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# Colonizing Cyberspace: The Formation of Virtual Communities

Matthew Jones

*University of Tennessee - Knoxville*

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To the Graduate Council:

I am submitting herewith a thesis written by Matthew Jones entitled "Colonizing Cyberspace: The Formation of Virtual Communities." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts, with a major in History.

Janis Appier, Major Professor

We have read this thesis and recommend its acceptance:

Kathleen Brosnan, Vejas Liulevicius

Accepted for the Council:

Dixie L. Thompson

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

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Vejas Liulevicius\_\_\_\_\_

Accepted for the Council:

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Anne Mayhew  
Vice Provost and Dean of Graduate Studies

(Original signatures are on file with official student records.)

**Colonizing Cyberspace: The Formation of Virtual Communities**

A Thesis  
Presented for the  
Master of Arts  
Degree

The University of Tennessee, Knoxville

Matthew Jones  
May 2003

## **Abstract**

The topic of this thesis is the electronic bulletin board systems that existed in Memphis, TN from the early 1980s until around 1999. Although initially a fringe hobby limited to computer enthusiasts, the declining cost of computers, and their subsequent proliferation, allowed those without technical proficiency to dial in. Over time, those who connected to the BBSes developed into a close-knit, emotionally involved community. The dynamics of the communities that arose on BBSes differed based on numerous factors, particularly age. This thesis attempts to examine those interactions, as well as challenge the notion that community is wedded to geography, an idea prevalent among historians.

In order to accomplish this goal, I have relied on interviews with those who participated in the Memphis BBS scene, as well as a survey questionnaire for those unable to schedule meetings. In addition, many users retained log files, message base archives, and a host of other relevant materials which were also utilized as primary sources. A great wealth of data was also found on the World Wide Web, particularly among sites devoted to the BBSes.

Computer-mediated communication is rapidly changing how individuals interact. Email, chat rooms, and instant messaging have already impacted how people build and maintain social networks. These changes are not as new as many think, however. Well before the Internet, the BBSes altered those who participated in similar ways. Thus, this thesis examines the BBS community in order to broaden understanding of computer-mediated interaction in general.

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## Introduction

Many people saw the Internet in 1995 as a novel, and sometimes frightening, place. Before the fire, fury, and collapse of the dot-com technology bubble, few users ventured onto the so-called “Information Superhighway.” In fact, a poll showed only 9% of the adult population connected to the Internet at all.<sup>1</sup> Popular conceptions of the Internet often stressed its unsavory aspects, both real and imagined. The movie The Net symbolized many American’s fears about the coming digital age. The protagonist, Angela Bennett, is a brilliant shut-in who isolates herself from “real life” contacts, preferring the world of distance and control provided by computers. In reality, those who used computer-mediated communication (CMC) to build friendships and communities were far from the anti-social recluses popular culture made them out to be. Airline pilots, lawyers, teachers, and homemakers, as well as teenagers of all stripes, had been meeting on BBSes for fifteen years before The Net hit theaters, and on a host of other services well before that.

In the last twenty years, the microcomputer boom and the rise of the Internet have prompted a popular interest in the history of computers, particularly the development of the Internet. Stephen Levy’s Hackers has been through many editions and continues to be one of the definitive works about the history of personal computing.<sup>2</sup> Matthew Lyon and Katie Hafner were among the first to approach this subject with Where Wizards Stay up Late, an overview of the development of the early history of the Internet.<sup>3</sup> After this

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<sup>1</sup> Harris Interactive, “Those with Internet Access to Continue to Grow but at a Slower Rate.” [http://www.harrisinteractive.com/harris\_poll/index.asp?PID=356] (03 April 2003).

<sup>2</sup> Steven Levy. Hackers: Heroes of the Computer Revolution. (New York: Penguin Books, 2001).

<sup>3</sup> Katie Hafner and Matthew Lyon. Where Wizards Stay Up Late. (New York: Simon & Schuster, 1996.)

work, a host of other histories appeared, including a Public Broadcasting System documentary entitled Triumph of the Nerds. Scholarly interest has lagged behind public interest in this field, with researchers only recently undertaking serious explorations. Of such examinations, most currently concentrate on the early days of the Arpanet and its evolution into the Internet.

Although the development of the Internet is a topic of great importance and those forward thinking scientists and researchers who developed it are fascinating individuals, these subjects are not the alpha and omega of computer history. Without the microcomputer explosion in the early 1980s, for example, the demand for a computerized public information network would have been virtually nil. At this time, most published material focuses on the scientific and developmental aspects of computing, ignoring almost entirely its cultural and popular impact. Carolyn Marvin, writing in When Old Technologies Were New, commented, “The history of media is never more or less than the history of their uses, which always lead us away from them to the social practices and the conflicts they illuminate.”<sup>4</sup> Marvin points out a critical flaw in the bulk of presently published research regarding the history of technology: research focuses on devices themselves rather than those whom they affect. Since at least the 1960s a thriving computer culture existed in America. Subsequent decades saw that culture develop, expand, and separate into numerous subcultures. This human aspect is missing from the history of computers. Stories of heroic developers trump those of everyday people who

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<sup>4</sup> Carolyn Marvin, When Old Technologies Were New: Thinking About Electric Communication in the Late Nineteenth Century. (New York: Oxford University Press, 1990), 8.



used these new machines to further their everyday lives by simplifying mundane chores, or used them to live their lives in ways undreamt of just a generation before.

Although little secondary historical literature exists on the subject, the study of CMC, or its cultural impact, is not barren. Sociologists, psychologists, and anthropologists have undertaken studies on computers and their societal effects since as early as the 1980s. Before the ubiquitous connectivity provided by the Internet came on the scene, tens of thousands of computer enthusiasts connected to each other using electronic bulletin board systems, or BBSes. “A BBS,” Howard Rheingold explains in Virtual Communities, “is a personal computer, not necessarily an expensive one, running inexpensive BBS software, plugged into an ordinary telephone line via a small electronic device called a modem.”<sup>5</sup> Users dialed into BBS computers with their own modems, allowing them to exchange messages, download files, and play games. According to Rheingold, writing in 1993, “When you walk down the street in your city or town, it is likely that at least one of the people you see every day is a BBSer.”<sup>6</sup> Despite their past popularity, BBSes are an area rarely explored by historians.

One anthropologist has published articles specifically about BBS interaction. David Meyers, interested primarily in how people play, wrote two major explorations into the subject of BBSes, but they produced no follow-up studies. This void is puzzling, particularly because BBSes had not yet hit their stride in the mid-1980s. As will be shown, the high point of the BBSes came in the early to mid-nineties. By this time

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<sup>5</sup> Howard Rheingold, The Virtual Community: Homesteading on the Electronic Frontier. (New York: HarperPerennial, 1993), 132.

<sup>6</sup> Ibid, 144.

researchers moved on to study other online communication mediums, including Usenet and the World Wide Web. Historians have left this promising field all but fallow.

BBSes introduced the possibilities of CMC to thousands of individuals. Yet, their quick rise, short shelf life, and the prevalence of the Internet in popular culture combine to place BBSes in the margins of history. Such marginalization is undeserved, considering the widespread popularity of BBSes through the 1980s and 1990s. Pre-Internet CMC is both relevant and key to understanding fully the impact and development of the Post-Internet world. However, time and entropy may yet conspire to make such explorations quite difficult. Users stored most of their information on floppy disks, tape drives, or now-obsolete hard drives, all unstable mediums. Because of this deterioration, much information has been, and will continue to be, lost as long as this topic goes unexplored.

Former BBS users, perhaps acknowledging this fact, have begun to band together on the Internet to attempt to save their culture from extinction. One former BBSer, Jason Scot, is attempting a documentary on the BBS culture of the United States. Only one work, Howard Rheingold's Virtual Communities, discusses the BBSes in detail, and although the theoretical groundwork provided by Rheingold still holds merit, much of his monograph is out of date. For example, he spends almost no time analyzing the World Wide Web, while he discusses the now-obsolete and much less user-friendly Gopher in depth.

This thesis explores one aspect of BBS culture: the formation of online communities. The impact of the Internet on society is beyond question, and as more Americans become Internet users, its effect will continue to grow. Within a generation,

the Internet will likely be as pervasive as the telephone and television. Thus, the time is ripe for initial exploration into the history of online cultures and communities. Because a strong following developed around the BBSes, they are an ideal place to start such a voyage. Despite the decline of interest in BBSes, their powers of building and maintaining close ties remain as strong as ever. In fact, these ties are easier to discover and examine on the BBSes than on the Internet because of their smaller scale and recognizable chronology.

Although these ties may be easier to find, the scarcity of such research coupled with the nebulous and debated meaning of “community” itself makes such an endeavor difficult. Most contemporary historians derive their understanding of community from the work nineteenth century sociologist Ferdinand Tönnies. Tönnies believed that society existed in two forms: *Gemeinschaft* and *Gesellschaft*. Scholars often translate *Gemeinschaft* as “community,” while *Gesellschaft* is understood to be “society,” or in historical context, “urbanity.” To Tönnies, these two concepts were inexorably at odds, with the isolated and alienated world of *Gesellschaft* encroaching upon and eventually destroying the close-knit world of *Gemeinschaft*. Historical works derived from Tönnies’s theories typically focus on the community-disrupting features of modernity, urbanity, technology, or any host of other aspects of *Gesellschaft*.<sup>7</sup>

Thomas Bender, deeply critical of sociological notions of history, argued in Community and Social Change in America that Tönnies-based historiography was inherently flawed, and that Tönnies’s “sociological formulation . . . seems to have been

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<sup>7</sup> Thomas Bender, Community and Social Change in America. (New Brunswick: Rutgers University Press, 1982), 16-20.

absorbed into the working assumptions of historians.”<sup>8</sup> To Bender, this “model of social change might be faulted for being essentially a ‘reasoned moral position’ rather than a plan for ‘empirical research.’”<sup>9</sup> The community/urbanity axis and its inevitable conflict are at once a research assumption and a value judgment based on emotional, not historical, understandings.

Bender also points out the net effect of such illogical foundations. “The absorption of this logic into historical thinking at a time when the professional organization of historical scholarship encourages concentration on rather short historical periods within which, not between or among which, most research is undertaken has produced rather curious results.” The seemingly continuous breakdown of community as typically understood is a historical anomaly. Bender references several monographs, each focusing on a different period, ranging from the seventeenth through twentieth centuries. Bender comments, “If these books are placed in serial order, they offer a picture of community breakdown repeating itself.”<sup>10</sup>

Where did the real breakdown of community occur? Most likely, it occurs nowhere. Community persists despite supposed disruptions caused by modernity, urbanity, and mass communication. Joli Jensen argues, in Redeeming Modernity, “The critical discourse on media influence, in conjunction with the critical discourse on modernity, constructs an idealized past that is ever receding.”<sup>11</sup> The study of CMC appears at a crossing of these two concepts. The massive, faceless perception of the Internet allies it in the minds of critics with *Gesellschaft*, too large and impersonal to

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<sup>8</sup> Ibid, 46.

<sup>9</sup> Ibid, 27.

<sup>10</sup> Ibid, 51.

<sup>11</sup> Joli Jensen, Redeeming Modernity. (New York: Sage Publications, 1990), 178.

foster communal ties. In addition, the assumption that new media forms encourage alienation and seclusion also influence such ahistorical arguments.

New technologies do not disrupt or destroy communities but rather alter their nature. As Barry Wellman and Milena Guila argue, “worriers are confusing the pastoralist myth of community for the reality. Community ties are already geographically dispersed, sparsely knit, connected heavily by telephone communications, and specialized in content.”<sup>12</sup> Indeed, if change over time is the basis of historical study, then understandings based on a static notion of community cannot be historical. Bender argues for a dynamic understanding of community, commenting, “The kind of community that is available to us is not the enveloping community seventeenth-century New Englanders knew . . . but . . . to define community in such static terms is to foreclose any possibility of community through time. We need new images of community based upon a historical notion of continual transformation.”<sup>13</sup>

Bender defines community as “a network of social relations marked by mutuality and emotional bonds. This network . . . is the essence of community, and it may or may not be coterminous with a specific, contiguous territory.” Additionally, Bender warns, “A definition of community must, therefore, be independent of particular structures.”<sup>14</sup> Thus, we must add telephones, fax machines, rapid post, and CMC to our notions of community and the forming of communal bonds, while we must revise long cherished ideas about the importance of proximity. Such devices do not disrupt communities, but only change their nature. With these developments in distance communication,

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<sup>12</sup> Barry Wellman and Milena Guila, “Virtual Communities as Communities.” in Communities in Cyberspace eds. Mark A. Smith and Peter Kollock (New York: Routledge, 1999), 187.

<sup>13</sup> Bender, Community and Social Change in America, 146

<sup>14</sup> *Ibid*, 7.

communities no longer remained bound to geography. Yet, because geography has been the primary determinant of community formation, it is a difficult criterion to discard.

Berry Wellman, a University of Toronto researcher who was among the first to acknowledge the lessening influence of geography, “describes how today, rather than gathering with neighbors in public places such as street corners or cafes, people now communicate with their friends by telephone or email in small groups in private homes.”<sup>15</sup> Community, then, has moved off the village common and into the global communications infrastructure. Rheingold labeled these new social groupings “Virtual Communities,” which he described as “social aggregations that emerge from the Net when enough people carry on . . . public discourses long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace.”<sup>16</sup> Benedict Anderson, writing about the feelings of community shared by members of the same nation-state in Imagined Communities, argues, “All communities larger than primordial villages of face-to-face contact (and perhaps even these) are imagined.”<sup>17</sup> Bender proposes that communal bonds exist solely because individuals feel they exist and are not coterminous with geography. Simply stated, “Community is where community happens.”<sup>18</sup>

Using the term “community” is tricky at best. Reading fifty works about communities will likely yield at least fifty-one different definitions. Community, existing as it does in the minds of its members, is difficult to pin down and label. Yet, for any meaningful discussion of community to take place, that is exactly what this work must

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<sup>15</sup> Barry Wellman, “The Privatization of Community,” Presented to the Conference on Urban Regions in a Global Context, University of Toronto, October 19-20, 1995.

<sup>16</sup> Rheingold, Virtual Communities, 5.

<sup>17</sup> Benedict Anderson, Imagined Communities: Reflections on the Origin and Spread of Nationalism. (New York: Verso, 1991), 6.

