

THE INTERNET AND COMMUNITY:
AN ANALYSIS OF TWO
LISTSERVES

by

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A THESIS

Presented to the School of Journalism
and the Honors College of the University of Oregon
in partial fulfillment of the requirements
for the degree of
Bachelor of Arts

June 1997

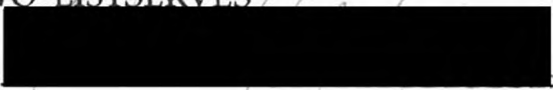
APPROVED: _____

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An Abstract of the Thesis of

Kendra Alis Smith for the degree of Bachelor of Arts

in the School of Journalism to be taken June 1997

Title: THE INTERNET AND COMMUNITY: AN ANALYSIS OF
TWO LISTSERVESApproved:  Thomas Wheeler

The popularity of the Internet, the latest new medium, has raised many questions about its impact on society. In this thesis, the opinions of two authors — Howard Rheingold, who supports the Internet, and Mary Pipher, who worries about the influence of electronic media in general — about the Internet's value and effects are addressed through quantitative and qualitative analyses of the Internet's content. The study examines 16 days of messages from two Internet listserves, finding that the communications are mainly of a personal nature. The content of the messages exchanged reveals that members of the listserves have a shared history beyond the histories of the listserves' topics and exhibit a sense of responsibility toward each other, at least within the limits of the listserves.

ACKNOWLEDGMENTS

I want to express my sincere appreciation to my professors, Tom Wheeler, Al Stavitsky and Dennis Todd, for taking on the job of helping me narrow down such a voluminous mass as the Internet into an acceptable undergraduate thesis.

Thanks to my extended family, especially Leslie Smith, for asking me about my thesis often and thereby coercing me not to quit. Thanks also to my parents: my father for the best advice I got on this thesis, "Do me a favor and just write the damn thing"; my mother for the second best advice, "Sometimes there are things in life we have to do that we don't want to do"; and both of them for always being proud of me.

Thanks also to my friends: my roommate and soulmate Jordana Dolowich, for finishing her thesis early and giving me lots of advice (both solicited and unsolicited — I'm only thanking her for the solicited); Christi Eddie, my partner en crimen; Jennifer Carter, for starting just as late as I did and always being around to gripe with; Michael Glaros, who wrote a thesis last summer, for the third best advice I ever got on this project, "Don't sweat the thesis"; Nikki Okimoto, for always making me feel like I'm one of the most intelligent people on the planet; Jason Schwartz, for talking to me about statistics and loving every minute of it; also Angie Suchy and Amy Kimmel.

DEDICATION

To my grandmother,
Lourdes "Babe" Fernandes Smith,
who truly knew the meaning of community.

TABLE OF CONTENTS

Chapter	Page
INTRODUCTION.....	1
METHODOLOGY.....	12
Research Question.....	12
Why Content Analysis?.....	12
Preliminary Sampling.....	13
Defining a Universe.....	15
Hypothesis.....	16
Systematic Sampling.....	17
Reliability and Validity.....	18
Explanation of Quantitative Measurements.....	19
Operational Definitions.....	20
Coding.....	21
RESULTS.....	24
DISCUSSION.....	33
CONCLUSION.....	47
BIBLIOGRAPHY.....	52

LIST OF FIGURES

Figure	Page
1. Tally Sheet for Recording Coding Information.....	22
2. Comparison of the Subjective Latent Content Ratings for Messages from Listserves A and B	25
3. Number of Messages in Listserve A Having Specific Percentages of Personal Words	28
4. Five Number Summary Graph for the Manifest Content Data for Listserve A	29
5. Number of Messages in Listserve B Having Specific Percentages of Personal Words	31
6. Five Number Summary Graph for the Manifest Content Data for Listserve B	32

INTRODUCTION

To have a real life, people must participate in real community.
People who live in virtual communities have virtual lives.

— Mary Pipher

The Internet began in the late 1960s as part of a computer experiment for the U.S. Department of Defense's Advanced Research Projects Agency (ARPA).¹ A small group of researchers was given money by the government to redesign the way computers worked.² Their goal was to create the first "interactive" computers — ones that could be operated not by inserting information on punch cards and receiving printouts but by interacting, in a sense, with the computer through keyboards and monitors.³ Once their ideal computer was designed, these same researchers also developed a method to use the machine for communication.⁴ Called ARPANet, it was designed as a covert method for communicating about defense projects.⁵ With a single center of information, it would be too easy for an enemy to destroy the Defense Department's control over military capabilities within the country.

¹ Howard Rheingold, The Virtual Community: Homesteading on the Electronic Frontier (Menlo Park: Addison-Wesley, 1993) 67.

² Rheingold 67.

³ Rheingold 67.

⁴ Rheingold 67.

⁵ Rheingold 7.

ARPANet enabled communication across the nation with a few keystrokes, allowing decision-making and the sharing of information to occur rapidly and without the existence of a central organization.⁶

In the 1980s, the National Science Foundation sponsored the Internet, a technology that built on the Defense Department's ARPANet to link university professors to researchers and scholars working for private industries.⁷ Using the Internet, they could rapidly exchange valuable data dealing with timely studies and accelerate the discovery of new information.⁸ Beginning with schools in the United States, colleges worldwide came on line.⁹ When university computing centers got hooked up to the Internet, so did millions of college students.¹⁰ They became exposed to forms of computer communication available besides electronic mail: Usenet newsgroups, Internet Relay Chat (IRC), listserves, Multi User Dungeons (MUDs), and Bulletin Board Systems (BBSes).¹¹

The university community, and now professionals and the portions of the public fortunate enough to have access to computers, have found that the Internet is not only a great research tool, but it also has the potential to entertain.¹² Newsgroups on Usenet offer public forums to post opinions on specific subjects and get other people's responses to them.¹³ IRC enables conversations — sometimes even across the globe — to be carried out on a

⁶ Rheingold 7.

⁷ Rheingold 68.

⁸ Rheingold 68.

⁹ Rheingold 68.

¹⁰ Rheingold 69.

¹¹ Rheingold 69.

¹² Rheingold 69.

¹³ Rheingold 69.

computer screen.¹⁴ Listserves deliver messages right to subscribers' email inboxes on subjects of their interest.¹⁵ MUDs give people from all over the state, the nation, often even the world, an opportunity to participate in the same giant role-playing game.¹⁶ The Internet provides the possibility to communicate easily and cheaply — for now, anyway — with people far away and nearby, as well as the ease of encountering groups of people who are interested in discussing particular subjects.

Recently, media critics and sociologists have observed that the Internet is having profound effects, both positive and negative, on the idea of community in America and the world. Some argue that the easy, national, and sometimes international interaction among people that tools like listserves are providing is a good thing. Others feel it is only alienating us increasingly from our next-door neighbors and local community. While the Internet is currently hotly debated in popular and professional publications, television, radio and even film — remember Sandra Bullock in "The Net"? — its popularity grows in both professional and personal spheres, meaning that for many people, it has become a medium consulted more than once daily.

Some theorists claim that the popularity of electronic media like the Internet has resulted in a displacement of the usual forms of community. Mary Pipher, an author and psychologist who studies the family, claims that various media now constitute the American community; Americans are more comfortable in the "electronic village" than they are in the cities in

¹⁴ Rheingold 103.

¹⁵ Shirley Duglin Kennedy, "The Internet as a Communications Tool," Information Today Feb. 1997.

¹⁶ Rheingold 145.

which they live.¹⁷ She discusses the crisis of the disappearing local community, stating that by 1990 almost three-quarters of Americans did not know their neighbors.¹⁸ Instead, they stayed indoors as prisoners of computers, fax machines, home entertainment centers, and Nintendo.¹⁹ While she doesn't argue that these technological devices are inherently evil, she feels that when they are employed en masse, as is happening today, they are detrimental.²⁰ So, she moves the responsibility for the social dilemmas of today's American youth from the shoulders of their workaholic parents to the electronic village she feels is replacing traditional neighborhoods: the community of media and technology.²¹ She calls it a "dysfunctional community."²² Her opinion stems from her observations that it is no longer common for families to sit and enjoy a meal together and that American children watch an average of four hours of television a day.²³

She is not alone in her belief. Neil Postman, a communication theorist, fears that the new wired world many children live in enables them to be fully entertained without ever leaving their rooms, which serves to isolate them from their families and people in the neighborhoods and cities around them.²⁴ He views the proliferation of computer technologies as a threat to the whole notion of community.²⁵

¹⁷ Mary Pipher, The Shelter of Each Other (New York: Grosset/Putnam, 1996) 13.

¹⁸ Pipher 84.

¹⁹ Pipher 10.

²⁰ Pipher 10-11.

²¹ Robynn Tysver, "Who's raising the children?: Author says a true community nurtures families but the electronic village fractures them," The Register Guard 1 July 1996: D1.

²² Tysver D1.

²³ Tysver D2.

²⁴ Lynn Smith, "Social scientists worry about kids disappearing into an electronic world: In a Wired Web," The Register Guard 29 Apr. 1996: D2.

