attached to scouting itself. The historical page is beautifully designed, the News sections is full of current statistics and the layout of the site (even with NO email links whatsoever) is dignified and interesting- but NOT aimed at children. The only non-textural

content on the BSA site is under "Family Fun", which contains a clever semaphore game, a Morse code sampler, a state flag identifying drill and a weather-predicting game.

While the Boy Scout page is definitely aimed at an adult reader, the Girls Scout page is aimed at girls. The Girl Scouts are blatantly exclusionary in their "Just for Girls" site (<http://www.girlscouts.org/girls/index.htm>). This material is clear about its audience: this is *not* for boys. "Girls on the Go", "Girls ask How", "Girl Space", --with all seven homepage links title "Girl..." . Just *how* these pages are actually defined as "non-boy" is unclear: they contain many of the same interests and activities as the Boy Scout pages, with sports and outdoor activities emphasized on both sites. The Just for Girls site is a relative circus by comparison with the Boy Scout site, with pen pals, advice columns, sports quizzes, pages on crafts, poetry, Web page design, space, water and sports science, among several dozen others.

The Girl Scout page is as modern and child-targeted as the Boy Scouts are not: bright colors, animated icons, few references to adults, lots of active cartoon girls doing active things- The home page, (the only area addressed to adults at all) stresses the " Girl Scouting today provides a safe, supportive way for girls to participate in projects involving computers and technology, careers, the environment, personal finance and sports."

Despite their widely indexed names, these two organizations have very different goals in these pages: the Boys Scouts are recruiting adults at their site. The Girls Scouts are recruiting girls. The difference in target audience was more striking in this subject area

than the specific gender references. The lack of overlap between these two American organizations was remarkable, considering the unique possibilities that might emerge if they were coordinated.

Conclusions

Despite the possibilities inherent in Cyberspace of eliminating many blatant communication roadblocks, including some of those tied to gender, the "snapshot" sampling of sites examined in this study seems to indicate that traditional gender-based communication styles are sprouting along the Information Superhighway rather readily.

Trends within a culture, such as the predominance of mothers receiving legal custody of children or the tradition of men's amateur sports receiving the majority of financial support, appear to be thoroughly reflected in the Web. Demographics of American life in particular are vividly mirrored online, in areas such as disease survival, divorce settlement and bereavement support. The numbers of sites related to these topics tie closely to their occurrence within American society.

Within the "snapshot" sites reviewed, some generalizations about gender and communication were supported in broad ways. The following table reflect some of the traits observed within these "snapshots":

Generalizations about male-specific sites:

Facts are vital
 Not principally designed as artistic outlet

Privacy is stressed
 Impersonal, often clinical

Professional quality of advice is emphasized
 Authority is suggested

Few contributions from visitors are solicited

Few contributions from visitors are received
 Interaction between visitors is sometimes aggressive
 Other men are the audience

This is an exclusive group
 The site is consistent
 Sites are carefully organized

Description of Generalization:

"Findings" "Research" "Data" "Facts" "Mission"
 Color never or rarely used, in background, icons or text
 Graphics rarely used (icons or ads only) Few photos
 Music (WAV files) not used
 "A private forum", "Please do not use your real name"
 Few names, contacts, introductions, personal data or photos
 "Expert Advice", Ask a doctor", "Ask the Professional"
 Prominent mention of status of page owner, partnerships with national groups
 Limited response mechanisms (few guestbooks, chat, listservs, email)
 Page is made up of data/opinions from page designer only
 Warnings about language occur within FAQs
 Discussion groups/links to other men; few to general public
 Membership fees occur
 Each page is related/looks like the others
 Home page is compact, most links work

Generalizations about female-specific sites:

Openly sharing this experience is vital
 Site creation is an artistic outlet

Community is stressed
 Personal, often intimately so

Personal quality of advice is emphasized
 Authority is not central
 Contributions from visitors are emphasized

Contributions from visitors are vital
 Other women are the audience

This is an exclusive group
 The site design is inconsistent
 Sites are organic

Description of Generalization:

"Safe haven" Speak out", "Share", "Support"
 Extensive use of color in background, graphics text
 Photos & graphics used extensively.
 Music (WAV files) used
 "Places to share", "gallery""showcase""Come with us"
 Extensive use of names, contacts, introductions, personal data & photos
 "Give us advice", Tell a doctor", Share your knowledge"
 Partnerships with national groups are not stressed
 Multiple response mechanisms (combined guestbooks, chat, email)
 Page is made up of visitor contributions
 Discussion groups/links to other women; few to general public
 Membership fees occur
 Backgrounds and text change, links jump
 Home page is one long, growing work of additions/changes

The results of this study would seem to suggest that the most frequently indexed sites in these five interest areas are still reflecting the core of gender-specific communication traits. The male-oriented sites in this study tended to use authoritative language, stressing privacy and professionalism while ignoring personal interaction. The female oriented sites seemed to emphasize personal expression, communality and artistic efforts while relying on emotional interaction.

It seems important to note Grossman's point on people reacting to their perceived audience more strongly than to their own gender: these people were all genuinely trying to communicate with other people of the same gender. "In a world where there are no bodies and all that matters is the quality of your written thoughts, all those physical delineators like skin color, gender, or disability would vanish. The thing is, although physical objects don't accompany you into cyberspace, your personality and your experience of the real world do. (Grossman, 1997, 16).

Even if women aren't kinder and gentler than men, much of our society wants to believe that stereotype- and so the patterns reinforcing those traits seem to continue, right on into Cyberspace.