<sup>18</sup> Bender, Community and Social Change in America, 6.

attempt. Communities are, on the most basic level, groupings of individuals who share emotional bonds and feelings of closeness. Members of communities find their feelings of closeness heightened by a belief in a shared identity and renewed by shared experiences. In addition, communities provide a sense of inclusion and stability that might otherwise be lacking in the lives of individual participants. Although members may not even label themselves a “community,” they still imagine themselves as part of a larger whole that accepts and supports them. In addition, feelings of exclusivity in communities breed exclusionary tendencies, and communities are defined as much by who is not a member as who is. Finally, location is crucial to the success of a community. A shared space must exist for members of the community interact in, though that place need not necessarily be physical. To members of the BBS community, any one of a host of bulletin boards acted as the common ground around which their culture formed.

Despite Bender’s persuasive arguments, current journalistic and historical commentary about online communities still stumbles into base and simplistic assumptions. Jensen argues that “cable and computer technologies are only the most recent in a long line of communication forms . . . to elicit a chorus of prophetic language. The same dreams . . . and the same nightmares . . . are dreamed each time.”<sup>19</sup> Such commentary, as described by Jensen, guides historical thought. Future historians, guided as they are by sociological theories and normative assumptions, are in danger of exploring the community-building or community-disrupting aspects of the Internet only along an axis of decline that is as ahistorical as that of urban decline or corrupting modernity.

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<sup>19</sup> Jensen, Redeeming Modernity, 97.

This work finds its beginnings in the assumptions of Bender, Anderson, Jensen, and other scholars who stress the need for revised understandings of community. As Luciana Paccagbella wrote in “Online Community Action: Perils and Possibilities,” “Community is neither destined to disappear . . . nor to resist [these] changes . . . [Instead] . . . In complex societies, community will neither be ‘lost’ or ‘saved’ but rather freed into multiple networks, no one of which has the monopoly on solidarity.”<sup>20</sup> The effect of CMC, represented in this case by BBSes, on community development is the focus of this work.

BBS communities developed in two distinct ways: those who discovered CMC relatively late in life and created separate, yet no less important, social ties online, and those who “grew up” online, building their communities almost entirely using BBSes. It is important to note that in both cases, users tended to be ethnically and economically homogenous. Middle and upper class, white males and females comprised the bulk of Memphis BBS use. This lack of diversity stemmed most likely not from intentional exclusion, but rather from circumstances of economics. Despite the relative inexpensiveness of computers, their thousand-plus dollar price tag kept them beyond the reach of many people. In addition, this lack of diversity translated into unspoken assumptions that transcended anonymity. Although users had no way of knowing class, race, or sex, the factors mentioned above no doubt influenced the thinking of individuals who must have realized that the anonymous entity on the other end of the connection was most likely white and at least moderately well off. Although in depth examination into

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<sup>20</sup> Luciana Paccagbella, “Online Community Action: Perils and Possibilities,” in Online Communities: Commerce, Community Action, and the Virtual University eds. Chris Werry and Miranda Mowbray. (Upper Saddle River: Prentice Hall, 2000), 376.



race and economic status is beyond the scope of this study, the above understanding is a factor involved in painting a full picture of BBS culture.

In order to discover how the two different, yet related, social networks of adults and teens became established, this work adopts a localized approach, focusing on community development centered on the BBSes in Memphis, Tennessee. Although it might initially seem counterintuitive to build theories of non-geographically mandated communities around a localized area, such an approach makes gathering primary information far simpler and because the BBSes were primarily localized phenomena.

Thus, this work is a starting point for historical inquiry into online communities rather than its logical conclusion. It is the expectation of the author that trends and developments in the BBS environment have parallels in the Internet. In addition, the novelty of the Internet makes finding points of comparison difficult. BBS culture is both similar enough to be useful for preliminary exploration, and small enough for meaningful analysis. Before such analysis can take place a brief overview of the history of BBSes must occur, otherwise the topics developed and terminology used will baffle rather than enlighten.

## **Chapter One** **Development of Digital Dispatches**

Before analysis of BBS culture can begin, it must be understood that BBSes did not appear *ex machina*, nor did the community that built up around them. The evolution of personal CMC before the Internet came during a unique junction in the history of computing. Falling machine prices, increased performance, development of peripherals and even a Chicago blizzard combined to inspire the creation and proliferation of the BBSes. In addition, the BBS community, once formed, possessed a unique set of expectations, understandings, and fears molded in large part around its unique history, which in turn influenced the way members of this community viewed the world. In order to fully appreciate the scope of BBS culture, as well as understand many of the concepts introduced later, a brief foray into the evolution of personal computing and computer mediated communication must be undertaken, as well as an examination of political, legal and cultural events that combined to shape the world view of the dedicated BBS user. Such an examination must necessarily begin with the United States military, for as Howard Rheingold suggested, “it is unlikely that microchips and interactive computers would have been available to civilians today if the Department of Defense had not found them essential to national security decades ago.”<sup>21</sup>

George Stibitz gave the first remote computing demonstration on September 11, 1940 at a meeting of the American Mathematical Society at Dartmouth College. During the demonstration, he transmitted problems via teletype to his Complex Number Calculator, the Model K, a proto-computer constructed using surplus relays, tin-can

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<sup>21</sup> Rheingold, *The Virtual Community*, 68.

strips, flashlight bulbs and other common items.<sup>22</sup> During the years of U.S. involvement in World War II, Stibitz worked for the National Defense Research Committee, which was part of the Manhattan Project. By the 1950s, computing was an integral part of the United States military. The high cost of research and development, the high price of computing time, and the relative scarcity of computers made remote computing a desirable and cost-effective means of distributing computational power. In addition, the military placed computers for national air defense across the nation.

Luckily, a nationwide communication infrastructure was already in place by way of the Bell Telephone system. However, No one had digital communications in mind during the development of the telephone system. Computers operate in binary, a base-two system that represents everything in terms of ones and zeros, called bits, using minute electrical impulses. Because standard telephone lines were of relatively low quality and used to transmit only audio, they were not well suited to transmit digital information. Errors associated with audio, such as line noise, were far too frequent for computers, which require precise and clear representations of bits. Engineers had to overcome this problem if they wished to see remote computing succeed. In order to allow computers to access the nationwide telephone network, users require an interface device to modulate and demodulate digital information over phone lines, or convert them from electrical impulses to audio tones representing the impulses and back again. This device became known as a modem.

By the end of the 1950s, modems operated across the country. Despite the predictions of experts, computers rapidly found niches in realms beyond the government

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<sup>22</sup> Kip Crosby, "In Memoriam: George Stibitz." [<http://ei.cs.vt.edu/~history/Stibitz.html>]

and associated research facilities. In order to cater to this demand, American Telephone and Telegraph produced the first commercial modem in 1962, the Bell 103. The Bell 103 allowed speeds of up to 300 bits per seconds (bps), less than 1% of the speed of modems standard in today's computers. Innovations outside Bell Labs came slowly when they came at all. AT&T's monopoly made it difficult or impossible for competing products to enter the marketplace, because AT&T forbade the use of non-Bell products on Bell telephone lines. In 1968, under increasing pressure from third-party manufacturers, FCC handed down the Caterphone decision, forcing AT&T to allow third-party products on Bell lines. AT&T complied with the mandate, although the required that non-Bell equipment use special "adaptors" designed to protect the telephone system.<sup>23</sup> The opening of the marketplace to third parties proved vital to the growth of modem use and remote computing. Even with the "adaptor" requirement, competition encouraged the development of increasingly efficient communication devices and lower prices so that, by 1984, modems had the capability to transmit at 9,600 bits per second; 14,400 by 1991; and 28,800 by 1994. As computing developed as a hobby and as modems became commonplace, the importance of the Caterphone decision grew clear. Modems, no matter how inexpensive and efficient, served as expensive paperweights without similarly inexpensive and efficient computers. The microcomputer revolution in the 1980s built upon a thriving hobbyist culture dating back as early as the mid-1950s.

Kit computing machines existed as early as 1955, and simple, relatively small computation machines appeared even earlier. However, when the "world's smallest

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<sup>23</sup> Spencer Whipple, Jr.[pseud.], "Hacking Ma Bell, Part One." [<http://www.textfiles.com/phreak/hmb1.txt>] (15 December 2002).

electronic brain,” the Simon, appeared on the cover of Radio Electronics, few of the early devices computed more than simple arithmetic. The Simon processed only four functions: addition, subtraction, greater than, and selection. In addition, it could do so only with the numbers 0, 1, 2 and 3.<sup>24</sup> Early machines capable of relatively advanced computing involved prohibitive costs. The average enthusiast could not hope to afford the PDP-8, and even the more modestly priced Kitchen Computer rang in at \$7,000 (\$37,814.14 in 2001 currency). In 1966, Bolt, Beranek, and Newman, Inc. used the Kitchen Computer, without the cutting board attachment, to construct the ARPAnet, the precursor to the Internet.<sup>25</sup>

Although this is a matter of some debate, many computer cognoscenti consider the Mark 8 to be the first minicomputer to be available to the public at large. The Mark 8, designed by Jon Titus, a chemistry graduate student at Virginia Tech, appeared on the 1974 cover of Radio Electronics magazine. The Mark 8 used the Intel 8008 chip as the central processor and allowed for a then-astronomical 16 kilobytes of memory. It had no keyboard, no monitor, and almost no peripherals. Titus intended his project simply to show that making a personal computer was possible; he never intended to exploit any perceived demand.<sup>26</sup> Thus, the Mark 8 never achieved popularity and the Altair 8800, its more successful peer, generally overshadowed it. Because of its success, many people often mistakenly label the Altair as the first minicomputer. Ed Roberts, owner of Model Instrumentation Telemetry Systems, designed the first 8800 in the early 1970s. MITS

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<sup>24</sup> Columbia University Public Information Office, “Fact Sheet on ‘Simon.’” [<http://www.blinkenlights.com/classiccmp/berkeley/simonfaq.html>] (15 December 2002).

<sup>25</sup> Blinkenlights Archaeological Institute, “Personal Computer Milestones.” [<http://www.blinkenlights.com/pc.shtml>] (15 December 2002).

<sup>26</sup> Jon Titus and Andrew Davie, “The Mark-8 Minicomputer.” [<http://www.his.com/~jlewczyk/adavie/mark8b.html>] (15 December 2002).

initially sold flashbulbs used to observe the telemetry of model rockets, then later branched off into electronic test equipment, pocket calculators, and eventually microcomputers.<sup>27</sup>

The January 1974 issue of Popular Electronics featured a mock-up of the Altair 8800 on its front cover. MITS offered the Altair in kit form for \$387 (\$1,483.62), a rock-bottom sum. This low price allowed even enthusiasts of moderate means to buy computers. Dropping prices and/or increasing computing power characterized, and continues to characterize, the home computer industry. Increases in performance coupled with static or even falling prices allowed more people every year to involve themselves in the microcomputer revolution. Despite being primitive by modern standards, the 8800 brought to light the potential demand for personal computers.

The Altair used the Intel 8080 processor, had 256 bytes of memory and, like the Mark 8, had no input or output devices aside from the switches and blinking lights on the front panel. Unlike the Mark 8, however, the Altair enjoyed much success. Roberts expected to sell only about 400 units, enough to help save his failing company. Roberts did sell 400 units – in one afternoon. Checks soon poured in for Altair kits, and buyers also included money for expansion boards not yet designed.<sup>28</sup> No one knows how many orders for computers MITS received, but most estimates put the number at more than 2,000, far more units of a single type than had ever been sold previously.<sup>29</sup> The response

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<sup>27</sup> Levy. Hackers, 189-190.

<sup>28</sup> Ibid, 191

<sup>29</sup> Stan Veit, “The Altair 8800 Microcomputer.” [[http://www.pc-history.org/altair\\_8800.htm](http://www.pc-history.org/altair_8800.htm)]. (15 December 2002).

so overwhelmed MITS, in fact, that many customers had to wait over a year to receive their products.<sup>30</sup> Future expansions had similarly impressive receptions.

With the coming of the Altair, amateur computer users cropped up all over the country. Such enthusiasts tended to be young, middle-class, white males interested in science and engineering. Altair loyalists began to band together, and 1975 witnessed a wellspring of computer enthusiast groups and hobbyist organizations. On March 5, 1975, the Amateur Computer Users Group Homebrew Computer Club held its first meeting in Menlo Park, California with thirty-two participants. Over forty people showed up for the second meeting and several hundred by the fourth.<sup>31</sup> Also in summer 1975, the Chicago Area Computer Hobbyist Exchange (CACHE) formed on the campus of Northwestern University. Its first meeting attracted between two and three hundred individuals.<sup>32</sup> Similar groups appeared across the country throughout the late 1970s and early 1980s. These meetings became crucial to the growth of personal computing as a hobby and as a business. Users offered each other technical assistance on the often-byzantine Altair. In addition, users swapped programs, horror stories, and hardware design. For example, a member of the Homebrew Computer Club, not an employee of MITS, designed the first working memory cards for the 8800.<sup>33</sup>

The stunning success of the Altair made other people realize the business potential of the microcomputer market. The future of the personal computer impressed a young employee of Hewlett Packard named Steve Wozniak. Wozniak, who attended the first Homebrew Computer Club meeting, designed his first computer for fun in 1975.

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<sup>30</sup> Levy, Hackers, 194.

<sup>31</sup> Levy, Hackers, 200-202.

<sup>32</sup> CACHE, "Club History." [<http://www.chicagocache.org/history.htm>] (15 December 2002).

<sup>33</sup> Levy, Hackers, 208.

Built around the Motorola 6502 chip, Wozniak's revolutionary machine that interfaced with a monitor and allowed color graphics, a keyboard, a cassette for mass storage, and a 3K version of Basic he wrote.<sup>34</sup>

The debut of Wozniak's machine came in early 1976 at the Homebrew Computer Club. Steve Jobs, a friend and fellow Homebrew member who had already helped Wozniak develop the game Breakout for Atari, saw the commercial potential. Jobs constantly offered helpful suggestions and troubleshooting. The two pooled their resources to form Apple Computers on April Fool's Day in 1976 and began marketing their first product, the Apple I. Smaller and more efficiently designed than any microcomputer to date, the Apple I amazed spectators. Many who saw the machine found it difficult to believe that an entire computer could fit in a wooden box the size of a briefcase. Apple produced two hundred Apple I computers, selling all but twenty-five in the first ten months at \$666.66 (\$2,110.42).<sup>35</sup>

In 1977, at the West Coast Computer Faire, Jobs and Wozniak followed the modest success of the Apple I with the Apple II. The Apple II shipped fully preassembled with streamlined case, no visible screws, the ability to expand to 64 kilobytes of memory, a keyboard, and a color monitor. In addition, unlike its predecessors, it could only be purchased pre-built, not in kit form.<sup>36</sup> Wozniak designed it to appeal to anyone interested in computers, not just the technical elite, and priced it affordably at \$1,298 (\$3,883.77). The affordability, aesthetic appeal, user friendliness,

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<sup>34</sup> Ibid, 252.