²⁵ Smith D2.

When Pipher talks about the new community of media in America, she contrasts it with what she calls “real” communities. She describes these communities as actual places with skylines and landscapes.²⁶ Certain sounds and scents characterize them.²⁷ People actually reside there and other residents know their names.²⁸ In her opinion, the Internet isn’t one of these places: “To have a real life, people must participate in real community. People who live in virtual communities have virtual lives.”²⁹

The problem Pipher has with the Internet is that it lacks three things: a foundation for values, diverse problems, and accountability. All of these are things she says real communities *do* provide. In her opinion, because the problems media today choose to address are the ones that will ensure a profit, the dilemmas presented often are not issues that real people are confronted with, making the depth of experience in real life nonexistent in electronic communication.³⁰ Pipher says that real communities revolve around the idea of accountability: “what I owe you and what you owe me and ... what we can and should do for each other.”³¹ In these communities, what people say and do matters, because relationships balance delicately on protocol.³² People live with their words and actions until they die.³³ In the community of the Internet, Pipher sees no accountability because people can be deleted quickly if they cause problems, names are often not real names, and the vastness of the medium means people using it never need to encounter again the people

²⁶ Pipher 255.

²⁷ Pipher 255.

²⁸ Pipher 255.

²⁹ Pipher 255.

³⁰ Pipher 14.

³¹ Pipher 255.

³² Pipher 84.

³³ Pipher 84.

they have met, if they choose not to.³⁴ This virtual community is so hollow, according to Pipher, that it does not provide parents with a good, universal set of values by which to raise their children.³⁵ Instead, electronic media surreptitiously teach children poor values, making them think, feel, and behave in ways contrary to common sense.³⁶

Children grow up to be adults, and the worry is that the young people infected by the inadequacies of the electronic community will take these mislearned lessons into adulthood. Pipher, and mothers and fathers everywhere who are buying her books, fret that their children will grow up to be someone like Chris Lamprecht, the first person ever to be banned from the Internet.³⁷ He was convicted on money-laundering charges related to the theft and sale of telecommunications equipment worth \$1 million.³⁸ Lamprecht broke down and cried when he heard at his sentencing that he could no longer access the Internet: "I told the judge computers were my life."³⁹

On the other side of this topical debate is a man named Howard Rheingold, whose experiences on a server called the Whole Earth 'Lectronic Link (WELL) have led him to see a true community in the environment created by plugging a computer into a telephone and logging on. Rheingold admits that the primary reason the WELL rapidly became a community for him was that it had a basis in his local community, the San Francisco Bay

³⁴ Pipher 84-85.

³⁵ Pipher 14.

³⁶ Pipher 13.

³⁷ J.D. Helman, "Banned from the Internet," Swing Mar. 1997: 70.

³⁸ Helman 70.

³⁹ Helman 70.

Area.⁴⁰ But, as the WELL grew — from a few hundred users to eight thousand in less than a decade ⁴¹ — Rheingold's own interests in the new technology expanded. He found himself participating in communities in Japan, France, England, Russia, China and Kuwait — virtually.⁴² Like many of the critics and skeptics today, he says he at first found the idea of computer-assisted communication cold.⁴³ He has since greatly changed his view: "I learned quickly that people can feel passionately about e-mail and computer conferences. I've become one of them. I care about these people I met through my computer, and I care deeply about the future of the medium that enables us to assemble."⁴⁴

To him, the Internet is beneficial to children. He marvels at the power the Internet offers, citing a hypothetical example of a 10-year-old who, with a little of the right knowledge and a little bit more money, could connect two of the world's most heavily researched, expensively developed technologies — computers and the Internet — and research an opinion, spread the word about it, and find millions of people who agree with him.⁴⁵ Rheingold is open with his seven-year-old daughter about what he tells her are his "invisible friends," the people he converses with on the WELL, who sometimes pop up in real life, a term so frequently employed on line that netizens abbreviate it as "IRL."⁴⁶ He has actually met many of the people he first chatted with on line in the physical world, and their relationships now

⁴⁰ Rheingold 2.

⁴¹ Rheingold 2.

⁴² Rheingold 3.

⁴³ Rheingold 1.

⁴⁴ Rheingold 1.

⁴⁵ Rheingold 5.

⁴⁶ Rheingold 1.

stretch beyond the computer screen.⁴⁷ He takes walks with one friend in the hills to discuss problems with people and relationships on the WELL⁴⁸, he and his family reunite with members of the WELL's special computer conference on parenting for an outing to a local circus every year⁴⁹, and he sadly joined other members of the WELL for the funeral of one of their own.⁵⁰

Marc Smith, a graduate student studying sociology at the University of California at Los Angeles, has developed a theory about virtual communities, specifically the WELL, according to the concept of "collective goods": cooperative groups develop because the individual members realize that there is something significant and vital that can be attained only by their joining together.⁵¹ A social network, knowledge and communion are the collective goods that make the WELL a community, according to Smith.⁵² Rheingold utilized Smith's theory to see if he could find these collective goods on the WELL, and claims he has encountered all of them.⁵³ A social network was already established for him when he took a trip to Japan: a Tokyo computer conference welcomed him with open arms "IRL," even though he had never before been there and had communicated with residents only via email.⁵⁴ As he asked questions of the WELL members, he found knowledge on various subjects, a sort of "online brain trust."⁵⁵ When

⁴⁷ Rheingold 197-198, 220-221

⁴⁸ Rheingold 53.

⁴⁹ Rheingold 21.

⁵⁰ Rheingold 35.

⁵¹ Rheingold 13.

⁵² Rheingold 13.

⁵³ Rheingold 13.

⁵⁴ Rheingold 13.

⁵⁵ Rheingold 13.

the children of two parenting conference participants were ill, he saw communion as other members rallied around the couple.⁵⁶ In his opinion, applying traditional community analysis to the WELL shows that Internet interactions can represent a community.⁵⁷

Rheingold also explains that through the computer, people who participate in these electronic communities do almost everything people in real communities do: "You can't kiss anybody and nobody can punch you in the nose, but a lot can happen within those boundaries."⁵⁸ To him, computer-assisted communication is rich and vital.⁵⁹ There is support, gossip and exchange of information.⁶⁰ People make small talk and fight, have intellectual talks and negotiate.⁶¹ There are feuds, romances and friendships.⁶²

Rheingold finds a reason for all this in sociological theory as well. In The Great Good Place, author Ray Oldenburg set out the theory that each person needs to participate in three essential places: home, work, and another "third place" where he or she can gather for friendship.⁶³ In Oldenburg's view, places where community members gather to make idle chat — cafes, bars, beauty parlors — are crucial in holding a society together because they are the places where community is born and thrives.⁶⁴ As our world focuses more on cars, strip malls, and fast food, convenience is replacing conviviality

⁵⁶ Rheingold 13.

⁵⁷ Rheingold 12-13.

⁵⁸ Rheingold 3.

⁵⁹ Rheingold 3.

⁶⁰ Rheingold 3.

⁶¹ Rheingold 3.

⁶² Rheingold 3.

⁶³ Rheingold 25.

⁶⁴ Rheingold 25.

and these places and their importance are being forgotten.⁶⁵ Oldenburg notes that the proud American ethic of individualism eventually leaves us lonely and alienated, because as we focus on our own lives we gather lots of material goods but have no time for community.⁶⁶ In the end, we are left without a third place.

Rheingold, and Pipher as well, have the same concern as Oldenburg: that our informal public places to meet and converse are rapidly fading away.⁶⁷ Rheingold calls it "a hunger for community," and just like Pipher, he sees electronic technology feeding that hunger.⁶⁸ But while this notion scares Pipher, it excites Rheingold. Though he admits that the Internet could be an escape from true community and represent only a semblance of personal connection, as Pipher alleges, he also proposes that it fits many aspects of Oldenburg's notion of the third place.⁶⁹ He defines a "virtual community," an entity Pipher frequently attacks, as a "social aggregation... that emerge[s] from the Net when enough people carry on ... public discussions [using computer-assisted technology] long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace."⁷⁰ In his opinion, the feelings he has when he is deep in cyberspace with others on the WELL are just as real as any ones he would have with friends "IRL," because he laughs, swears and cries while he's at the computer.⁷¹ To him, logging on to the WELL is like popping into a corner pub, like Norm dropping in at Cheers.⁷²

⁶⁵ Rheingold 25.

⁶⁶ Rheingold 25.

⁶⁷ Rheingold 6.

⁶⁸ Rheingold 6.

⁶⁹ Rheingold 26

⁷⁰ Rheingold 5.

⁷¹ Rheingold 2.

⁷² Rheingold 26.

Everybody knows your name, like the song goes. To Rheingold, it is a positive feeling.