<sup>35</sup> Steven Weyhrich, "Apple II History, Chapter Two." [<http://apple2history.org/history/ah02.html>]. (16 December 2002).

<sup>36</sup> Weyhrich, "Chapter Four." [<http://apple2history.org/history/ah04.html>]. (16 December 2002).



and versatility of the Apple ][ combined to make it the preeminent machine within two years.

Apple Computers signed up for the West Coast Computer Faire early on. Because of such foresight, and a little luck, Apple received a display booth right by the front door. Although the sleek and stylish booth appealed to many in attendance, they did not consider Apple to be a serious competitor. Byte magazine, in its report of the Faire, failed even to mention the Apple ][.<sup>37</sup> Despite early dismissal by the computer elite, Apple ][ sold three hundred units in a couple of months.

Besides the Apple ][, several other pre-built computers hit the market in 1977. Commodore priced its PET computer at \$595 (\$1780.31) and Radio Shack priced its TRS-80 at \$600 (\$1,795.27). Of the three, only owners of the Apple ][ had an easily upgradeable machine. In addition, the design of the Apple ][ influenced computers to come, especially the IBM PC. The basic design of the Apple ][, with its streamlined, approachable look and easy access, remains largely intact to the current day, despite exponential growth in the fields of data storage, processor speed, connectivity, and graphical capabilities.

By December 1977, Apple had produced a floppy drive for the Apple ][, thereby addressing many complaints about small storage space and slow access times. By 1979, when Apple introduced the Apple ][ plus, personal computing already meant big money, and a host of manufacturers marketed their own systems. According to Time Magazine,

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<sup>37</sup> Weyhrich, "Chapter Four." [<http://apple2history.org/history/ah04.html>]. (16 December 2002).

which declared the computer Man of the Year of 1982, two-dozen computer companies sold three quarters of a million units in 1980 and made \$1.8 billion.<sup>38</sup>

As late as 1980, small startup companies dominated the personal computer market. Mainframe computer companies, such as IBM and DEC, failed to acknowledge the growing trend in personal computer use and initially wrote off the device as unprofitable. At IBM, the folly of that decision became evident as small companies posted enormous sales, so Big Blue rushed to create a competing PC. In 1981, the IBM PC 5150 hit the market, running the Microsoft Disk Operating System (MS-DOS), a clone of Quick and Dirty Operating (QDOS) system, itself a clone of the popular Control Program for Microcomputers (CP/M) operating system.<sup>39</sup> By licensing their product for use with the IBM PC, whose specifications became a de facto standard, Microsoft began its domination of the operating system market.

In 1981, twenty companies “joined the stampede,” including IBM. In that year, sales jumped to 1.4 million units worth almost \$3 billion.<sup>40</sup> IBM marketed their PC through outside distributors such as Sears & Roebuck and Computerland and expected to sell half a million 5150s over the life of the product. Instead, it sold 500,000 in the first three months of production.<sup>41</sup> The IBM Extended Technology, or XT, followed the 5160 in 1983. Although highly customizable, the average XT came with 256k to 640k of

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<sup>38</sup> Otto Friedrich, “Machine of the Year: The Computer Moves In.” Time Magazine. [http://www.time.com/time/special/moy/1982.html]. (16 December 2002)

<sup>39</sup> Tim Patterson, “A Short History of MS-DOS.” Byte Magazine. [http://www.patersonstech.com/Dos/Byte/History.html]. (16 December 2002)

<sup>40</sup> Otto Friedrich, “Machine of the Year,” [http://www.time.com/time/special/moy/1982.html] (16 December 2002)

<sup>41</sup> IBS Corporation, “Brief History of the PC Clone Market.” [http://www.ibscorporation.com/pc2.htm]. (16 December 2002).

memory, high resolution color graphics, a 360k floppy drive, and a ten or twenty megabyte hard drive.<sup>42</sup>

Although Apple still had name-brand recognition as the dominant personal computer, IBM products quickly eroded Apple's market share and became the system of choice. In addition, "clone" products conforming exactly to IBM PC and Apple specifications and compatible with IBM and Apple products flooded the marketplace, undercutting prices. Although IBM eventually lost its market primacy to third-party clones, their entrance into the fray crushed competing standards, such as those produced by Tandy and Commodore.<sup>43</sup>

The low price and approachability of microcomputers made them attractive to those with passing interest in computing in addition to hard-core technophiles and computer experts. The development of standardized operating systems and prepackaged software made computers more approachable. No longer was proficiency in BASIC or assembly language required to get use out of a computer. The first stage of the explosion put computers in millions of households. The next stage involved finding things to do with the new machines. Soon, the thing to do became clear: computer mediated communication facilitated by the introduction of cheap and easy to use personal modems. As with the evolution of the personal computer, the production of modems useful to the general population took several years of frustration and development.

In the 1960s and 1970s, when modems were offered at all, they were clunky, primitive, and expensive. In order to connect with a modem, the user had to dial the

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<sup>42</sup> Old-Computers Online Museum, "PC XT Model 5160." [<http://www.old-computers.com/museum/computer.asp?c=286>]. (16 December 2002).

<sup>43</sup> ---, "Personal Computer." [[http://www.webopedia.com/TERM/P/personal\\_computer.html](http://www.webopedia.com/TERM/P/personal_computer.html)]. (16 December 2002).

number he or she wished to connect to on the telephone, wait for the modem to answer, then place the modem on a cradle and press a button to begin transmission. This lack of user friendliness meant that only the informed and/or dedicated accessed computers remotely. Acoustic modems of this type generally ran at less than 300 bps. Some modems did have an autodial feature at added cost, and others connected directly to the phone line and thus allowed for much greater speed.<sup>44</sup> One such modem, the Radio Shack DC-1200, released in 1983, could operate at 1200 bps for \$699 (\$1231.18 in 2001 currency) and offered an autodial expansion for \$150 (\$264.20). Even then, the autodialing modem could not use tone dialing, only pulse.<sup>45</sup>

As mentioned previous, telephone connection devices were originally an expensive and inefficient rarity. The Altair 8800 offered a modem device, the 88-ACR audio cassette record interface board, as early as 1975, but the product shipped worked neither as a modem nor as a cassette interface.<sup>46</sup> The Apple I and II, likewise, did not initially offer a modem, so a member of the Apple Pugetsound Program Library Exchange (APPLE), Darrell Aldrich, jury-rigged a method for transmitting data over the phone line. The “Apple Box” attached to a phone line via alligator clips and plugged into the cassette port of the Apple II. Use of the Apple Box required a number of frustrating steps, and the product sold only about twenty units at \$10 each. In 1978, Apple released the Apple II Communications Card, retailing for \$225 (\$632.14). Although this was not a modem itself, it allowed the machine to interface with an acoustic modem with speeds

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<sup>44</sup> Gabriel Robins, “Computer Museum.” [<http://www.cs.virginia.edu/brochure/museum.html>]. (16 December 2002).

<sup>45</sup> Frank Durda IV, “The AT Command Set Reference – History.” [<http://nemesiis.lonestar.org/reference/telecom/modems/at/history.html>]. (17 December 2002).

<sup>46</sup> James Willing, “Jim’s Computer Garage (Museum).” [<http://www.rdrop.com/~jimw/j-boards.shtml>]. (17 December 2002).

between 110 and 300 bps.<sup>47</sup> Users could not easily use computers to communicate with other computers until the development of a device that could transcend compatibility issues, transmit data reliably and quickly, and do so affordably.

Dennis C. Hayes invented the first PC modem in 1977. Using a \$5,000 investment, Hayes's company, Hayes Associates, produced modems for the S-100, an Altair clone, and the Apple ] [. In 1981, Hayes released the Smartmodem 1200, which ran at 1200 bps and could interface with any computer regardless of model.<sup>48</sup> The Smartmodem could also dial out without human assistance, although it could not recognize busy signals or even a dial tone. The rapidly changing marketplace and the increasing demand for faster modems led to the rapid rollout of the Smartmodem 2400. In the rush to get a working product, Hayes chose to save time by not developing a new set of commands for his 2400 bps modem.

The Smartmodem 1200 used the AT command set. The letters AT, for "attention," notified the modem that it was about to receive commands. For example, "ATDT 555-1212" instructed the modem to dial the number 555-1212 using touch-tone, while "ATDP 555-1212" performed the same action using pulse dialing. This was the first example of a two modems that used the same commands, thus bridging one major gap in computer communication: that of compatibility. This allowed anything designed for use on Hayes 1200 to be also useable on the Hayes 2400. Other vendors quickly realized the advantages of this system and within six months began marketing "Hayes Compatible" or "AT Command Set Compatible" modems. By 1986, five years after the

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<sup>47</sup> Steven Weyhrich, "Apple II History, Chapter Twelve." [<http://apple2history.org/history/ah12.html>]. (17 December 2002).

<sup>48</sup> ---, "Dennis C. Hayes." [<http://www.ideafinder.com/history/inventors/hayes.htm>]. (17 December 2002).

release of the Smartmodem 1200, virtually no PC modem manufacturers produced modems that did not support the AT command set.<sup>49</sup>

These modems initially possessed a very limited set of functions. Individuals connected to each other only if they were expecting a call and were present to force the modem to answer. File transfers were not only slow but also non-automated. Although the novelty of remote computing made it popular, the banality of modem operation quickly irritated enthusiasts. As long as remote computing remained difficult and non-automated, it possessed little practical value. However, the development of two key applications in 1978 - the electronic BBS and an error correcting transfer protocol - by a duo in CACHE greatly increased the potential of modems.

On the morning of January 16, 1978, the city of Chicago lay under a blanket of snow. In fact, the entire Midwest found itself almost totally shut down by the worst blizzard ever to hit the continental US.<sup>50</sup> Ward Christensen, trained as a physicist and employed as a mainframe programmer, was among the thousands trapped in their houses by several feet of snow. Unlike most people in the Midwest, however, Christensen was also heavily involved with CACHE.<sup>51</sup> Well before the storm hit, Christensen and his friend Randy Sues developed a method, named MODEM.ASM, to access remotely their CP/M machines using a cassette drive and a modem.<sup>52</sup> Several hacks contributed by other CACHE members led MODEM.ASM to become XMODEM, the first major

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<sup>49</sup> Durda, "AT Command Set" [<http://nemesis.lonestar.org/reference/telecom/modems/at/history.html>]. (17 December 2002).

<sup>50</sup> Robert Schwartz, "US Averages 11 Blizzards Anually, Most In The Upper Plains." [<http://www.newswise.com/articles/2001/11/BLIZZARD.BSU.html>]. (17 December 2002).

<sup>51</sup> The Moschovitis Group, "Chapter Three: What Does A Network Do?: 1970-1978." [<http://www.historyoftheInternet.com/chap3.html>]. (17 December 2002).

<sup>52</sup> Ward Christensen and Randy Sues. "The Birth of the BBS." [<http://timeline.textfiles.com/1978/01/16/2/FILES/cbbs.txt>] (17 December 2002).

modem protocol. XMODEM, with further revisions, became YMODEM and then ZMODEM. Although no official body existed to create and regulate standards of electric communication at the time, these three protocols were so rapidly and completely adopted that they became the unofficial standard until the popularization of TCP/IP (Transmission Control Protocol/Internet Protocol) and the Internet.

Christensen and Suss already used MODEM.ASM and XMODEM to exchange messages before the storm. Unable to leave the house, Christensen phoned Suss to pass the time and the two hit on the idea of setting up one of Christensen's machines for CACHE members to call into and leave newsletter updates. Suss, thinking that a committee project might never finish, suggested the two go in alone. Suss agreed to supply the hardware and the line if Christensen provided the software. Christensen began work on the humbly named CE.C, or "computer elite's project C." After two weeks of laboring in his spare time, Christensen produced an operational system based on the CACHE cork bulletin board. Although Christensen completed the project in two weeks, he feared no one would believe such a claim. Thus, he began testing in early February and waited until February 16<sup>th</sup> to declare the birth of CBBS, the Computerized Bulletin Board System.<sup>53</sup>

Interest in CBBS grew rapidly, encouraged by an article Christensen and Suss published in the November 1978 issue of Byte magazine describing the system and discussing the theory and practice of maintaining virtual bulletin boards.<sup>54</sup> As individuals and organizations grew interested in CBBS, Christensen decided to charge \$50 a unit for

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<sup>53</sup> Ibid.

<sup>54</sup> Moschovitis Group, "What Does A Network Do?" [<http://www.historyoftheInternet.com/chap3.html>]. (17 December 2002).

his product: low enough to keep people interested, but high enough to keep people from “bugging” him. All money went to Suess, who supplied the majority of the hardware. Although around two hundred copies of CBBS eventually sold, the pair did not develop the system with profit in mind. According to Christensen, the birth of XMODEM came from necessity and CBBS evolved simply because “all the pieces are there [and] it’s snowing like @#\$.”<sup>55</sup>

By 1980, the first CBBS system boasted 11,000 users and grew at a rate of ten to fifteen users per day. Easily the busiest BBS in existence at the time, users called in from as far away as Hawaii and Europe to get up-to-date information about microcomputing. Although initially designed with general information topics, such as “help wanted” and “for sale” sections in mind, the system operators quickly chose to keep the Chicago CBBS focused on computing. New systems appeared that catered to other tastes, such as one in Boston focusing on games and another in Beaverton focusing on movie reviews.<sup>56</sup>

As more users became interested in BBSing, a host of programmers began to develop competing BBS suites. In December 1981, a programmer named Cynberu Taren released a new BBS system called Citadel, designed around the concept of user-defined message areas, or “rooms.” Thus, instead of having a static system where message areas were created and deleted by system operators, the users themselves could spawn new message boards around a variety of interests.<sup>57</sup> After Citadel, a trickle, and then a flood, of new BBS suites appeared over the next twenty years. Although far from

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<sup>55</sup> Christensen and Suess. “Birth of the BBS.” [<http://timeline.textfiles.com/1978/01/16/2/FILES/cbbs.txt>] (17 December 2002).

<sup>56</sup> Frank Derfler, Jr., “Dial Up Directory.” Kilobaud Computer Magazine. [<http://www.portcommodore.com/commodore/bbs/cbbs.html>] (17 December 2002).

<sup>57</sup> ---, “Citadel BBS.” [<http://www.citadel.org/>] (17 December 2002).



an exhaustive list, among the more frequently encountered were Wildcat!, The Major BBS, PCBoard, Quick BBS, Remote Access, GBBS (for Apple), Cnet BBS (for Commodore) and Maximus. Others, such as Telegard, Oblivion, LSD, and Insanity<sup>2</sup> sported a following made up almost exclusively of “cyber outlaws.”

Among the most popular and most commercially successful was The Major BBS, produced by Galaticomm in 1987. The Major BBS broke new ground, allowing BBSes to offer multiple lines, or nodes, to their users. Before this, multiple nodes were possible, but difficult and costly. Setting up such a system typically required one computer per node and complicated networking procedures. The Major BBS allowed a single computer to operate as many modems as it could hold, allowing as many as eight (and later 64 or more) users to connect at once. Although the software package was expensive by BBS terms, costing \$259 for a two-node version, it was far cheaper than setting up multiple computers as dedicated nodes.<sup>58</sup>

The Major BBS also lent itself to commercial endeavors. Most BBSes granted their users a flat time limit per day, and others restricted the number of calls per day. The Major BBS initially worked on “credits.” Typically, one credit would be one second of online time, thus 3600 credits would last one hour. Credits could be used consecutively or sporadically, but they did not regenerate. Under normal circumstance, a new user was given a set number of “basic,” nontransferable credits to test the system out. After those expired, individuals purchased new from the SysOp or panhandled from other users. In later versions, the Major BBS would roll out a system to let users pay for monthly

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<sup>58</sup> Peter Scott, “Galaticomm Major BBS Demo System.” [<http://www.lights.com/hytelnet/bbs/bbs093.html>]. (17 December 2002).

“subscriptions” which would allow users to pay a flat rate for a set amount of time online per day.

In 1993, Galaticomm offered add-on software that allowed The Major BBS to use high-speed lines and offered access to multiple Internet features.<sup>59</sup> Other optional packages allowed Major BBS teleconferences to link with other Major BBSes across the country and made it possible for users to engage in real time chat with other BBSers from everywhere. Because it could cheaply handle multiple nodes and a “pay for use” system came preprogrammed, The Major BBS became the primary choice for massive, chat-based bulletin boards. Later features such as Internet email, Internet Relay Chat, TCP/IP further solidified its place as the dominant chat BBS software. Boards of this type generally possessed anywhere from four nodes to sixty-four or more.

Hobbyist BBSes, even massive pay chat-boards, were not the only way for users to pass their time on the emerging digital frontier. Large-scale, national, dial-in information services existed in the form of CompuServe, Prodigy, Delphi, and a host of others. These services offered thousands, tens of thousands, or even a million or more users access to online chat, games, and even Usenet newsgroups. Prodigy, an IBM/Sears venture, for example, boasted over a million users.<sup>60</sup> Quantum Link, which eventually developed into America Online, a Commodore 64 service, offered its users a full range of colors and a graphical user interface at the cost of six, and later eight, cents a minute. Many users easily ran up hundreds of dollars in a single month as such prices.<sup>61</sup> As the

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<sup>59</sup> ---, Information Today, June 1993, 55.

<sup>60</sup> The Moschovitis Group. “The Wild Frontier: 1985-1990.” [http://www.historyoftheInternet.com/chap5.html]. (17 December 2002).

<sup>61</sup> R. Matthew Casper, “[Good] For Your Approval,” 20 December 2002. Personal email.

Internet appeared in public consciousness, these services became among the first Internet service providers.

Although America Online, Prodigy, CompuServe, and others were already poised to make the leap to the Internet in the early 1990s because of their massive user base and nationwide availability, many local BBSes also attempted to become profitable by becoming ISPs. The difficulties in turning a profit as a BBS proved to be multifold. User fees rarely generated enough income to offset the cost of software, hardware, and phone lines, and few BBSes were able to make money before the Internet. In many areas, though, BBSes were the primary way to get “online.” For those boards that already possessed a large user base, the transition from hobby BBS to business ISP seemed almost natural, especially for the more technically inclined and entrepreneurial SysOp. Ripco Communications in Chicago, for example, started out as Ripco BBS.

Despite the fact that very few BBSes became ISPs, successful or otherwise, individual BBSes rarely proved to be totally isolated enclaves. Networks of shared message bases linked a vast number, probably the majority, of BBSes. Very much similar to the Usenet, these networks swapped messages by a system of relays. During the slow traffic period, usually around four or five in the morning, a major local board, the network hub, called its members and collect any new messages posted in network conferences, and deposit any new messages left elsewhere. For national or international networks, local hubs then forwarded these packets to regional hubs for distribution. The early days of Usenet newsgroups used the UNIX command UUCP (Unix to Unix Copy Program/Protocol) to achieve similar results. Unlike the Usenet, however, these

networks were available to anyone with a modem, not just members of the educational and scientific community.

Networks of this kind existed for a wide variety of interests and user bases, appealing to local and national audiences. The Memphis Area Geeks Network, or MAGNet, existed in Memphis in the early 1990s as a local network of around a dozen boards that exchanged messages about local events, technical issues, and general banter. MAGNet was informal, with loosely defined rules and regulations, allowing off topic discussions to appear and evolve. Cyberchurch, unlike MAGNet, was national in scope and very narrow in focus: Christian discussion. Moderators enforced a strictly defined code of conduct and acceptable online behavior, and allowed little or no deviation or dispute.<sup>62</sup> FelonyNet operated on a similarly narrow focus, catering only to “underground” boards dealing in illicit and illegal material. FelonyNet echoed, as message distribution of this kind is sometimes called, conferences about wire fraud (phreaking), pirated software distribution, the phone system, ANSI graphics, and a host of other topics frowned upon by law enforcement agencies.<sup>63</sup>

Obviously these networks did not allow every BBS to become a node, as an individual BBS on the network was known. FelonyNet required potential node operators to fill out applications and demonstrate their competence, while the fundamentalist Cyberchurch did not hesitate to deny or dismiss any off-topic or “heathen” nodes. Likewise, because of its localized nature and community that developed as a result, interest in MAGNet likely did not exist far outside the greater Memphis area. Although

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<sup>62</sup> Troy Davis, interview by author, tape recording, Memphis, Tennessee, 15 May 2002.

<sup>63</sup> Einstein [pseud.], interview by author, tape recording, Memphis, Tennessee, 1 May 2002.

countless local, regional and topical networks existed, one such network transcended its regional boundaries and became the de facto official network of the BBS community:

FidoNet.

Tom Jennings dialed into his first BBS in 1976. Although living in San Francisco, Jennings often called as far away as Chicago using a 300 bps acoustic modem. In 1984, he wrote his own BBS software, which he called Fido, and shortly thereafter, he began FidoNet.<sup>64</sup> Despite humble beginnings, it became the largest privately owned computer network in the world and, at its peak, connected 38,000 individual BBSes.<sup>65</sup>

FidoNet started with two nodes, Jennings's in San Francisco and one in Baltimore, run by John Madill. Initially, the only reason for the creation of FidoNet was the spirit of exploration and "the fun of it." Later, however, the practical use of FidoNet became readily apparent, as the two distant friends exchanged messages cheaply, easily and without regard to time zone differences. The use of FidoNet between the two became "more or less routine."<sup>66</sup> In June of 1984, FidoNet consisted of less than two-dozen nodes and was easily handled by primitive software and networking. By August, the number of nodes had grown closer to thirty. After three months, the nodelist numbered fifty, and message distribution became much more complicated. For example, with no way of automating or validating new members, systems dialed wrong numbers frequently. Because most FidoNet traffic happened at four in the morning, and because FidoNet typically tried an unresponsive number every twenty seconds until success, a

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<sup>64</sup> Tom Jennings, "Fido and FidoNet." [<http://www.wps.com/FidoNet/index.html>]. (17 December 2002).

<sup>65</sup> ---, "Fidonet." [<http://www.hyperdictionary.com/dictionary/Fidonet>] (17 December 2002).

<sup>66</sup> Tom Jennings, "Fidonet History and Operation." [<http://winramturbo.com/fidochron/history/fidohst1.txt>]. (17 December 2002).

wrong number easily disrupted not only the network, but also the everyday lives of uninvolved individuals forced to cope with hundreds of late night phone calls.<sup>67</sup>

Also, as the nodelist began to grow and become more regionally diverse, the feasibility of a centralized message clearinghouse declined. In an effort to streamline message distribution, as well as minimize phone costs, Jennings and several FidoNet associates in St. Louis worked together to institute a routing procedure. FidoNet quickly spilled outside the United States into Canada, and from there, FidoNet nodes cropped up all over the globe. The initial, sequential numbering sequence for nodes no longer fit the needs of a large, robust network. In fact, the massive size of FidoNet (160 nodes by 1985) meant that not only did it require a more efficient organizing sequence, but also a more efficient means of administration.

The standard that FidoNet eventually adopted split the world into six zones: 1 for the United States and Canada, 2 for Europe and the Soviet Union (later Zone 2 became Europe, Russia and the former Soviet Republics), 3 for Australia and New Zealand, 4 for Latin America, 5 for Africa and 6 for Asia. Zones were further broken down into nets, and nets were made up of individual nodes. Later, Fidonet added “regions” to the scheme, although they never showed up in FidoNet addresses. Multi-line BBSes were given multiple points, each point representing a system tied to a node and not reachable by FidoNet.<sup>68</sup> For example, the FidoNet address “1:123/8” would be located in the North American zone, in the southeastern net (123). Node 8 indicates the BBS itself, in this case Crystal Clear Ideas, one of the largest BBSes in Memphis.

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<sup>67</sup> Ibid.

<sup>68</sup> BBS Corner, “The Fidonet BBS Network.” [<http://www.dmine.com/bbscorner/fidonet.htm>]. (17 December 2002).

Jennings and the other FidoNet developers supplemented this simple addressing scheme with a simple organizational hierarchy. In 1986, Jennings began using avowedly anarchist principles to guide FidoNet, attempting to make it local, self-organizing, completely lacking in hierarchy, and able to communicate around problems of accident or design. This attempt, although largely successful, came after the new addressing scheme, and some aspects of FidoNet management clashed with these principles. One such aspect, the inherent hierarchy of the regions and their coordinators, later raised Jennings's ire.<sup>69</sup> The final power structure was neither democratic nor anarchic, but a hybrid of representative democracy and autocracy.<sup>70</sup>

Despite the seemingly draconian system of running FidoNet, regular newsletters and the close-knit nature of local BBS communities allowed it to remain very laid back and generally democratic. In 1986, however, some problems arose when FidoNet incorporated as a non-profit group, the International FidoNet Association, or INFA.<sup>71</sup> The INFA sought to promote telecommunication and promote interest in computers. Many members of FidoNet, however, disliked the idea of an "official" organ of FidoNet, resulting in a protracted and heated exchange between the two camps. The exchange eventually caused so much friction that the board of directors of the IFNA held a FidoNet referendum about the future of the IFNA. If the measure passed, then the IFNA would become the official organ of FidoNet; if it failed, the IFNA would be abolished. In

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<sup>69</sup> Jennings, "Fido and FidoNet." [<http://www.wps.com/FidoNet/index.html>]. (17 December 2002).

<sup>70</sup> ---, "Who's Fido?" [<http://www.fanciful.org/bbs-promotion/how-to-bbs/fido.htm>]. (17 December 2002).

<sup>71</sup> International Fidonet Association, "Articles of Association." [<http://winramturbo.com/fidochron/history/ifna-articles.txt>]. (17 December 2002).

addition, the board of directors required that the measure win a majority of all nodes, not just a majority of respondents.<sup>72</sup>

Voters scrutinized this election as much as any political race. Users leveled charges of vote tampering, causing one national coordinator to resign and leave the network for “personal and economic reasons.”<sup>73</sup> Despite the seemingly simple nature of the referendum, opponents claimed that “a YES vote is a vote to take over and control Fidonet,” while supporters countered that “a NO vote is a vote against democracy.”<sup>74</sup> In the end, on December 1, 1989, apathy won the day. Although the majority of respondents voted to keep the IFNA, the majority of eligible voters abstained, thus forcing the dissolution of the INFA.<sup>75</sup> On January 27, 1990, the INFA board of directors voted unanimously to dissolve the organization, although several members, including Tom Jennings, “reserve[d] the right to claim that the meeting was improperly conducted.”<sup>76</sup> FidoNet continued to grow and expand without the aegis of nonprofit status, reaching its apex in the mid-1990s with over 38,000 nodes.

While FidoNet and hobbyist BBSes grew, so too did their illicit counterparts. A thriving underground community became similarly networked, using BBSes to exchange credit card numbers, pirated files, and other prohibited wares. However, although cooperation generally characterized FidoNet, rivalry – sometimes good-natured but often

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<sup>72</sup> John Roberts, “FidoNews 7-01” [<http://www.textfiles.com/bbs/FIDONET/FIDONEWS/fido0701.nws>]. (17 December 2002).

<sup>73</sup> ----, “International Fidonet Association Newsletter.” [<http://www.was-ist-fido.de/doks/fnews/fido648.txt>] (18 December 2002).

<sup>74</sup> Ibid

<sup>75</sup> Karl Schinke, “Fidonews 7-02” [<http://195.226.109.55/jhassler/wif/doks/fnews/fido702.txt>] (18 December 2002).

<sup>76</sup> International Fidonet Association, “Minutes of the Board of Directors” [<http://www.was-ist-fido.de/doks/fnews/fido706.txt>]. (18 December 2002).



bitter – characterized the computer underground. Small groups dedicated to “cracking” copy protection on software, phreaking, virus writing and other specialized talents formed. Rarely did rival groups cooperate. In fact, the underground perpetually fought a two front war. In addition to constantly being on guard from rival’s attacks, from verbal taunts to “crashing” boards, members of the scene were required to be constantly vigilant to prevent being nabbed by the authorities. Various state and federal authorities conducted raids and sting operations throughout the 1980s, although the overall impact in stemming the tide of piracy, wire fraud, and credit card fraud was minimal. By the 1990s, false BBSes and minor stings began to be replaced with high-profile, sweeping crackdowns, of which the Operation Sundevil in 1990 was likely the most famous.