Rheingold admits that the questions asked about this medium cannot be ignored just because his own experience on the WELL has made him a number of strong personal connections. He agrees with Pipher that the medium and its problems must be understood. To that end, he recommends that all disciplines work together to find an answer to how these new technologies are changing human community.⁷³ "Some of the most important learning will always have to be done by jumping into one corner or another of cyberspace," he writes, "and getting up to your elbows in the problems that virtual communities face."⁷⁴

By looking both quantitatively and qualitatively at a selection of the messages from two listserves, my research gets into the heart of electronic communication, as Rheingold suggests. It is an objective and subjective look at systematically chosen interactions from one "virtual community" about baseball and another about AIDS. In responding to both Pipher and Rheingold's assessments of the Internet as a community, it sheds a more scientific light on the conjectures and opinions of two theorists. What is the nature and quality of the communication over the Internet? Can it be a third place?

⁷³ Rheingold 15.

⁷⁴ Rheingold 15-16.

METHODOLOGY

Research Question

The dispute presented by Pipher and Rheingold revolves around the question of whether the Internet provides a sufficient community to its users to be classified as a third place, as defined by Oldenburg's analysis. To study this idea of the Internet as a successful or unsuccessful third place, the research question must be this: What is the nature and quality of communication over the Internet?

Why Content Analysis?

Content analysis, a method of observation from sociological study through which the researcher can encounter information to help explain social phenomena,¹ was chosen as the method to examine this question for two reasons. First, people are not the units of analysis, or what is examined, in this type of sociological research.² Content analysis instead employs forms of communication as units of analysis.³ For an undergraduate researcher,

¹ Earl R. Babbie, The Practice of Social Research (Belmont, Calif.: Wadsworth Publishing Company, Inc., 1973) 225.

² Babbie 225.

³ Babbie 225.

had to determine which part of the Internet to study.

As cited in the Introduction to this paper, one of the points Postman makes is that media that keep us locked up in our houses, away from our local communities, are detrimental.¹¹ Media that Postman attacks in this statement, media that hold us for long periods of time — those consulted for professional purposes excepted — are most likely entertaining or interactive, like television or video games. Interactivity and entertainment value were therefore criteria to determine the part of the Internet studied. Rheingold stresses that his communication over the Internet was highly personal.¹² This was also a criterion in the decision of what aspect of the Internet to study.

Many parts of computer communication today are entertaining, such as Web sites. Although Web sites can sometimes be interactive, this interaction is not usually an interpersonal one, because it comes in the forms of games, downloading pictures or listening to audio tracks, not conversing with others. The parts of the Internet that are most interpersonal are MUDs, IRC, and listserves, because their participants have conversations. Therefore, MUDs, IRC and listserves would be potential subjects, according to the criteria established by looking at the dispute presented in the two theorists' conjectures. However, because the conversations in MUDs and IRC go on in real time — participants take part in the conversation over their computers as it happens, as if they were all in a room together — they are difficult to capture for analysis. The conversations on listserves, however, take place over hours or days. Messages are posted and responses to them can come in

¹¹ Smith D2.

¹² Rheingold 1.

seconds or weeks later. The extended nature of these conversations, plus the fact that the messages that constitute them arrive over email, makes them easier to study. The listserve thus presented itself as the easiest interactive and personal computer-assisted communication medium to study for this research.

Defining a Universe

The next sampling necessary was to choose from all the listserves available and define a universe, or specify the boundaries of the body of content to be considered.¹³ This means a topic area and time period, that is, which listserve or listserves to study and what number of weeks or days to look at, had to be selected.¹⁴ A listserve that functioned like a support group was selected as one topic area, and to balance the obvious personal nature of that type of listserve, a hobby was selected as the other topic area. Four listserves were joined for one week to see if they had sufficient content for study: one for support of families of prostate cancer sufferers and one for support for AIDS victims and their caregivers, as well as one about European motorcycles and one about hacky sacking. The AIDS list was extremely active in the first few days, so I selected that one over the cancer list. The motorcycle list no longer existed and the hacky sack list had very little postings, so the search began for a different list centered on a hobby. Because AIDS is well known in America and the first hobbies examined were not, a hobby that had the equivalent level of familiarity to the typical American

¹³ Wimmer 162.

¹⁴ Wimmer 162.

needed to be found. The first day I observed a list centered on a particular baseball team there were 34 messages exchanged, again giving me much content for study, so I selected that list. The late discovery of the second subject meant that the time period to collect messages had to be shortened to enable time to execute the analysis of the messages. Therefore, I limited the period to 16 days. This study considers messages from a listserve pertaining to support for those who take care of AIDS sufferers from February 10 to 26, 1997 (hereafter referred to as A), and a listserve that serves as a forum for fans of a particular major league baseball team from February 22 to March 9, 1997 (hereafter referred to as B). The names of the listserves and of the listserve members are not given here in order to respect members' privacy.

Hypothesis

Once the exact listserves to be studied were determined, a hypothesis could be formed. Unlike the research question, which asks a broad question on issue being examined, this statement is directly tested by the research.¹⁵ Because the research question relates to what uses people make of the Internet, the messages had to be analyzed for their nature. The main uses of the Internet seem to be for research purposes, that is, the exchange of information, and for interpersonal communication. Therefore, I decided that the study should find the number of messages that were personal and the number of messages that were informational. The hypothesis is: The messages studied will reveal that the chosen Internet listserves are used for communications of a personal nature significantly more than they are used

¹⁵ Wimmer 23.

for purely obtaining information. The quality of the messages, that is, how personal or informational they are, can be examined once the hypothesis is proven or disproven. That information can lead to a better understanding of exactly what kind of community the Internet is creating and give insight into how we should choose to treat this medium in our society.

Systematic Sampling

After the messages were obtained from a 16-day period on each listserve, I discovered that sampling needed to be done again to limit the subjects for study, because there were 166 messages from listserve A and 283 from B. The method easiest for a researcher functioning alone without the benefit of a computer program to devise a sample is systematic sampling.¹⁶ It saves time, resources and effort and is frequently used in communications research.¹⁷ In systematic sampling, every n th subject is selected from a group of subjects to arrive at a smaller number of subjects.¹⁸ The number n represents the sampling interval.¹⁹ For example, in this study, both amounts of messages were almost exactly divisible by 55. To get 55 messages, listserve A had to have a sampling interval of 3, B a sampling interval of 5. I obtained a sampling frame, a complete list of the messages for each listserve ²⁰, and the messages were numbered in the order they were received. Then a starting point for each listserve was randomly selected to add further validity to the

¹⁶ Wimmer 69.

¹⁷ Wimmer 69.

¹⁸ Wimmer 68-69.

¹⁹ Wimmer 69.

²⁰ Wimmer 69.

process.²¹ When I completed the sampling for listserve A, every third message was selected starting at number 3, for listserve B, every fifth message was selected starting at number 199.

Reliability and Validity

To avoid problems with reliability and validity in content analysis, testing must be done according to two methods.²² The communications must be examined for manifest content, that is, for the actual words or phrases that appear in the communications that support the hypothesis.²³ This test is very reliable. Researchers can count on the accuracy of the results regardless of who is testing the messages, because a manifest content test is conducted by counting the number of times chosen words and phrases appear, obtaining a precise, objective measurement.²⁴ However, because it does not delve deeper into the context surrounding those words or phrases, a manifest content test lacks validity.²⁵ To solve this, researchers also code the latent content of communications.²⁶ In latent content coding they make a subjective, overall assessment of the nature of the work and tap its underlying meaning.²⁷ This method may lack reliability, because certain portions of a work can mean different things to various people, but it is much more valid, because it reveals the depth of meaning possible when words are looked at in

²¹ Wimmer 69.

²² Babbie 229.

²³ Babbie 229.

²⁴ Babbie 229.

²⁵ Babbie 229.

²⁶ Babbie 229-230.

²⁷ Babbie 229.

conjunction with each other.²⁸ Thus, putting the two tests together gives a clearer assessment of the communications.²⁹ In this study, I used latent content coding to describe the messages as personal or informational and employed manifest content coding to find the number of words contained in each message that were associated with personal thoughts.

Explanation of Quantitative Measurements

Because content analysis is quantitative research, both the subjective latent content assessments and the objective manifest content assessments must be assigned numerical values.³⁰ With manifest content this is simple: the numerical value is the ratio of the number of words that appear that are from a pre-developed list of words that support the hypothesis to the total number of words.³¹ It is a little more difficult to quantify subjective analysis. The easiest way to do it is to assign values along a scale.³² For example, in this research, a purely informational message is rated zero (0). Personal messages are rated one to three, one (1) being a mix of personal and informational, two (2) being more personal than informational, and three (3) being highly personal. These categories are modeled after those from sample content analysis tests presented in Earl R. Babbie's The Practice of Social Research. For example, if one were to subjectively rate newspaper editorials on their political leanings, 1 might represent very liberal, 2, moderately

²⁸ Babbie 229.

²⁹ Babbie 229-230.

³⁰ Babbie 231.

³¹ Babbie 232.

³² Babbie 231.

liberal, 3, middle-of-road, and so on.³³

I will consider my hypothesis refuted if the average subjective rating is less than 1, because that would indicate that the messages have little or no personal content. I will employ statistical analysis to find these averages, including a test to find the significance of the data.