On May 8, 1990, the U.S. Attorney’s Office in Phoenix, Arizona circulated a press release announcing a large crackdown, named “Operation Sundevil” after the Arizona State University mascot. Authorities issued twenty-seven search warrants in thirteen cities, resulting in four arrests by 150 Secret Service agents and the seizure of 23,000 computer discs.<sup>77</sup> The government intended Sundevil to send a message to hackers, namely, that they could not take refuge behind the “relative anonymity of their computer terminals.”<sup>78</sup> Although members of the underground always regarded the legal powers of the government with a fearful respect, Sundevil did little to increase that anxiety. Unfortunately for the government, Sundevil only resulted in only one indictment and sent the message that the United States government understood little, if anything, about the problem it was attempting to combat.

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<sup>77</sup> Bruce Esquibel, “—‘Operation Sundevil’ is finally over for Dr. Ripco.” [http://www.eff.org/Legal/Cases/SJG/ripco\_case\_closed.article]. (18 December 2002).

<sup>78</sup> The Prodigy [pseud.], “Operation Sundevil.” [http://www.hackcanada.com/blackcrawl/general/sundevil.txt]. (18 December 2002).

In addition, Sundevil targeted many legitimate BBSes. Although authorities intended Sundevil to intimidate underground users, the high number of public domain BBSes seized and the small number of prosecutions had little effect on the underground scene, while mobilizing the BBS community against government meddling in cyberspace. The government was increasingly viewed as the enemy, a behemoth that attempted to regulate and control an entity it did not comprehend through knee-jerk reactions and legislation, further cementing a feeling of “us versus them” solidarity among users. It also meant that users began to feel that their culture, and the spaces – virtual and otherwise – where they interacted were under a constant state of siege by uncomprehending and unsympathetic authorities.

Among the computers seized by the Secret Service was Ripco BBS, one of the largest public domain BBSes in the Chicago area. Callers to Ripco on May 8 did not receive the usual connect tones but rather a voice message that indicated that Ripco BBS “was confiscated on that morning,” and that “it is unlikely that the system will ever return.”<sup>79</sup> Outrage tinged with fear rapidly spread through the BBS community. Although Dr. Ripco’s dire prediction of his BBS’s permanent demise turned out to be false the raid highlighted the acute powerlessness of the BBS community to defend itself. The case never went to trial, and Dr. Ripco, the SysOp of Ripco BBS, meekly accepted his computer hardware back, although the government wiped away all traces of the original BBS.<sup>80</sup>

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<sup>79</sup> Esquibel, “Operation Sundevil” [[http://www.eff.org/Legal/Cases/SJG/ripco\\_case\\_closed.article](http://www.eff.org/Legal/Cases/SJG/ripco_case_closed.article)]. (18 December 2002).

<sup>80</sup> Ibid.

The authorities also seized Illuminati BBS, run by Steve Jackson Games. Jackson posted excerpts from a role-playing game, GURPS Cyberpunk, on the BBS for download. The authorities, assuming the excerpts described actual methods of committing piracy and fraud, confiscated virtually all computer equipment from the company, as well as that owned by the author of GURPS Cyberpunk on March 1, 1990. According to Jackson, the Secret Service “seemed to make no distinction between a discussion of futuristic credit fraud, using equipment that doesn't exist, and modern real-life credit card abuse.”<sup>81</sup>

The raid almost forced Steve Jackson Games into bankruptcy, because the government confiscated many systems required for the day-to-day operation of SJG. Four months later, when the government returned the hardware, it was virtually useless, because agents wiped much of the information from the hard drives and caused a great deal of physical damage to the computers themselves. Luckily for SJG, several concerned computer professionals formed the Electronic Frontier Foundation in 1990, dedicated to preserving civil liberties in cyberspace. With the aid of the EFF, Steve Jackson filed a lawsuit against the Secret Service and, at the conclusion of Steve Jackson Games vs. The United States Secret Service (1993), a federal judge ruled that Steve Jackson Games lost \$100,617.00 in damages and a profit loss of \$42,259.00.<sup>82</sup> Despite the vindication of Steve Jackson Games, a sense of fear filled the BBS community as many began to believe that even unknown or tangential affiliation with illegal activities could lead to arrest and seizure of equipment.

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<sup>81</sup> Steve Jackson Games, “SJ Games vs. the Secret Service.” [<http://www.sjgames.com/SS/>]. (18 December 2002).

<sup>82</sup> Sam Sparks, “Judge’s Decision in SJ Games vs. Secret Service.” [<http://www.sjgames.com/SS/decision-text.html>]. (18 December 2002).

BBS users felt a heightened sense of anxiety as local municipalities began to crack down on BBS violations of “community standards.” The highest profile example came to be known as the “Amateur Action Case.” Robert and Carleen Thomas of Milpitas, California, ran the Amateur Action BBS, billed as “the nastiest place on earth,” named thus for its extensive collection of hard-core fetish pornography.<sup>83</sup> In 1991 and 1992, the San Jose and Santa Clara County police departments investigated Amateur Action and decided that they were operating in a legal manner.<sup>84</sup> In 1994, however, the Thomases were convicted in Memphis, Tennessee on one count of conspiracy and nine counts of transporting obscenity interstate.<sup>85</sup>

Under the Miller v. California (1972) decision, the U.S. Supreme Court decided that material was obscene if it violated “community standards,” even if the material came from outside the prosecuting state’s jurisdiction. However, the Thomases were convicted not only for sending pornography by mail, which Miller explicitly addresses, but also over the phone line. If the courts decided that the Miller decision applied to materials transported digitally, then SysOps could be held liable for materials downloaded by users in other states, even if they could have no reasonable way to determine the location of their users.<sup>86</sup> New definitions of “community,” including “virtual” communities such as The WELL, Prodigy and CompuServe further muddied the waters of the 1972 community standards ruling. Despite efforts by the EFF and the Thomases, the Sixth Circuit Court of Appeals upheld the ruling, and on Friday, December 2, 1994, ordered

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<sup>83</sup> Chris Conley, “Calif. Couple Gets Prison For Computer Porn Relayed Here.” The Commercial Appeal. 3 December 1984, A1.

<sup>84</sup> David Loundy, “Whose Standards? Whose Community?” [http://www.loundy.com/CDLB/AABBS.html]. (18 December 2002).

<sup>85</sup> Conley, “Computer Porn,” A1.

<sup>86</sup> Mike Godwin, “The Long Arm of the Law.” Internet World. March 1995, 78.

Robert Thomas to serve the maximum sentence of 37 months, and Carleen to serve the minimum.<sup>87</sup>

Developments such as these served to draw BBS users closer together. The BBS scene, overall, included pornographers, phreakers, hobbyists, teenagers interested in chatting, adults interested in play and conversation, and a host of divergent and often conflicting interests. What unified this patchwork community, however, was a fierce protectiveness towards the unique, and seemingly fragile, new frontier.

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<sup>87</sup> Chris Conley, "Porn." The Commercial Appeal. 3 December 1984, A7.

## Chapter Two Asynchronous Adults

*They're all just a bunch of names in a box  
Some SYT's and a few old crocks  
Swappin' lies and tellin' tales  
Trying to make light of life's travails*

*Doctors, lawyers, ranchers and raunch.  
Typin' with keyboard planted on paunch  
Conjuring images of far away places  
Of names and of lives without any faces.*

*Businessman, bumpkin, housewife and harlot  
All trying their damndest to be someone they're not  
Alter ego's express life's wildest ambitions  
And tell the whole world in daily transmissions*

*Bills and bad news won't come with this mail  
Just laughter and daydreams and talk of wassail  
Long lines of crap, and a red rose or two  
Will, at one time or another, grace this milieu*

*Talk about tube tops, of leather and lace  
Of bracelets and bondage are quite commonplace  
Spike heels and whips and the odd frying pan  
Cavorting and conniving are part of this clan*

*Affairs of the mind are always the best  
No chance of failure on the Wasserman test  
So tickle my keys and steam up my screen  
And hope that the Pooh bah won't intervene*

*Give us a line, the whole ball of wax  
A day without RIME is an anticlimax  
From the tubby old wag to the leather bound fox  
Uplinkers all you're a bunch of great FLOKS.<sup>88</sup>*

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<sup>88</sup> Dave Whittington, "Ada in charge," <Uplink>, 21 March 1994.

Those who took part in BBS culture shared common traits, appreciations, and feelings of protectiveness towards their online home, but the BBS culture consisted of a patchwork of different groups and interests. Sometimes these groups interacted amiably, sometimes they did so with an air of hostility. Much of an individual's early online experience consisted of finding a BBS where her or she felt most comfortable. In 1982, when even the largest cities had only a dozen BBSes and the entire nation had less than five thousand, common interest in computers served as the major draw.<sup>89</sup> By 1992, over 50,000 BBSes serving ten million users operated nationwide.<sup>90</sup> With this increase in users came an increase in fragmentation, as users became more discriminating in choosing associations.

Although many BBSes centered on themes such as religion, technical discussion, or common interests, these divisions were secondary at best. As communities began to form amidst BBS culture, the primary dividing line seems to have centered on age, despite the presumed ability of CMC to mask such information. Although no doubt some examples exist to the contrary, the two groups studied in this work formed around age first and common interest second. One group of like-minded adults, Uplink, serves as a good focus for analysis based on its sense of solidarity, the existence of relatively large caches of archival material, and the length of the lifespan of the conference. The distribution of Uplink followed a relay system to that used by its larger peer, FidoNet. Although not based in Memphis initially, Uplink quickly developed a strong local following there through an active BBS scene and word of mouth. This unusually strong

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<sup>89</sup> Judith Berck, "It's No Longer Just Techno-Hobbyists Who Meet by Modem." The New York Times, 19 July 1992, 12.

<sup>90</sup> Ibid.

local presence made Uplink a creature both of Memphis and apart from it. Memphis “flocks,” as Uplink members often referred to themselves, formed a distinct and lively community that thrived for over five years, before the prevalence of the Internet forced the group to reevaluate itself.

At its heart, Uplink possessed no unifying theme or central topic. Although all were welcome, the echo primarily appealed to middle-aged users. In addition, those who “just wanted company dropped out pretty quick.” Thus, the average Uplink user dedicated a great deal of time and effort to community discussion.<sup>91</sup> Members exchanged wit and wisdom, discussing the trivialities of day-to-day life along with designing elaborate stories, puns, and poetry. “The messaging that went back and forth,” one user said, “was not just messaging, it was more wit. It was imagination.”<sup>92</sup> Another summed Uplink up more succinctly: “they were nuts.”<sup>93</sup> Although ‘plinkers, as they called themselves, might debate the purpose and spirit of their echo, few if any would consider it anything other than a community. As Debi Smith, one Uplink regular, commented, “Like Oz, it can be whatever you need it to be yet never more than it is.”<sup>94</sup>

And, much like Oz, Uplink existed in a space both tangible and intangible. Despite the nebulosity of individual definitions of community, a spatial requirement is of paramount importance to most every definition. The BBS community relied on space no less than did that of their real-world counterparts. This understanding, seemingly at odds with a community that interacted in a “virtual” world, requires a different and possibly non-intuitive understanding of the concepts of “space” and “place.” Historians

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<sup>91</sup> Susan Brooks, interview by author, tape recording, Memphis, Tennessee, 20 May 2002.

<sup>92</sup> Ibid.

<sup>93</sup> Susan Forbess, interview by author, tape recording, Memphis, Tennessee, 9 May 2002.

<sup>94</sup> Susan Brooks, “Bare truth,” <Uplink>, 30 July 1992.



must expand upon or discard notions of place wedded entirely to geography. Once a broader understanding of these concepts is in place, acceptance of communities existing inside “virtual” spaces seems feasible.

Most discussions of online community use the term “Virtual Communities,” coined by Howard Rheingold in his work of the same name.<sup>95</sup> However, this term is faulty, because “virtual” brings to mind “illusory.” Stephen G. Jones, who specializes in the study of media cultures, leveled a similar criticism, decrying the “all-too-brief” examinations into CMC for missing the “concomitant conceptualization of space and the social” and too often emphasizing “territory at the expense of culture.”<sup>96</sup> Jones, much like Bender, argued that communities were not places, but social networks and so emphasis should be placed on interactions instead of territory.<sup>97</sup> Thus, these interactions do occur in a place that is both real and virtual simultaneously. Used in this context, real and virtual are not a value judgments, but rather simple distinctions. “Real” categorizes the physical and tangible, while “virtual” represents the non-physical and intangible. This understanding is crucial to decoding the language used by BBSers, who often refer to face-to-face meetings as taking place in “real life.” Such terminology exists only as a method of distinction between the physical world and the non-physical one, not as a means to denigrate “virtual” interaction.

Thus, virtual space is just as “real” as real space, and just as important to CMC interaction. According to Jones, “cyberspace hasn’t a ‘where’ . . . rather, the space of cyberspace is predicated on knowledge and information, on the common beliefs and

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<sup>95</sup> Rheingold, *The Virtual Community*, 2-3.

<sup>96</sup> Steven G. Jones, “Information, Internet and Community,” in *Cybersociety 2.0* ed. Steven G. Jones, (Thousand Oaks, CA: SAGE Publications, 1998), 20.

<sup>97</sup> *Ibid.*

practices of a society abstracted from physical space.”<sup>98</sup> Despite such claims, total dismissal of place as worthy of discussion is a grievous error. A concept of space and place, even intangible ones, are crucial for community building. Rheingold commented on the importance of conceptualized space to virtual communities, saying, “spatial imagery and a sense of place help convey the experience of dwelling in a virtual community.”<sup>99</sup> In order to modify ingrained understandings, scholars must revisit and reevaluate current notions of place built largely upon classical philosophy.

Place is generally thought of in terms of physical location. The Eiffel Tower, the city of Paris, or the nation of France all exist in a “real” space. “Place,” like “love” and “obscenity” are traditionally difficult to define. To an Aristotelian, a place is a container devoid of bias and emotion into which the contents of an individual’s experience are placed.<sup>100</sup> To a Platonist, place is a more active receptacle that interacts with its contents.<sup>101</sup> Perhaps this is only the difference between a “house” and a “home,” but “home” is no longer associated solely with the physical plane.

One might argue, for example, that a web-based homepage exists in many “places” at once. The data that makes up the web page exists on a server. The location of that server could very well be unknown, even to the owner of the webpage itself. Viewing the web page also causes much of its contents to be stored, temporarily or permanently, on the client system. A web homepage is also an address that makes it possible for a user to access an active web page from any computer connected to the

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<sup>98</sup> Ibid, 15.