Usually in content analysis, categories must be exclusive.³⁴ However, in the case of this study, such exclusivity was impossible. Because the messages were written by people, they often contained a mixture of both informational and personal elements. Thus, the categories could not all rate the messages as exclusively informational or personal, or even in degrees of informational or personal. Some of the categories had to take into account the mix of the two.

Operational Definitions

In order to make this study accurate, the terms informational and personal must be operationally defined. That is, what makes the researcher conclude that these messages are personal or informational must be specified.³⁵ In this research, informational messages are operationally defined as those that contained an answer, inquiry, suggestion or recommendation based on facts that the author of the message presents. Personal messages are operationally defined as those that present an argument, an opinion, or a commentary, or function as a message of support or a call for support. These types of messages are considered personal because

³³ Babbie 231, 233.

³⁴ Wimmer 165.

³⁵ Babbie 82.

they involve the author's emotions. Messages rated 1 have qualities of both informational and personal messages. For example, a message would be rated 1 that presented a factual answer to a question but introduced the facts with a narration of a personal experience that had led the author to have a certain opinion about the validity of the facts. Highly personal messages differentiate themselves from personal messages in that they bring in personal information from events outside the realm of the listserve, such as those relating to work or family.

Coding

A tally sheet was devised to carefully code these messages numerically ³⁶, including space to append numbers that identified the message and to note the subjective latent coding, the number of manifest content words and the total words. [Fig. 1] Words were selected for the manifest content portion of the analysis, which would focus only on the personal values of the message. These words were those that would be found in a message of opinion, support, commentary or argument. This word list included the verbs *apologize, feel, believe, dream, worry, fear, help, hope, hug, love, pray, share, think, thank, and wish*, and all their possible verb and noun forms. It also included the nouns *opinion, god, and friend*, and the pronouns *I, m e, you, w e, and us* as well as their possessive forms *yours, mine, and ours*. The adverb *probably* was also included in the list because it was found to frequently preface statements of opinion. Emoticons, which are pictures formed with punctuation keys, liven up email communication and

³⁶ Babbie 232-233.

FIGURE 1. Tally sheet for recording coding information.

Number In Order of Analysis	Number Out of Total Number of Listserve's Messages	Listserve/Date/ Number	Subjective Evaluation 0-3 0 = Purely Informational/No Personal 1 = Mix of Informational/Personal 2 = More Personal than Informational 3 = Highly Personal	Number of Personal Words (From List)	Number of Total Words	Ratio/ Percentage

make it more like face-to-face conversation, as well as exemplify the community nature of the email culture because participants recognize them and know their meanings. For this reason, smiley faces and flowers created with punctuation marks — (; — stars and dashes used to indicate emphasis — *so* — and abbreviations like IMHO — in my humble opinion — were also counted.

I established this list by examining the messages in an informal pretest, as recommended by content analysis guidelines, to find out which words were frequently represented in messages I considered personal.³⁷ Other words and expressions that may connote opinion, support, commentary or argument — such as *right*, *wrong*, and *hate* — that seem to have been excluded from the list were not added because I found during the informal pretest that they did not appear in the sample messages. I coded the messages myself over several days; no independent coding staff was utilized.

³⁷ Babbie 231.

RESULTS

The content analyses of listserve A and listserve B revealed that a significant portion of messages from both contained at least some personal comments.

Almost 70 percent of the messages in listserve A have a subjective latent content rating of 2 or higher, and 89 percent of the messages have a rating of 1 or higher, meaning that the majority of the messages on this listserve contain personal information. The rating received by the largest number of messages (24, which represents 44 percent) is 2. Fourteen of the 55 messages received a rating of 3, highly personal, meaning that they include some story about family, friends or occupation in a way that is unrelated to the listserve topic. [Fig. 2] The average rating for a message from listserve A is 1.84.

I used a statistical significance test to evaluate my hypothesis by finding whether the average rating could ever be less than 1. From the mean and standard deviation I computed, I was able to find the *t* statistic and check the data for significance using a *t* test. I selected a *t* test because I needed to make an inference about the mean of the whole population from the mean of the sample.¹ That is, I had to discover if the average ratings I found from the 55

¹ David S. Moore, The Basic Practice of Statistics (New York: W.H. Freeman and Company, 1995) 408.

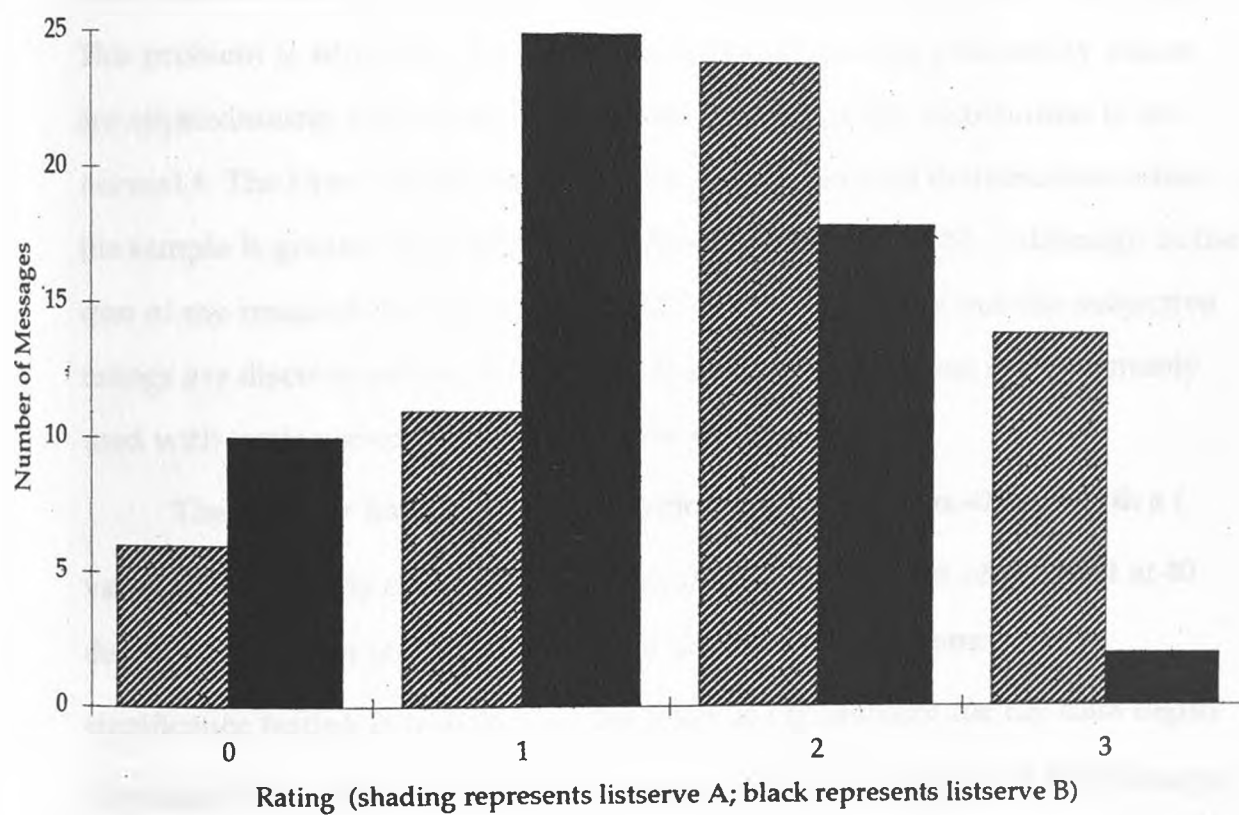


FIGURE 2. Comparison of the subjective latent content ratings for messages from listserves A and B.

messages from each listserves were applicable to the whole sets of messages.

A *t* test is normally considered accurate only if the data are a simple random sample and the observations from the population are normally distributed with an unknown mean and standard deviation.² I used systematic sampling in my research, which is virtually identical to simple random sampling.³ However, although the mean and standard deviation were unknown, the population observations were not normally distributed. This problem is solved by the statistical assumption that probability values are approximately correct for a large sample even if the distribution is not normal.⁴ The *t* test can be used even for clearly skewed distributions when the sample is greater than 40.⁵ The sample in this case is 55. Although in the case of my research the averages are not discrete numbers but the subjective ratings *are* discrete values, a *t* test is still acceptable, because it is commonly used with testing averages from discrete data.⁶

The data for listserve B are significant at the level $\alpha=0.0005$ with a *t* value of 6.63, highly surpassing the required critical value of $t^*=3.551$ at 40 degrees of freedom (*df*).⁷ (The level of significance commonly set in significance testing is $\alpha=0.05$ ⁸, so the level of significance for my data highly surpasses this.) This means that if the true average rating of all the messages in listserve A was less than or equal to 1, a mean rating of 1.84 or higher from

² Moore 408.

³ Babbie 155.

⁴ Moore 412.3

⁵ Moore 425.

⁶ Moore 426.

⁷ Kirk W. Elifson, Richard P. Runyon and Audrey Haber, Fundamentals of Social Statistics (San Francisco: McGraw-Hill Publishing Co., 1990) 466.

⁸ Moore 429.

55 pieces of sample data would occur less than .05 percent of the time. Thus, the data are highly significant; there is very little chance that the average rating of all the messages in listserve A could be lower than 1.

Thirty-six percent of the messages in listserve B received a rating of 2 or higher. More than 80 percent of the messages are rated 1 or higher, meaning that the majority of the messages contain some personal information. The rating received by the largest number of messages (25, which represents 45 percent) is 1. Only 2 of the 55 messages received a rating of highly personal, 3. [Fig. 2] The average rating for a message from listserve B is 1.22.

I performed a significance test on listserve B as well to find whether the average rating could be less than 1. The *t* test for listserve B revealed a *t* of 2.07, which means the data are significant at $\alpha=0.025$, because their *t* value is higher than the critical value of $t^*=2.021$ at 40 *df*.⁹ This means that if the true average rating of all the messages in listserve B was less than or equal to 1, a mean rating of 1.22 or higher would occur less than 2.5 percent of the time. Thus, the data are significant; there is little chance that the average rating of all the messages in listserve B is lower than 1.

Analysis of the manifest content data — what was revealed when I counted the number of personal words from my list in each message — found that a message from listserve A has an average of 10.4 percent personal words. [Fig. 3] Statistical analysis found an interquartile range, which represents approximately the middle half of the data, showing the bulk of the data lies between 7 and 12. [Fig. 4] This means that in most of the messages tested, 7 to 12 percent of the words are personal words from the list.

A message from listserve B has an average of 5.7 percent personal

⁹ Elifson 466.

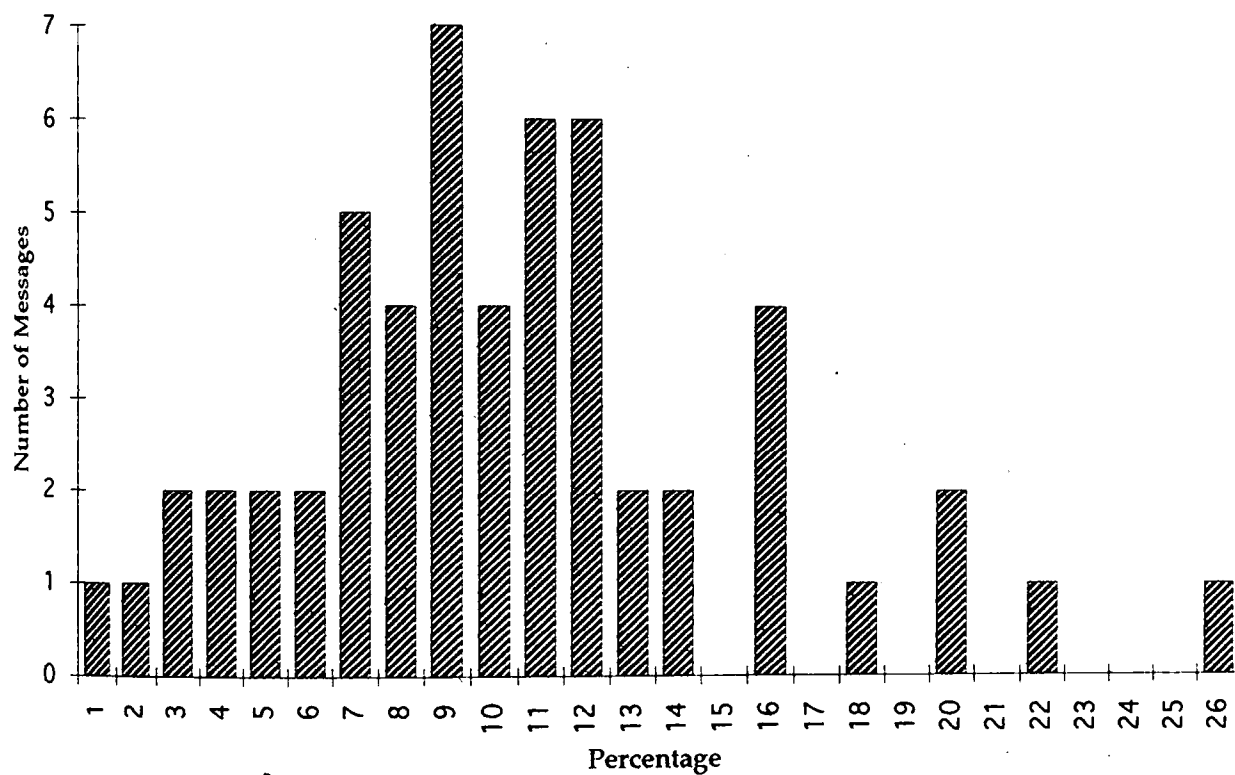


FIGURE 3. Number of messages in listserve A having specific percentages of personal words.

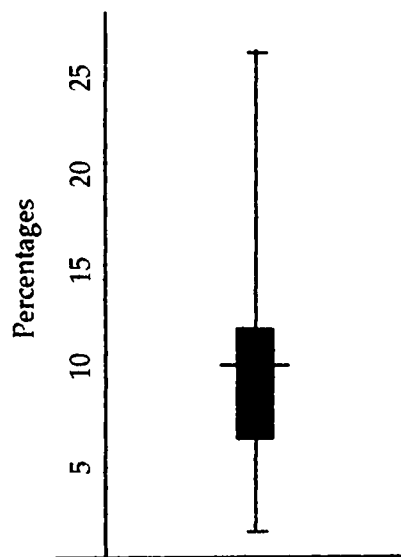


FIGURE 4. Five number summary graph for the manifest content data for listserve A, illustrating the concentration of the bulk of the data.

words. [Fig. 5] Statistical analysis found an interquartile range where the bulk of the data fell between 3 and 7. [Fig. 6] This means that in most of the messages tested from listserve B, 3 to 7 percent of the words are personal words from the list.

With the goal of showing that listserve A has more personal communication than listserve B, as discussed in the Methodology section, a *t* test for significance was again executed. It revealed that the data are significant at $\alpha=0.0005$ with a *t* of 6.08, which exceeds the required critical value of $t^*=3.551$.¹⁰ This confirms that listserve A has a greater content of personal words than listserve B. Though it cannot show that one listserve is twice as personal as the other, the test does reveal that the data give strong evidence to conclude that A has a higher personal word content than B.

¹⁰ Elifson 466.

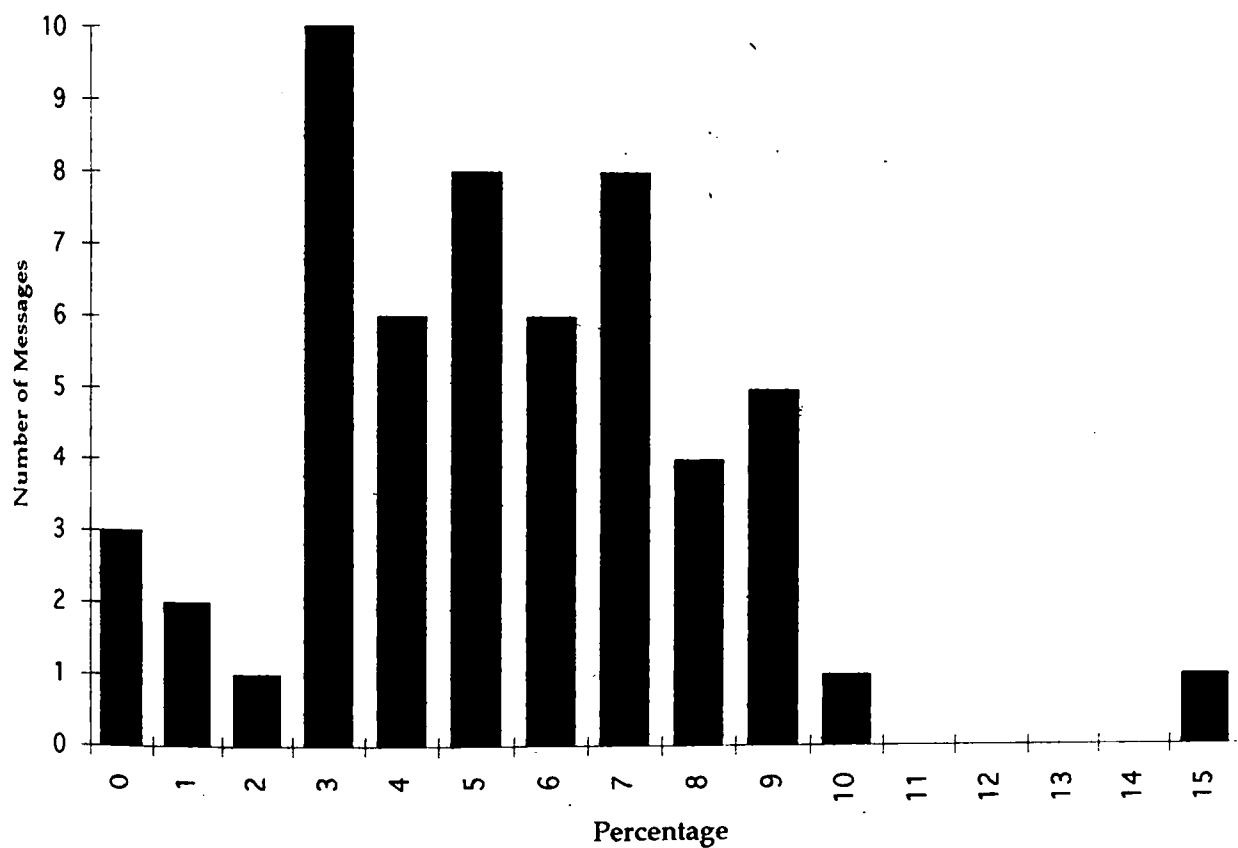


FIGURE 5. Number of messages in listserve B having specific percentages of personal words.