<sup>99</sup> Rheingold, *Virtual Communities*, 6.

<sup>100</sup> Jones, “Information, Internet and Community,” 20.

<sup>101</sup> Eugene Victor Walter, *Placeways: A Theory of the Human Environment*. (Chapel Hill, NC: The University of North Carolina Press), 13.

Internet. It is even possible to download some web pages into portable devices and transport them at will. Thus, a web page exists in multiple places and forms simultaneously.

Sociologist E. V. Walter tackled the changing nature of places in Placeways: A Theory of the Human Environment (1988). In this monograph, Walter argues that current concepts of space rely too heavily on models and formulae which act to separate the place itself from the experiences of the place. Walter's writes that "a place has no feelings apart from human experience there," and that a place is "a unity of experience."<sup>102</sup> This topistic mode of thought, as he calls it, stresses the importance of experience to the making of places.

By this definition, the above example of the webpage exists primarily in the *experience* of the web's viewers, not on any individual device or storage location. In addition, the participant does not get to know this "place" by visiting and reading its contents, but by participating "in the local imagination."<sup>103</sup> Frontier metaphors permeate much of the imagination of the Internet. "Cybersquatting" and "homesteading," for example, find their origins in current day understandings of the pioneer experience of the American West, as do the concepts of "White Hat" and "Black Hat" hackers.

Scholars and non-scholars alike often use frontier metaphors as throwaway terms for "progress." In some cases, and particularly in the case of the Internet, people use the term to give the impression of decentralization and lawlessness, as well as evoking the idea of a blank slate waiting to be built upon. Naturally, such concepts of the frontier are

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<sup>102</sup> Ibid, 21-23.

<sup>103</sup> Ibid, 2.

ahistorical in the extreme. Richard White, in his essay “Fredrick Jackson Turner and Buffalo Bill,” argues that such a view stems largely from the still-widespread popular acceptance of the Turner thesis, which portrays the frontier as a largely empty space waiting to be tamed by pioneers.<sup>104</sup> Patricia Nelson Limerick also believes that “a positive image of the frontier and the pioneer is now implanted in nearly everyone’s mind.”<sup>105</sup> Commentators and users both viewed the new world of CMC in this common, ahistorical understanding of the frontier, as did journalists and writers of Science Fiction.

William Gibson’s novel Neuromancer, a seminal work of science fiction that spawned an entire genre known as “cyberpunk,” pushed Wild West analogies further into the mainstream of computer jargon. Hackers, described as “cowboys,” engage in illicit operations in a full immersion computer network and “consensual hallucination” known as the matrix.<sup>106</sup> The matrix is its own kind of space, existing in a worldwide network of optical fibers and accessible only to those with special equipment. Although far from fully immersive, the Internet and the BBSes were no less a “consensual hallucination.”

One user described using the BBSes in similar terms, commenting:

I rarely thought about the fact that the conversations I was having with others were taking place in my room, in other people's rooms, and in a closet hidden behind a wardrobe in someone else's house. To me, the place was almost visualized as being something like a bar, or a blank slate on which we interacted with each other.<sup>107</sup>

Many equate “the Web” with “the Internet,” but the total online experience consists of the World Wide Web and a host of other applications. Millions converse each

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<sup>104</sup> Richard White, “Fredrick Jackson Turner and Buffalo Bill,” in The Frontier in American Culture, ed. James R. Grossman. (Berkeley: University of California Press, 1994), 15.

<sup>105</sup> Patricia Nelson Limerick, “The Adventures of the Frontier in the Twentieth Century,” in The Frontier in American Culture, ed. James R. Grossman. (Berkeley: University of California Press, 1994), 93.

<sup>106</sup> William Gibson, Neuromancer. (New York: Ace Science Fiction Books, 1984), 5.

<sup>107</sup> Preston Simpson, no subject, personal email. 30 December 2002.

day in real time using Internet Relay Chat and any one of a number of “Instant Messenger” products. Email races back and forth in volumes that stagger the imagination, while many people use software to access virtual universes called Multi User Dungeons, or MUDs. The totality of these methods of interaction, then, combine to create the “Information Superhighway,” a place that is of the physical world yet distinctly separate from it.

Because the topography of virtual space exists almost entirely in the mind, “where” one is at any given moment is highly fluid. Many SysOps constructed their BBSes around themes that often nudged a user’s mental picture in certain directions. The Neutral Zone and the Klingon Empire, for instance, evoked the myriad universe of Star Trek novels, movies and, television shows, while Jon Cook designed Lone\*Star BBS with a Wild West flair.<sup>108</sup> Specialty local message bases, as opposed to regional or national echo conferences, often reinforced these crafted images. Even boards with more neutral concepts, such as Mr. Zip and Crystal Clear Ideas, possessed unique qualities and quirks that served to construct a virtual meeting place. However, online interaction occurred not only in a space that was inherently mutable, but also in a chronology that was inherently nonlinear.

Scholars must subtly reword current notions of community in order to produce meaningful insights into the effect of computer-mediated communication. Sociologists Barry Wellman and Milena Guila have commented, “Pundits write as if people had never

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<sup>108</sup> BBSMates, “901 Area Code BBS List,” [http://www.bbsmates.com/browsebbs.asp?name=&sysop=&software=&city=&state=&country=&zipcode=&areacode=901&prefix=&from=1&to=20&sort=BBSName&order=asc]. (18 December 2002).

worried about community before the Internet arose.”<sup>109</sup> Sociologists have begun to revisit the notion of community, expanding it beyond traditional, place-oriented definitions. Because “cars, planes and phones can maintain relationships over close distances . . . communities do not have to be solitary groups of densely knit neighbors.”<sup>110</sup>

Some historians have already begun to make this leap of logic outside the realm of CMC. For example, Benedict Anderson, in his exploration of nationalism, Imagined Communities (1991), argues that all communities beyond face-to-face interaction are imagined.<sup>111</sup> Although Benedict uses this argument in a context far removed from CMC, its implications there are obvious. If Anderson is correct, then one should not view CMC communities in terms of reality or illusion. Rather, scholars should focus on “the style in which [communities] are imagined.”<sup>112</sup>

Because of the relative newness of CMC, most contemporary discussions of online communities are ahistorical at best and totally devoid of scholarly merit at worst. Currently, marketing departments worldwide have co-opted the term “online community” as a buzzword for niche promotion. Rheingold considered virtual communities to be a place where individuals shape their own communities by acts of conscious choice.<sup>113</sup> However, the term “online community” currently is used primarily in business contexts. By 1995, online community became “a synonym for new strategies of interactive

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<sup>109</sup> Wellman and Guila, “Virtual Communities as Communities,” 169.

<sup>110</sup> Ibid.

<sup>111</sup> Anderson, Imagined Communities, 6.

<sup>112</sup> Ibid.

<sup>113</sup> Rheingold, The Virtual Community, 68-69 and 145-148.

marketing” and by 1997, it was “depicted as central to models of commercial Internet development.”<sup>114</sup>

The view of community as a “polite way of talking about audience, consumer demographics, and market segmentation” acts as a corrupting influence on the notion of online communities.<sup>115</sup> Many, in fact, argue that the formation of online communities is all but impossible, instead ascribing the term “pseudo-communities” to these groupings. Such critics contend, “A community is bound by place” and is not “something you can easily join. . .It must be lived. It is entwined, contradictory and involves all our senses.”<sup>116</sup> This idea stems primarily from a faulty understanding of the nature of “place,” assuming that “place” must exist wholly in the world of physical experience.

The users of Uplink, however, would probably take issue with such a dismissal of their group as a fantasy. “It became a family,” one user commented, pointing out the numerous real world experiences that intersected with Uplink.<sup>117</sup> Although Uplink was “nothing really. . .just people shooting the bull all the time,” it intersected with users’ lives in a real and meaningful way.<sup>118</sup> When one member lost his son in a drowning accident, “everyone gathered around him and sent him messages.” In addition, “there were two or three divorces, two or three marriages.”<sup>119</sup> One of these marriages occurred between two users of Uplink, who met and fell in love over the echo.

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<sup>114</sup> Chris Werry, “Imagined Electronic Community: Representations of Online Community in Business Texts,” in Online Communities: Commerce, Community Action, and the Virtual University eds. Chris Werry and Miranda Mowbray. (Upper Saddle River: Prentice Hall, 2000), 3.

<sup>115</sup> Ibid, 11.

<sup>116</sup> Nancy K. Baym, “The Emergence of On-Line Community,” in Cybersociety 2.0: Revisiting Computer-Mediated Communication and Community, ed Steven G. Jones. (Thousand Oaks: SAGE Publications, 1998) , 37.

<sup>117</sup> Brooks, interview.

<sup>118</sup> Forbess, interview.

<sup>119</sup> Brooks, interview.

This “place” called Uplink offered new avenues to explore and a wilderness of new ideas to explore and tame. ‘Plinkers knew only what you were willing to share and, although they shared a massive amount, users still had the option of reinventing themselves in whole or in part. The ability to experiment with self in a way that did not conflict with daily, “real life” expectations allowed users to access aspects of personality otherwise closed off by social mores or personal prohibitions. All of this occurred not only in a new kind of space, but also with a new understanding of time.

Online interaction occurs in one of two ways: synchronous and asynchronous. With synchronous communication, users read and respond to each other in real time. On the other hand, with asynchronous communication, users read and respond to each other at different times.<sup>120</sup> Some scholars have further divided online temporal structure into subcategories: groups that meet only once for a limited time (synchronous or asynchronous), groups that carry on a series of messages (synchronous or asynchronous) and, finally, continual asynchronistic meeting over an extended time.<sup>121</sup>

Because the majority of BBSes were only one node, synchronous conversation with anyone other than the Sysop was impossible. Thus, continual, asynchronous communication was the order of the day. Messages went back and forth regularly, users replying to each other whenever whimsy or ability required. Message bases, often called special interest groups (SIGs) or forums, typically kept an archive stretching back anywhere from a week to six months. Because of the limited and expensive nature of storage space through the 1980s and early 1990s, the average BBS only kept messages

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<sup>120</sup> Baym, “Emergence of On-Line Community,” 43.

<sup>121</sup> Ibid, 43.



active for about thirty days, the default for many BBS software packages. Naturally, boards that leaned towards software distribution had smaller message bases with shorter archives, while those that eschewed file sharing for messages and games kept longer ones.

These archives meant that a conversation never actually “died” until it was removed from the system. Messages generated commentary months after their original posting with one simple reply, even after long periods of dormancy. Stephen Jones has commented on how the “instantaneity of CMC” and the ability to “roam the net” and interact using specialized software serves to problematize temporality.<sup>122</sup> For example, if a new member of a BBS stumbled across a long dormant message, it is still new to him or her. Even though the original temporal context might be lost, the user infused the message with his or her own context. In addition, this shifting temporality prevents conversations from becoming “stale,” as they are always viewable in a current context. This problem categorizing temporality existed also in the BBS environment. Troy Davis, long-time user of the BBS Artificial Reality, has observed that BBSes allowed users to “remove time as a factor altogether,” causing a “time shift” that negated the problem of attempting to rectify conflicting schedules.<sup>123</sup>

Asynchronous communication also allowed for more thoughtful and coherent posts than synchronous “chatting.” Susan Brooks, a regular in the national echo Uplink, commented that messages were “very fast paced” and “scribed almost constantly.” Despite this frenetic pace, the time displacement inherent to asynchronous

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<sup>122</sup> Jones, “Information, Internet and Community,” 12-13

<sup>123</sup> Davis, interview.

communication allowed her to type messages at her own pace, revising and editing to achieve the desired effect. Brooks continued, “I had a thesaurus by me. Dictionaries, encyclopedias, atlases. They all just kept sitting by the table.”<sup>124</sup> This devotion to detail, and the grammatical expectations that came with it, would be impossible to maintain with synchronous communication.

As multi-line, real time chat boards rose to prominence in the early 1990s, synchronous communication began to dominate online discussion. Susan Forbess highlighted the distinction, commenting, “People didn’t go there to leave messages, they went there to chat.”<sup>125</sup> Brooks mirrored Forbess’s thoughts when she said that the rise of the Internet led to a desire for “instant gratification.” Brooks claimed that this desire, made more acute by the rapid pace of information transmission on the Internet, caused users to be unwilling to wait for the slow and cumbersome relay method of transmission used by BBSes.<sup>126</sup>

In addition to building communally a virtual meeting place to interact, users also built a virtual self. The aegis of anonymity, partial or total, provided by online interaction allowed a fluidity of persona as well as nonlinear time and space. To BBS users, building alter egos, sometimes accompanied by pictures or icons known as avatars, had paramount importance. The removal of physical expectations, at least initially, allowed users to build themselves anew, emphasizing some qualities and downplaying others. It also allowed a greater deal of experimentation and role-playing, where users stepped into and out of alternate characters at will. Despite the ability to craft false or

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<sup>124</sup> Brooks, interview.

<sup>125</sup> Forbess, interview.

<sup>126</sup> Brooks, interview.

misleading identities, few did so. Generally, the online persona represented one's idealized perception of self, referred to in this work as "anima."<sup>127</sup>

Individuals met in "real life," as well as those encountered in novels, are generally said to "have" personalities. On the other hand, many researchers interested in online personas use the term "created" to describe the origin of personality. Many studies that concentrate on anonymity focus on individuals using the Internet as a tool for artifice and identity experimentation. Nancy Baym, well known for her studies of Usenet, argued that online "identities are actively and collaboratively created by participants through communicative practice."<sup>128</sup>

The first, simplest, and possibly most important aspect of crafting an online identity is the choice of a name. Even in the many cases where a BBS required the use of real names, a good deal of name manipulation occurred. In the case of Uplink, which required real names, the community created and gave handles to individuals.<sup>129</sup> Users generally had multiple handles, which they incorporated into message bodies depending on the discussion landscape that, in the case of Uplink, changed regularly. For example, Members of Uplink referred to Susan Brooks as "The Teach" when using her "actual" persona, and then used "Sweet Southern Belle" to signal a slight change of character.<sup>130</sup> A similar system holds true on the more close-knit Usenet newsgroups.<sup>131</sup>

Meyers, a sociologist who studied BBSes, wrote that names become "transformed into trademarks . . . by which . . . users are recognized as either friends or enemies within

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<sup>127</sup> Baym, "Emergence of On-Line Community," 55.

<sup>128</sup> Ibid, 54.

<sup>129</sup> Brooks, interview.

<sup>130</sup> Nancy Cherry, "New Here," <Uplink>, 5 July 1992.