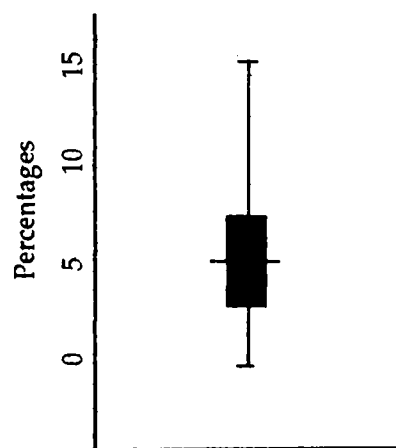


FIGURE 6. Five number summary graph for the manifest content data for listserve B, illustrating the concentration of the bulk of the data.

DISCUSSION

The statistical analyses of the data support my hypothesis, which I would have considered refuted if the means of the data for listserves A and B were less than 1. Means this low would have indicated that the messages had little or no personal content. But, the average ratings the tests found significant — 1.84 and 1.22 — demonstrate that messages from both listserves generally contain personal content. The data also show that the messages in listserve A contained personal communication 89 percent of the time, having a rating of 1 or above. Messages in listserve B contained personal communication 80 percent of the time. It is apparent that personal communication takes place on these listserves significantly more than informational communication, as I theorized in my hypothesis.

Statistical analysis of the manifest content data showed that messages from listserve A contained a greater number of personal words than messages from listserve B. The data shows that there is a higher incidence of 0 and 1 ratings on listserve B than on listserve A. There are also more 2 and 3 ratings on listserve A than on listserve B. Looking at the data further, there is more evidence that the ratings of messages from listserve A are consistently higher than those from listserve B. Listserve A has 70 percent of its messages rated a 2 or higher, meaning that they are more personal than informational.

Listserve B has more messages with the lower rating of 1 — indicating a *mix* of personal and informational content — than with the higher ratings of 2 and 3 combined. Listserve A has 7 times as many 3 ratings as listserve B. The results of these tests together lead to a conclusion that the content of listserve A is more personal than that of listserve B.

As addressed in the Methodology, this is likely the result of listserve A's function as a support group and listserve B's function as a discussion group. Listserve B participants send news articles scanned into email messages out to the rest of the group. These are occasionally prefaced by some personal commentary, but often they are sent out with little introduction under the heading "Daily News." These messages function as purely the passing of important information about the topic of listserve B to its members. Listserve A shies away from playing this information dissemination role. While members make suggestions and recommendations to each other about AIDS treatments, there is little scientific discussion of the disease or its potential cures. In fact, when a new member requested information on how AIDS is transmitted, one of the members responded with the following:

This list is probably not the best place for people who needs basic AIDS information. Most of us here are involved in the long haul of caring for people who are deeply into their personal battles with the virus. And our dealing with the mechanics of transmission of the virus these days is more often a matter of gloving up when we deal with spilled bodily fluids...¹

These different attitudes toward the listserves' purposes for their members probably explain the difference in ratings.

The quantitative data show that the listserves both have primarily

¹ Listserve A, 26 Feb. 1997, #11.

personal content, one to a higher degree than the other. Now that it has been determined that the nature of communications on these listserves is personal, the quality of the messages must be addressed. How personal are they?

The limitations of quantitative content analysis do not do justice to the issue of the quality of the communications. As Rheingold notes, "Community is a thing of emotions as well as a thing of reason and data."² While messages rated 2 and 3 may disclose extremely personal information about their authors, a concept fairly simple to rate quantitatively, messages with 1 ratings often reveal more about the individual's commitment to the others on the list. For example, a message on listserve B is rated 3 because the writer accompanies his commentary on the issue of dress codes for players off the field with his intimate philosophical views: "I'd love to just be able to grasp reality directly, it would be the fulfillment of a life-long dream — sadly it is simply not possible as long as we're discrete, self-contained units."³ Though this shows his comfort level with the others on the listserve is extremely high because he is willing to share such personal thoughts with them, it does not illustrate his commitment to the others on the listserve. On the other hand, a message from listserve A rated 1 is mainly information because it contains what its author knows about a new AIDS treatment, but at the bottom has a short message to the person who inquired about the drug, "Hope this helps."⁴ This quick note illustrates that the listserve's members have some sense of responsibility to each other and want to do what they can to help each other out.

² Rheingold 15.

³ Listserve B, 24 Feb. 1997, #5.

⁴ Listserve A, 12 Feb. 1997, #12.

Pipher alleges that accountability is warped in the electronic community,⁵ yet a true sense of owing each other is evident in both of these listserves. For example, a member of listserve B who got angry in a message offered his regrets the next day to the whole listserve. In the introduction to a message centered on the team's second basemen over the years, rated 1, he writes: "I apologize to the group for a hasty message yesterday that was couched with a bit of emotion."⁶ This type of apology is typical on both listserves when members feel they have made thoughtless comments. In a message rated 0 because it contains almost exclusively scores and stats, one member takes the time to recap an exhibition game on the list because he hasn't seen anyone do it yet: "Everybody's kind of silent today."⁷ Another message from listserve B gives the same sense of wanting to ensure that everyone on the list is informed about the team. "Just in case you missed it," it opens, following with a fact about a former player from the team who is now playing for a different ball club.⁸ Another member who is involved with Marketing the team makes a promise to update the other members in one of his messages: "I'll be meeting with them again in the next few weeks. If I hear more I'll let you all know."⁹

It isn't just a sense of responsibility to the listserve or each other that makes them do these favors for each other. It seems also to be the result of a kind of kinship. "Hello everyone," writes one poster. "I wanted to share some things with you that might not show up in the boxscore."¹⁰ Just his

⁵ Pipher 84.

⁶ Listserve B, 27 Feb. 1997, #13.

⁷ Listserve B, 4 Mar. 1997, #18.

⁸ Listserve B, 6 Mar. 1997, #3.

⁹ Listserve B, 6 Mar. 1997, #13.

¹⁰ Listserve B, 8 Mar. 1997, #2.

choice of the words "want" and "share" demonstrates his desire to do something nice for a group of people he may not know face to face, but obviously considers important. One poster goes online to tell the others what station to find the game on: "For those of you still looking for the ... game, it just started on [radio station]."¹¹ Although he already found the game himself, he takes the time to let the others on the listserve know so that they can enjoy it as well. Members of listserve A seem to feel the similar connections to each other. When one poster tells another that she likes his home town, he responds with the address of a Web site where she "can do a little web tour."¹² Another member takes a moment out of her day to make sure she responds to all her peers on the list, closing with, "Better go now. Just wanted to check in. Take care."¹³ Her comments seem to indicate that she is duty bound to the others on the listserve to give not only a report of how her life is going, but also to inquire about theirs. Others preface their messages in a similar way, as if they're updating far away family on their lives: "Just a short note to let you all know things are okay and quiet here."¹⁴ The obligation to keep people informed about what's going on seems to be the reciprocal result of the knowledge that others on the listserve care to know what's happening. Interestingly enough, this responsibility seems directly related to Pipher's condition for real communities: they are about "what I owe you and what you owe me and about what we can and should do for each other."¹⁵

One of the best examples of accountability on the Internet comes from

¹¹ Listserve B, 9 Mar. 1997, #7.

¹² Listserve A, 24 Feb. 1997, #6.

¹³ Listserve A, 25 Feb. 1997, #7.

¹⁴ Listserve A, 24 Feb. 1997, #3.

¹⁵ Pipher 255.

listserve A. One member, a homosexual, posted some anti-gay hate mail he received on his Web site to the listserve. He wanted members to send their reactions to the message to the author of the hate mail. One woman rapidly responded to the list member in anger, saying that the highly graphic and offensive message made her ill, and that he should not have posted it in the first place. To fix his wrong, she recommended that he at the very least send all the members a warning message that they would read before the hate mail post. He did so in a message titled, "Before you read 'Fwd: Dare' Read this!!!" This warning message told members that his first post was hate mail: "It will make you angry and upset."¹⁶ He also included an apology to the member who had been offended.

A series of messages were posted that day, speaking both in support of the poster and in anger at his insensitivity. One of the most important messages came from the list manager, who criticized the poster's actions: "[I]t shows a poor exercise of judgment on your part. This is an intimate list. To post something like that is the equivalent of taking a shit on the rug in the middle of a living room full of friends."¹⁷ The list manager advised him strongly to apologize to the group. The point: the member was forced to be accountable for his actions. This type of responsibility is not invisible on computer-assisted communications, as Pipher claims.¹⁸

However, one thing Pipher criticizes about electronic communication — the fact that people can be easily erased for misconduct, never to be heard from again, which is not so simple in a real community — is threatened by the manager: "If you post anything like that again, you will be quite simply

¹⁶ Listserve A, 11 Feb. 1997, #6.

¹⁷ Listserve A, 11 Feb. 1997, #12.

¹⁸ Pipher 84-85.

erased.”¹⁹ Still, although Pipher implies that such actions are taken without much thought — “Over the Internet, people can be deleted the second they become annoying or tiresome.”²⁰ — it is apparent that the manager wants to let the member have a chance to make a mistake. He acknowledges that no one’s perfect, even in cyberspace, and moves the situation closer to the realm of a real life community. If one looks at listserves A and B as if they were social organizations, it becomes clear that, with respect to these two listserves, Pipher’s assumption that people are erased with little consideration is just that — an assumption. If someone breaks a rule in a club, he or she is often forced to leave the group. Though it sounds harsher, when list managers threaten members who violate list protocol with erasure, it is similar to being put on probation by the president of a social organization, as evidenced by this situation.

This accountability for their actions and responsibility to each other may result from the history that the listserves’ members have with each other, experiences that go beyond the histories of the topics of the listserves. Instead of simply making the point that a player who was in the minors four years ago is now one of the team’s stars, a member of listserve B relates this information through the story of another listserve member who predicted the player’s rise to fame. Sounding like an old man on his porch in a small town, spinning yarns, he writes:

For those of us who weren’t here at the time, Hank proved himself a prophet way back in 1993 when, while the rest of us were worried about some pennant race ;), he noted that the [team] had a 19-year-old catcher ... in the very low minors who might be worth keeping an eye on ...²¹

¹⁹ Listserve A, 11 Feb. 1997, #12.

²⁰ Pipher 84-85.

²¹ Listserve B, 4 Mar. 1997, #8.

This message demonstrates a connection to each other — beyond what the players do — that's about what the *members* do. Listserve A also keeps track of its members and events in their lives. In a welcome message to two new members, one of the current members lists all the people who are presently on the list and their reasons for being on it, as well as people who have made their mark on the list but no longer post messages. These histories, and the members' remembrances and notations of them, illustrate that these communications are not just about the information that they provide, but about the people that send them.

Rheingold's observations on the Internet — "People in virtual communities do just about everything people do in real life, but we leave our bodies behind."²² — are supported by posts on listserves A and B. The people who participate in these listserves have interactions like those that occur in face-to-face communications. Rheingold writes that people who participate in computer-assisted communications "argue" and "feud" just as neighbors might in real life.²³ One message from listserve B demonstrates a long-standing quarrel between two members, one who accuses the other of incorrectly interpreting statistics to his advantage in discussions of players' prowess, that is, manipulating the figures to prove his points. His comments on the stat manipulator's post jump off the screen with sarcasm. He writes, "And batting average has been proven, to anyone who cares to actually acknowledge the evidence..." and "No offense but so what?" in response to the other member's statistical analyses.²⁴ The disagreement gets more fiery as he closes up the message with a criticism:

²² Rheingold 3.

²³ Rheingold 3.

²⁴ Listserve B, 26 Feb. 1997, #41.

Like I've said all along, everyone uses stats — it's just important you use the right ones. Which you're not. And that's not meant as an assault on your intelligence or any other personal attribute, it's just obvious that you don't know any better when it comes to statistical analysis.²⁵

But at the end, the argument tones down. "On this we can agree — we'll never agree," he writes. "But I'll be darned if this isn't more polite disagreement than usual. Hope it stays that way."²⁶ This admission on the part of both posters (the other writes, "I don't expect to change anyone's mind ... We'll both go on believing that our point of view has merit, and that's OK by me."²⁷) that they disagree but want to remain civil in their relationship to each other is reminiscent of a real life argument between neighbors or friends.

When the disagreements are over something more serious than statistics (for example, listserve A's problem with the posting of hate mail sent to a member from someone outside the list) the desire to reconcile is still strong. In a reply to a new member who wants to leave after the hassle over the hate mail, a member writes, "Even in this near-perfect family, we occasionally have some horrible spats — that we almost always fix IMMEDIATELY, because none of us can stand it when we fight."²⁸ These participants are human beings, and as Rheingold says, they have human interactions like fights — just on a slightly limited scale.

And the interactions are not always negative. Members make jokes, make jokes about each other, and just joke around. In response to one member who asks with irony about a player, "Am I missing something? Did

²⁵ Listserve B, 26 Feb. 1997, #41.

²⁶ Listserve B, 26 Feb. 1997, #41.

²⁷ Listserve B, 26 Feb. 1997, #41.

²⁸ Listserve A, 11 Feb. 1997, #24.

he have a shot and screw it up while I wasn't looking?", another member writes, "Gee... , don't you remember the game where he got in his shot at second, I believe he played two innings and got one at bat in which he struck out. After that [the coach] seems to believe that he can't play second."²⁹ One can almost hear them chuckling. The respondent signs the message, "Sarcastically yours."³⁰ One member picks on another who obsesses about stats in a discussion about a proposed dress code for players off the field. The "stathead," as they are called on the listserve, shares his reason for opposing the code: "On a personal level, I find it very difficult to work for somebody who tries to tell me how I should look, act, dress, talk, etc."³¹ The other member writes, "Chris I was hoping that maybe you had some statistics. :-)." ³²

Two members of listserve A tease each other when one of them comments on the other's penchant for organizing. "Isn't it a bit strange the way that [she] functions to keep everyone straight?" he writes. "Well, ... it's my hobby : > Think I'll ever manage ..." she responds. "Now, now I wouldn't change a thing about you no matter how others might talk," responds her critic. "Whew, glad you told me that," she writes back with sarcasm, "it was keeping me awake at night." Just like the arguments, these jibes reveal a real interaction between the members. They also show that these people are familiar with each other's personalities; they know who plays what role in their community, who disagrees with whom, and what each other's quirks are. They have relationships to each other just like people

²⁹ Listserve B, 24 Feb. 1997, #25.

³⁰ Listserve B, 24 Feb. 1997, #25.

³¹ Listserve B, 28 Feb. 1997, #7.

³² Listserve B, 28 Feb. 1997, #7.

in a real community. Some of them might even consider each other friends, as Rheingold theorizes: "I care about these people I met through my computer. ... I'm not alone in this emotional attachment to an apparently bloodless technological ritual."³³

There is a feeling of personal connection between many of the people on these two listserves, especially listserve A. The members compliment each other and tell them how important their presence has been. "I don't know if I ever properly thanked you for the opportunity you gave me to escape, for just a moment, to the peaceful world your words created. Would that I could give you that gift now."³⁴ "...I've been knocked out by your blazing honesty and fiery love. In other words, I look forward to your posts to the list."³⁵ They also discuss how special the entire listserve is, including the people who participate in it. "This group has helped tremendously."³⁶ "This is ... a huge, wonderful family."³⁷ "I cannot tell you how important this list has been to me."³⁸ "I think this group is amazing in the way everyone rallies round and gives help and advice or just support over the ether in times of stress and trouble."³⁹ It is clear that the members of this listserve feel very strongly about each other.

This is what makes Pipher's argument about distorted accountability seem flawed. In her book, she comments on the sense of togetherness that real communities provide, contrasting the resulting responsibility to each

³³ Rheingold 1.

³⁴ Listserve A, 25 Feb. 1997, #13.

³⁵ Listserve A, 19 Feb. 1997, #6.

³⁶ Listserve A, 23 Feb. 1997, #8.

³⁷ Listserve A, 11 Feb. 1997, #24.

³⁸ Listserve A, 23 Feb. 1997, #3.

³⁹ Listserve A, 26 Feb. 1997, #2.

other with the Internet's perverted version of it: "One never needs to see or talk to anyone again." This may be true about certain areas of the Internet, but it does not appear to be a reality on these two listserves. Parts of the Internet probably exist where people do not feel linked to each other in any way. But these people have histories together. They know each other's personality traits, and they respect each other's differences, even the ones that they sometimes poke fun at or the ones that make them angry. Moreover, they exhibit a responsibility to each other that, although it is never explicitly stated, comes through in their comments to each other. This seems to represent an understanding of "what we can and should do for each other"⁴⁰ — what Pipher deems is a major building block for a real-life community.

Pipher also criticizes the electronic community for neglecting to show real problems: "The problems it deals with are not the problems that real people must face."⁴¹ Again, while Pipher's comments may apply to other aspects of electronic technology, they do not appear to be true with regard to the listserves I studied. Members on both listserves had disagreements typical of real-life relationships and dealt with issues faced by people in their everyday lives. The discrimination experienced by the homosexual listserve A member who received anti-gay hate mail and posted it to the listserve and the conflict of personalities that occurred between the two members of listserve B who agreed to disagree about how to interpret statistics exemplify real problems.