<sup>131</sup> Baym, "Emergence of On-Line Community," 54.

an otherwise vague and anonymous BBS communication environment.”<sup>132</sup> A choice of handle serves not only to distinguish one from the masses, but also to disclose aspects of self to the group. The handle “Neuromancer” would hint that he or she is a fan of the Gibson novel of the same name. Because of the lack of verbal and physical cues, users often were forced to extrapolate information through deductive reasoning.

For example, the user Neuromancer would likely be a fan of science fiction in general, since few readers not interested in that genre would be familiar with Neuromancer, much less choose it as a way to present themselves to “the world.” Because this user is interested in cyberpunk, and frequents the BBSes, he or she is more interested in computers than the average person. In addition, the already demonstrated familiarity with somewhat obscure science fiction indicates the user probably reads more than the average person. Finally, because most BBS users were male and, more simply, the fact that the main character in Neuromancer was a male, leads to the reasonable assumption that the Neuromancer persona is also male. A user would then interact with Neuromancer not only to test the above hypothesis, but also to further flesh out the details of Neuromancer’s persona.

Moderators and SysOps who allow handles as the primary, or even the exclusive, means of identity labeling necessarily open their systems up to obfuscation and deception. The use of real names lessened the potential for beguilement greatly. Uplink, as an especially close grouping, was all but immune to acts of chicanery. As one Uplink

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<sup>132</sup> David Myers, “‘Anonymity is Part of the Magic’: Individual Manipulation of Computer-Mediated Communication Contexts.” Qualitative Sociology 10, Fall 1987, 256.

user commented, “After so many years, you couldn’t have a front that long.”<sup>133</sup> In addition, the requirement of using one’s real name “kept things more real,” because “you didn’t have anyone to hide behind besides your own name.”<sup>134</sup> The subterfuge that did exist came in the form of lighthearted role-playing, rather than malicious intent to defraud.

After a place to meet is found and stocked with individuals to meet there, the business of community formation can begin in earnest. Robin Hamman, founder of digitalartisans.org, conducted a study of AOL users that indicated that users “first obtain an AOL account to conduct research and to communicate with people from their preexisting network communities.”<sup>135</sup> According to this study, which consisted of just over 100 users, not a single user responded that he or she joined AOL with the intention of forming new friendships.<sup>136</sup> In the current day, when two thirds of Americans are connected to the Internet, the idea that users connect to be close to those they already know is unsurprising. The majority of those who connected to the BBSes, however, did not join with goals similar to those shown in the above study.

Most BBSers initially got online out of a mix of boredom and technophilia. Those who had personal computers initially thought of them as a tool for personal productivity, not as a tool for interpersonal communication. Carlton Smith, the SysOp of one of the largest boards in Memphis, with a database of over 9000 Memphians, admitted that he decided to purchase a computer “just to have fun and learn about the world of

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<sup>133</sup> Brooks, interview.

<sup>134</sup> Ibid.

<sup>135</sup> Hamman, “Computer Networks Linking Network Communities,” 71.

<sup>136</sup> Ibid.

computing.”<sup>137</sup> The majority of users, then, had purchased a computer for purposes other than CMC and then stumbled across the active BBS community. Susan Forbess, active in Uplink as well as the Memphis BBS community at large, initially used her office computer for transmitting documents. A friend introduced her to BBSes in 1985. Her first thoughts: “This thing is amazing!”<sup>138</sup> As user understanding of often non-intuitive and complex BBS systems increased, user interaction did likewise. With the increased interaction came the forming of community bonds.

Although ideally anyone armed with a modem and a modicum of expertise should be able to become part of an online community, such is not the case. Many methods of exclusion exist in online communities, ranging from the overt to the unintentional. Many users, for example, feel lost or left out when trying to join an existing community. B.A. Connery argues that newcomers questioning the status quo acted as a check on an online group’s tendency to stagnate. In fact, he asserted, “The freedom of the group as a public sphere can only be revitalized by unruly newcomers who flout the conventions and the authorities.”<sup>139</sup>

In reality, disruptive users ran the risk of regulars labeling them as trolls. The term “trolling” derives from fishing jargon, where one sets a line in the water and moves it back and forth hoping for a bite. Online trolls enter online groups, usually posing as a legitimately interested party, and then they antagonize members, hoping to incite

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<sup>137</sup> Carlton Smith, interview by author, tape recording, Memphis, Tennessee, 25 May 2002.

<sup>138</sup> Forbess, interview.

<sup>139</sup> B.A. Connery, “IMHO: Authority and egalitarian rhetoric in the virtual coffeehouse,” in Internet Cultures, ed David Porter. (Thousand Oaks: SAGE Publications, 1998), 165.

mayhem.<sup>140</sup> Not only can a troll “disrupt the discussion” of a community, but trolling can also “damage the feeling of trust.”<sup>141</sup> Entrenched members of the community could counter such flouting of conventions by assuming them to be the acts of a troll, all but negating any hope of the community accepting a new user. According to Judith Donath, writing about “Identity and Deception in the Virtual Community,” “Even if the accusation is unfounded, being branded a troll is quite damaging to one’s online reputation.”<sup>142</sup>

In addition, the existing unspoken understandings shared by an entrenched online community were often difficult to breach. Fred Weissman pointed out in a 1991 message to all of Uplink that “we’ve got some people in here for almost two years now.”<sup>143</sup> Susan Brooks wrote a message to Robert Willsey, a newcomer, where she explained, “We are a group of people who are friends. What we say to each other may not make sense to someone who is not a friend,” although she added “We do welcome anyone who would like to become a friend.”<sup>144</sup> Jack Hoch, upon discovering Uplink, described his feelings as similar to “[walking] into a party where everyone knows everyone else.”<sup>145</sup>

One of the more daunting tasks for an Uplink newcomer was sorting out the plethora of nicknames and handles, and many introductory messages sent to new users by regulars included long lists of Uplink participants and several of their aliases. Almost all introductory messages, in fact, contained a litany of names, habits, and personality

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<sup>140</sup> Judith S. Donath, “Identity and Deception in the Virtual Community,” in *Communities in Cyberspace* eds. Mark A. Smith and Peter Kollock (New York: Routledge, 1999), 45.

<sup>141</sup> Ibid

<sup>142</sup> Ibid

<sup>143</sup> Fred Weissman, “Uplink,” <Uplink>, 1991.

<sup>144</sup> Susan Brooks, “????,” <Uplink>, 1991.

<sup>145</sup> Art Garvin, “Up a link w/o a clue,” <Uplink>, 18 April 1991.

quirks. John Enterkin commented something to this effect, “finding it hard to keep up with who is who when nicknames are used.”<sup>146</sup>

Consistently breaking netiquette, an unspoken code of online behavior, could also serve to turn an online echo against an individual. Susan Brooks commented that one member of Uplink, Steve Poggio, “always tried to fit in, but never could.” According to Brooks, this lack of total acceptance stemmed from the fact that, quite simply, “he was obnoxious.” “He tried to boss everybody around,” and “nobody really liked him and everybody made fun of him.”<sup>147</sup> In a channel known for levity and chiding, it could be difficult for an outsider to discern when playful teasing is actually spiteful mocking. Introduction messages refer to Poggio with regularity, typically referring to his constant barrage of terrible puns, hinting that he was at least nominally accepted. He even appeared at real life meetings of Uplink, although by accounts he was “pretty quiet and reserved (until you empty a couple of bottles of gin into him).”<sup>148</sup>

Poggio’s messages, however, do often contain an edge of cruelty, even if delivered in jest. In one message, where he placed many of the Uplink regulars into the cast of a Robin Hood remake, he described one member as “big, dumb and stupid,” another as “a sly, sloppy scoundrel” and yet another as “predictable.”<sup>149</sup> Some signs of Uplink discontent in regards to Poggio are also visible through select messages. Poggio even indicated on several occasions that he felt the group was against him. One user, still trying to get the feel for the group dynamic, asked “WHY DOES STEVE POGGIO

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<sup>146</sup> John Enterkin, “...,” <Uplink>, 8 April 1991.

<sup>147</sup> Brooks, interview.

<sup>148</sup> Art Garvin, “Memphis Upchuck Details,” <Uplink>, 1991.

<sup>149</sup> Steve Poggio, “Casting Couch,” <Uplink>, 15 November 1991.



FEEL PEOPLE HATE HIM?” Art Garvin, a regular, affirmed that Poggio felt people hated him and that it was likely that “he’s happier when he’s depressed.”<sup>150</sup>

Generally, anyone who played by the rules was allowed to stay and participate. In actuality, contributors were doomed to stay on the periphery unless they made significant efforts to find acceptance. One Memphian, Susan Brooks, appeared in almost every introductory message, while Susan Forbess, another Memphian, appeared in only a handful. Although a valued part of the Uplink community, Forbess never achieved the level of pervasiveness as Brooks, in part because she did not participate in group discussions with Brooks’ frequency. Other Memphian “plinkers,” including the SysOp of The Party Line, which carried the Uplink echo, were rarely mentioned in Uplink.

Brooks was an almost constant fixture in Uplink. Unlike Forbess, who frequented a number of local BBSes, Brooks “didn’t call any others.”<sup>151</sup> In addition, those who did not have the willingness or ability to devote massive amounts of time and energy, reading upwards of 500 messages a day, were rarely considered regulars. According to Brooks, those who did not fully participate “missed all the fun,” and she felt that “they kind of recognized it,” pointing out that after a few years the amount of regulars and semi-regulars grew from a handful to “thirty-five or forty people from all over the United States.”<sup>152</sup> Users had to maintain a noticeable presence in order to be fully involved with Uplink.

Being a female increased a user’s likelihood of acceptance. Although the number of women grew dramatically over the twenty-year period of BBSes, males outnumbered

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<sup>150</sup> Karen Easter, “Self-`ept,” <Uplink>, 24 April 1991.

<sup>151</sup> Brooks, interview.

<sup>152</sup> Ibid

females by a significant margin throughout the BBS era. In a study conducted by sociologist David Meyers, one respondent was “very surprised to find that almost all users on the BBs were young males.” In fact, the males so outnumbered females that, even with the feminine sounding handle “Andromeda X,” users “did not assume I was female.”<sup>153</sup>

Even as late as 1993, men outnumbered women on Uplink by a ratio of almost 2:1. Susan Brooks commented that “it was mostly the guys. . .there weren’t a lot of women in it.”<sup>154</sup> Females, relative to their scarcity of numbers, maintained a high profile in Uplink. Although the actual user base had almost twice the number of males, rough gender parity in the number of high profile regulars existed. This is contrary to the findings of Susan Herring’s exploration of gender in discussion groups presented in 1994. Herring found that male and female users possessed fundamentally different writing styles: the men tended to be adversarial and dominated the conversation, while women were characterized by “supportiveness” and “attenuation,” or meekly “submitting ideas in the forms of questions.”<sup>155</sup> The differences between these two findings are especially puzzling because of the surface similarities between the groups. Discussion lists, much like Uplink, are typically groups of adults sending messages that are distributed nationally, generally open to all and, most importantly, asynchronous in form.

The primary difference is topic. Uplink, being free form, encouraged feelings of kinship, personal sharing and community. LINGUIST-L, and the other discussion groups examined by Herring, all have a topical requirement. In lists where moderators exist,

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<sup>153</sup> Myers, ““Part of the Magic,”” 259.

<sup>154</sup> Brooks, interview.

<sup>155</sup> Susan Herring, “Gender Differences in Computer Mediated Communication: Bringing Familiar Baggage to the New Frontier.” [<http://www.cpsr.org/cpsr/gender/herring.txt>]. (3 February 2003).

they prohibit the distribution of “off topic” messages, and even unmoderated groups frown on non-topical posts. This prohibition prevents true emotional exchange and, thus, inhibits the formation of communal bonds. This does not mean that examinations of discussion lists is useless, but rather such findings must be presented as they are – not representative of CMC as a whole. Topical discussion lists are unlikely to form communities for the above reasons, yet a similar examination of a free-form, unmoderated list would likely have yielded dramatically different results.

Conversation in Uplink, although diverse and chaotic, centered on men and women – particularly women – more than any other topic. One user characterized interaction as “a lot of flirting . . . stuff like that, just playing around.”<sup>156</sup> Users also maintained some degree of traditional values online. Despite the flirting and almost constant sexual innuendos, most ‘plinkers took pains not to “swear in front of the ladies.”<sup>157</sup> Members of Uplink also maintained other traditional stereotypes. For example, messages often referred jokingly to men as DOMs (Dirty Old Men), and women as SYTs (Sweet Young Things). In one message, Art Garvin commented, “Since you’re a SYT, I don’t want to waste my time on technical discussions.”<sup>158</sup> Even in jest, users reinforced such stereotypes with equally frivolous replies. For example, whenever “anyone mentioned ‘techie’” to one user, she would reply “running away with hands over ears, screaming ‘don’t say techie!’”<sup>159</sup>

Researchers have only recently begun to appreciate the depth and diversity of online interaction, yet many scholars of online communities study the subject in a

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<sup>156</sup> Brooks, interview.

<sup>157</sup> Forbess, interview.

<sup>158</sup> Art Garvin, “How Old Is Litty,” <Uplink>, 25 April 1991.

<sup>159</sup> Brooks, interview.

vacuum. When discussions of real life occur at all, they often take a Chicken Little-like tone of fear and apprehension. Stories of “cyber-addicts” losing touch with reality and shunning society are among the most frequently cited claims. As sociologists Barry Wellman and Milena Gulia argue, such fears are misleading in several ways. One such way is the assumption that more time spent online means less time spent interacting face to face. This assumption treats “community as a zero-sum game.”<sup>160</sup> This assumption not only disregards “the seriousness with which Net participants take their relationships,” but also the very real possibility that online contact comes at the expense of other leisure activities, such as reading or watching television.<sup>161</sup>

These arguments also draw on misleading comparison between the nature of online communities and “actual” ones. In reality, most communities in the industrial world do not rely on real life contact at all. Because most acquaintances live further away from each other than a walk or a drive, “telephone contact sustains ties as much as face-to-face get togethers.”<sup>162</sup> Finally, such a distinction assumes that a division between “real” and “virtual” contacts existed. In most cases, there is a great deal of overlap between these two circles.

Naturally, membership in an online community is not always neat, easy and conflict free. Often, the balancing act between real life obligations and online community expectations could be difficult to maintain. Brooks, for example, commented that her interaction with Uplink “was an obsession” that “really took over<sup>163</sup>.” Users often planned real life social events and vacations to minimize the disruption of the

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<sup>160</sup> Wellman and Gulia, “Virtual Communities as Communities,” 181.