Although Pipher's discussion of this lack of real-life dilemmas seems to center on television and film, she does merge all types of electronic media

⁴⁰ Pipher 255.

⁴¹ Pipher 14.

by referring to them as the "electronic community."⁴² This implies that she is including the Internet and other electronic media in her statement about the lack of authentic human issues. Because she does not recognize the distinctions between the types of electronic media, it appears that she makes a judgment that they all neglect to deal with real issues. While the argument may have truth in it with respect to television or other electronic media, it is clear from the communications on listserves A and B that they examine real life problems. This realistic treatment of issues is probably for the largest part because the participants in the listserves, those who create the communications, are real people writing about their daily lives rather than actors performing a script that was written to entertain.

Lastly, Pipher criticizes the electronic community's inability to give parents a back up for teaching proper values.⁴³ She alleges that family members separate and experience different electronic media instead of interacting.⁴⁴ Pipher seems to be making the statement that these distinct experiences may not support the values parents have attempted to impart to their children, or may entirely replace the teaching of values. While some types of electronic technology, like video games, may have a detrimental effect on the teaching of values within the family, perhaps because they make violence seem like an answer to problems, listserves like A and B do not present distorted values. Although the messages never directly provide instruction on values, it is implied through their communications that the members feel obligated to one another, at least within the confines of the listserve. When the list manager addresses the member who posted hate

⁴² Pipher 14.

⁴³ Pipher 40.

⁴⁴ Pipher 40.

mail that upset other members, his demand for accountability — “I hope you will, after reflection, remedy the situation appropriately ... At this point, I think it would be advisable for you to make some sort of apology to the group. I leave it up to you to express it.”⁴⁵ — represents a request for members to exhibit proper ethics in their dealings with each other. In effect, the list manager is saying, “Take responsibility for your actions.” With Pipher’s focus on accountability in her book, it would seem that she feels this accountability one of the main values American youth need to learn. And, it appears to be a value backed by the interactions on listserve A.

The study of these two listserves reveals that some of the judgments Pipher and other media critics make about electronic communication may have been hastily developed. It can’t be all bad. The fact that four-fifths or more of the communication on these two listserves involves personal thoughts or comments, and that these comments reveal a history between the members, a sense of responsibility to each other, as well as a familiarity with and acceptance of each other’s personalities, can only indicate that interactions on listserves A and B have served to facilitate friendships among many of their members, at least within the limits of the listserves.

⁴⁵ Listserve A, 11 Feb. 1997, #12.

CONCLUSION

Every medium has an impact upon society. New forms of technology have throughout history struck terror into the hearts of both regular citizens and experts for their potential to bring about the ruin of society, while at the same time been hailed as the solution to numerous societal problems and inconveniences.

In the 1880s, journals were abuzz with the concerns of experts and ordinary people who theorized that electronic communication devices like the telephone would irrevocably change societal standards about conventions like courtship for the worse.¹ Today, there is debate over the safety and reliability of searching for a romantic partner on line — remember the Virginia woman who married a lover she met through the computer only to find out later he was a she?²

A major question in the 1880s centered on the level of intimacy of telephone communication and when its use was appropriate.³ Today, books like Internet Email for Dummies,⁴ articles in business publications⁵ and

¹ Carolyn Marvin, When Old Technologies Were New (New York: Oxford University Press, 1988) 66.

² Lan Nguyen, "On-line love sours when it turns out groom is a woman," The Record 20 Dec. 1996.

³ Marvin, 88.

⁴ Michael Cunningham, "All those email questions in a nutshell," The Irish Times 2 Dec. 1996.

⁵ Michelle V. Rafter, "Top 10 E-Mail Rules," The Reuter European Business Report 22 Oct. 1995.

even areas of the medium itself, such as the Frequently Asked Questions (FAQ) sites on the World Wide Web, have been established to confront similar concerns about proper "Netiquette."

The concern in the 19th century that users could never be certain of the class standing or the motivations of the caller on the other end⁶ relates to today's knowledge that it's easy for people to be something they're not over the computer. This same concern was expressed in a shocking email forward recently circulated describing how a young girl met a man on line and had a lengthy romance with him over the computer, only to find out months later when they met in person that the man was her father.

When the telephone became popular, many citizens resisted the telephone companies' desires to widen the use of phone service by placing dime phone booths on street corners and in public places.⁷ Today, with the high price of computers and subscriptions to on line services, Americans discuss increasing the availability of the medium to low-income citizens.

The problems with the Internet are not new ones — they're just translated to a new age. Issues such as the democracy of the medium, its effects on social rituals, the development of new societal standards to accommodate it, and concerns about crime and deception have been addressed before; things that shocked 19th century people about the telephone now cause concern with regard to the Internet. And today, we still have phones, and it seems our society is intact, or at the very least, hanging on.

Says one editorial writer:

My telephone can connect me with anyone on the globe, and once I'm talking, I can deliver any kind of message I want, unfettered, uncontrolled and mostly unmonitored — at least

⁶ Marvin 86-87.

⁷ Marvin 103.

domestically. The phone can also be used, as we assume it is, by terrorists or hate groups or spies or criminal conspirators. Is it the telephone that allows antisocial or somehow potentially objectionable activity? Or is it the users and the nature of their messages?⁸

These essential questions, coupled with the knowledge that media have always panicked society with their potential negative influences, leads me to think that the reactions of theorists like Pipher are hasty generalizations that miss the point. It's not all electronic media that are causing problems, but the effects of a few of them combined with other flaws in American society. And it's not the whole Internet that's the problem, but those parts of it that can be misused and the people that take advantage of that. Certainly we have seen that media that keep us disconnected from society can be detrimental — such as children absorbing too many of television's fantasy portrayals without receiving the parental assertion that they aren't real — and that's only a logical conclusion. But can any medium that's at its heart interpersonal, like these listserves, really be all that bad?

Although it is true that many Americans receive numerous quantities of electronic media that inevitably work together with other societal influences to affect their lives, my study demonstrates that not all electronic media possess the same type of communications. Therefore, they cannot be combined into one entity, nor can their effects be addressed as if they were one entity. Pipher states that the different electronic technologies have important uses and says she wouldn't argue for the removal of any of them, yet she adds that all of them together are wreaking havoc on our society: "Now, all these tools have their uses and their good points. I wouldn't argue

⁸ Terry Schwadron, "Are we influenced more by the Web or what we catch in it?" The Oregonian 1 Dec. 1996: F3.

that any tool is bad and should be eliminated. It's the whole pile that's the problem."⁹ This represents a flaw in Pipher's discussion of electronic communication. We must take the time to study the Internet's different aspects and form opinions about them in order to decide what course of action to take with each part. I would agree with many of Pipher's comments about the Internet with regard to certain aspects of it: Web sites that deliver porn, chat rooms related to finding sexual relationships. Yet a listserve, like the two studied in this research, has very different effects on its users from a Web site that provides pornography. The Internet is diverse. Electronic technology is diverse. It can't all be lumped together.

Granted, the Internet is not a perfect medium. The users on listserves A and B recognize this. They understand that it falls short of face-to-face communication, and they know that it can often be deceptive. One member of listserve A tells another, upon hearing how rough things are for her, "I hope you have some type of live support that you can go to."¹⁰ A member of listserve B has a footer at the bottom of every message that reads, "Because e-mail can be altered electronically, the integrity of this communication cannot be guaranteed."¹¹ And there are probably hundreds of thousands of listserves worldwide — according to the University of Oregon Computing Center's Web site, there are over 650 listserves coming out of just that school — so my study cannot profess to represent all of them, or even represent the norm.

But the Internet does have its positive parts — as Pipher admits — those that enable people who never before have been able to interact with each other to communicate in ways beneficial to themselves or to society. It

⁹ Pipher 10-11.

¹⁰ Listserve A, 17 Feb. 1997, #8.

¹¹ Listserve B, 4 Mar. 1997, #8.

seems from the results of my study that these positive aspects are something to be supported, not attacked. The realities of the Internet's problems don't make it any less significant that my quantitative and qualitative analyses of these two listserves revealed personal communications, accountability, and real people's problems — with a few limitations. The question of the value of the Internet is related to the larger issue of media effects, something America as a society has been struggling with throughout its history, and still grapples with with regard to television and cable.

Rheingold relates in his book the moment he first met the people he had been conversing with on line at a WELL party at someone's home:

I looked around at the room full of strangers when I walked in. It was one of the oddest sensations of my life. I had contended with these people, shot the invisible breeze around the electronic watercooler, shared alliances and formed bonds, fallen off my chair laughing with them, become livid with anger at some of them. But there wasn't a recognizable face in the house. I had never seen them before.¹²

It's a weird thing to envision — a group of people who have intimate connections to each other, but have never looked each other in the eyes. But it happens, as my study shows. And it's time, as Rheingold suggests, to continue looking deeply at the nature of the communications that travel over the Internet and the attitudes of people who use it in order to make educated judgments about it.

¹² Rheingold 2.

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