<sup>161</sup> Ibid.

<sup>162</sup> Ibid, 182

<sup>163</sup> Brooks, interview.

online community. In fact, even being on vacation often was not enough to tear ‘plinkers away from their terminals, as many messages indicate. When several Uplinkers visited Fred Weissman in Boston, they still did their best to maintain contact with the community. Bryan, for example, “found a board near his sister’s house that has UPLink,” and Weissman himself composed a message while still entertaining guests.<sup>164</sup> Often, SysOps would archive messages for a week or more if they were aware that a particularly active user was going to be out of contact.<sup>165</sup>

The power of Uplink over its members came with its share of conflict. The disruption of real life by online interaction has been detailed elsewhere, particularly the plight of “Everquest Widows,” those who claim that a popular online game has ruined their marriage.<sup>166</sup> Although those who fully immerse themselves in online realms, as stated above, are rare, BBS use created its own brand of conflict. As BBSes became more prominent in the press, particularly in relation to piracy and pornography, using the BBSes carried with it some degree of social stigma. Largely because of popular misunderstandings, outsiders often viewed BBSers as strange and deviant. One user commented that admitting BBS use was akin to “admitting something dirty.”<sup>167</sup>

Popular perception was even more critical of adult users who developed romantic relationships with those online. Mark Adams, a Pennsylvanian, and Susie Peterson, a Memphian, fell in love over Uplink and later married. Although more sentimentally minded BBS users likened this to falling in love writing letters, those not acclimated with

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<sup>164</sup> Fred Weissman, “Facts,” <Uplink>, 1991.

<sup>165</sup> Brooks, interview.

<sup>166</sup> Becky Worley, “Everquest Kills Cupid.”

[<http://www.techtv.com/news/culture/story/0,24195,3372376,00.html>]. (23 January 2003).

<sup>167</sup> Forbess, interview.

online interaction “thought it was nuts.”<sup>168</sup> Outsiders even considered making friends online, and bringing those friendships into real life, as suspect. Despite such popular misgivings, BBS users were usually “prepared to be in person friends” with their fellow users.<sup>169</sup>

A variety of sources point to such a desire. Baym’s investigation of the Usenet group rec.arts.tv.soaps led her to argue that online relationships usually gravitate to other means of interaction.<sup>170</sup> For example, a study by Malcolm R. Parks and Kory Floyd showed that 35.3% of their respondents eventually contacted each other by phone, 28.4% by mail and 33.3% moved on to face-to-face interaction.<sup>171</sup> In Baym’s experience, members of r.a.t.s, as users referred to the newsgroup, arranged local meetings or even planned gatherings “when one participant is visiting an area where others live.”<sup>172</sup>

The expectation was that eventually online communities would break the barrier of facelessness and interact in person. This expectation proved to be true on both the local and national levels. Locally, Memphis BBS users were meeting biannually at Hackers are Human, or HAH, gatherings as early as 1989.<sup>173</sup> By 1995, the Memphis BBS community hosted not only bimonthly HAH parties, but also GTs (Get-Togethers) for users of local chat boards and ARGHs (Artificial Reality Garibaldi's Hooha) for members

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<sup>168</sup> Ibid.

<sup>169</sup> Ibid.

<sup>170</sup> Baym, “Emergence of On-Line Community,” 58.

<sup>171</sup> Malcolm R. Parks and Kory Floyd, “Making Friends in Cyberspace.” [<http://www.ascusc.org/jcmc/vol1/issue4/parks.html>]. (21 January 2003).

<sup>172</sup> Baym, “Emergence of On-Line Community,” 58.

<sup>173</sup> Smith, interview.

of Artificial Reality BBS. These meetings ranged anywhere from less than a dozen users to over two hundred.<sup>174</sup>

Uplinkers, although sometimes separated by a thousand miles or more, still took pains to meet semi-regularly. Members discussed travel plans, often subtly altering arrival or departure times to meet other members.<sup>175</sup> In 1991, ‘plinkers organized the first Uplink meeting, called Upchuck, for the weekend of July 4<sup>th</sup>. Because the plurality of Uplink regulars came from Memphis, the Bluff City seemed the natural spot to host it. By all accounts, the first Upchuck was a resounding success, with almost all of the regulars in attendance.

For many, Upchuck was their first face-to-face encounter with fellow ‘plinkers. Users seemed shocked not by how different Uplink members were from their online selves, but how similar. Although Steve Poggio shocked many by being “pretty quiet and very reserved,” reading a Susan Brooks post was “no different than her day to day conversation.”<sup>176</sup> The Uplink, and its next two iterations, would become an important tool for the bonding of Uplink and the cementing of their online community. Those who were unable to go not only “missed all the fun,” but also failed to fully bond with the Uplink crowd, a fact that “they kind of recognized.”<sup>177</sup>

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<sup>174</sup> Ibid.

<sup>175</sup> Forbess, interview.

<sup>176</sup> Garvin, “Memphis Upchuck Details.”

<sup>177</sup> Brooks, interview.

### Chapter Three Synchronous Students

*I am so pathetic  
But it makes me so poetic  
I'm sunk in this depression  
What a trendy-cool obsession  
My clothes are black, my hair is too  
I love death and I hate you  
I've got piercing in my nose  
I throw out bloody awful prose  
I haven't seen the sun in week  
I haven't bathed, my body reeks  
To aim the blame I have to say  
It's your fault I act this way  
I'm a tortured genius, can't you see  
There's no one else as deep as me.<sup>178</sup>*

For seven years, hundreds - if not thousands – of Memphis-area teenagers met and interacted on a BBS known as Shadowscape, operated by Clayton Ramsey. In 1992, Ramsey, also known as Mongoose, created The Mongoose's Shadow (TMS). Initially, TMS operated with two nodes using a Wildcat! software suite. Later that year, Clay switched to the much more powerful and versatile Galacticomm MajorBBS suite, favored by the majority of chat-based BBSes. In December 1993, TMS fell victim to a catastrophic hard drive failure caused, ironically, by security software. Lacking recent backups, Clay opted to redesign totally his BBS. The second incarnation, Shadowscape, came online in the first week of January 1994. Clay designed Shadowscape to be darker in tone, more user-friendly, and slightly more innovative than its predecessor. At its height, Shadowscape boasted over three dozen lines, thousands of users and provided a cheap and easy Internet service provider to many Memphians. By 1999, however, the

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<sup>178</sup> Gan [pseud.], Untitled Poem from Shadowscape's Poetry forum. Date unknown.



Internet fully eclipsed the BBS scene and Shadowscape faded into memory and obscurity.

Shadowscape and its predecessor appealed largely to the under-twenty-five set in Memphis. Although individuals of all ages frequented TMS and Shadowscape, the majority of adult users found other outlets for socialization, often message groups such as Uplink or localized message networks carrying local Memphis echoes. Shadowscape, and the Memphis-area, multi-node chat boards in general, stands in contrast to Uplink and other echoed conferences on a number of points. In addition to a young users, Shadowscape possessed a centralistic quality lacking from distributed echoes as well as a much larger user base. Shadowscape's user base dwarfed that of Uplink, and not only did every user of Shadowscape dial into the same phone number, but also users lived almost entirely in the Memphis area. This trend continued even after Ramsey connected Shadowscape to the Internet. Instead of connectivity bringing users from far-flung geographic areas onto his BBS, the ability to log in from remote locations appealed almost exclusively to transplanted Memphians. Finally, and perhaps most importantly, Shadowscape possessed the ability to facilitate synchronous communication. Real-time chatting proved to be wildly popular with young BBS users, many of whom willingly paid, or convinced their parents to pay, ten to twenty-five dollars a month for the privilege.

The differences demonstrated by the two groups went well beyond the superficial. In fact, analysis of adults' and teens' BBS use reveals age-related distinctive patterns. As shown earlier, adults readily committed themselves to online communities. However, although adults generally saw their online communities as separate and distinct

from their everyday lives, teens often felt no such division. The pattern of forming bonds in the virtual world, then transplanting those bonds to the real world, thrived in both adult and teen circles. The major difference between the two lay in the matter of scale. Teens threw themselves into CMC feet first, using the BBSes to develop strong community bonds almost from scratch, rather than augmenting or adapting their existing social networks with CMC as adults often did. This tendency comes as no surprise when understood in the context of teenage emotional development.

Americans generally view adolescence as an awkward period of growth and change. Erik Erikson's influential theory of development, first introduced in 1950, supports this assumption. To Erikson, adolescence formed the hub of his full theory of development. This period involves young adults learning about society and their place in it. However, it does not come without difficulty and peril, often resulting in a great deal of identity confusion, unhappiness, and angst. Many adolescents cope with this identity confusion by repudiation, or rebellion against the adult world and fusing their identity with that of a group. Those who successfully complete this stage gain "fidelity," an understanding, and acceptance of their place in society.<sup>179</sup>

Parents often find adolescence, characterized by an increasing desire for independence, while simultaneously coping with the harsh reality of one's dependence, as trying as teens. Among their concerns, problems of self-image and peer interaction typically hold a position of primacy. Adolescents, particularly those not gregarious, outgoing, or popular, sought forums that reduced the awkwardness of interaction. To hundreds, the faceless virtual world of Shadownscape proved to be such a place.

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<sup>179</sup> C. George Boeree, "Erik Erikson." [<http://www.ship.edu/~cgboeree/erikson.html>]. (12 March 2003).

For the painfully shy, synchronous online communication presented a way to interact with peers meaningfully, while still being protected by the “buffer of teleconference.”<sup>180</sup> Whatever the cause of an individual’s shyness, the degree of separation granted by CMC dampened such impulses. Wellman and Guila commented that the Internet’s “lack of in-person involvement can provide participants with more control over the timing and content of their self disclosures.”<sup>181</sup> Both on the Internet and on the BBSes, this control equated to a higher sense of comfort. Wellman and Guila added, “This allows relationships to develop on the basis of communicated shared interests rather than be stunted at the onset by perceived differences in social status.”<sup>182</sup> Although their reasons for feeling differed, many former users of Shadownscape described themselves as “shy around people,” “too introverted,” and “not outgoing.”<sup>183</sup> In the words of Chris Barnett, teleconference provided a forum for local teens to meet each other on “not uncomfortable grounds.”<sup>184</sup> CMC made it “easier to get over the shyness factor,” and made Shadownscape into a haven for those who sought ways “to open up and still be sociable without having to deal with [shyness].”<sup>185</sup> These qualities of physical separation made it popular not only among those who “didn’t do so well interpersonally in real life,” but also among varied groups of “social outcasts.”<sup>186</sup>

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<sup>180</sup> Preston Simpson, interview by author, tape recording, Memphis, Tennessee, 7 May 2002.

<sup>181</sup> Wellman and Guila, “Virtual Communities as Communities,” 184.

<sup>182</sup> Ibid.

<sup>183</sup> John Fannon, interview by author, tape recording, Memphis, Tennessee, 13 May 2002. Kris Meredith, interview by author, tape recording, Memphis, Tennessee, 23 May 2002. Daniel Tolson, interview by author, tape recording, Memphis, Tennessee, 15 May 2002.

<sup>184</sup> Chris Barnett, interview by author, tape recording, Memphis, Tennessee, 6 May 2002.

<sup>185</sup> Julia Moorhead, “Q-A,” Personal Email, 24 April 2002. Joey Anderson, interview by author, tape recording, Memphis, Tennessee, 24 May 2002.

<sup>186</sup> Jason Orendorff, “Q-A,” Personal Email, 31 July 2002. Olivia Orendorff, “Q-A,” Personal Email, 21 August 2002.

Many alienated groups on the social fringe found refuge on Shadownscape. Lindsey Scott felt that “most everybody who logged onto the boards had a feeling of being an outcast,” and that users attempted “to find alternative methods of meeting people and connecting with people.”<sup>187</sup> Goths, punks, geeks, troublemakers, and other outcasts relied on Shadownscape for the social interaction that their peers generally denied them in their schools and neighborhoods. Indeed, most users felt drawn to CMC not only because it often shielded uncomfortable truths about height, weight, and appearance, but also because teleconference provided a means to interact without “[worrying] too much about how you present yourself.”<sup>188</sup> Robynn Krause described the experience as a means of communicating without the “pressure” of “having to try to look cool [and] sound cool.”<sup>189</sup> Thus, online communication allowed users to engage in communication, unfettered by social expectations, stereotypes, or assumptions.

Many of these users first logged on in their early teens, some as young as eleven or twelve.<sup>190</sup> In many ways, connection at such an early age allowed them to have an advantage over their non-connected peers. An individual’s transition to high school often carries with it a great degree of displacement and confusion. The transition disrupts or destroys social connections, as friends go their separate ways or simply drift apart because of the pressures and changing social circumstances of high school. Often, incoming freshmen must reconstruct their social circles almost entirely from scratch. The lack of reliable transportation makes such development even more difficult. Julie

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<sup>187</sup> Lindsey Scott, interview by author, tape recording, Memphis, Tennessee, 14 May 2002.

<sup>188</sup> Barnett, interview.

<sup>189</sup> Robynn Krause, interview by author, tape recording, Memphis, Tennessee, 9 May 2002.

<sup>190</sup> Meredith, interview.

Kemker commented, “If you couldn’t drive, you had to wait until you turned sixteen to meet the world.”<sup>191</sup>

The BBSes allowed a method to transcend location and isolation. Although dependent on others for automotive locomotion, users still managed to interact meaningfully with their social circles via Shadowscape. In addition, the BBSes appealed to those with “restrictive parents or lived in areas . . . that were far from things to do.”<sup>192</sup> In addition, Shadowscape provided a powerful stabilizing influence. Changing schools or moving to a new residence, normally highly disruptive events, had little impact on these social relationships. The existence of a standardized meeting place independent of geography served to mute the negative impacts of such events. The telephone system itself became the meeting place, and anyone with access to a computer and a phone line could take part.

The spidery strands of the telephone network stretched throughout Greater Memphis, tying users “from Frayser and East Memphis and South Memphis that normally would not have any reason to get together.”<sup>193</sup> Thus, those who felt alienated because of appearance or personality found a channel to connect with similarly-inclined people. As Kemker recounts, “I think the biggest influence the BBS community had on me was to help me accept who I was, and to realize that there [were] lots more people out there who [were] like me.”<sup>194</sup>

This feeling of acceptance and belonging often influenced adolescent users in profound ways. Many former users, in retrospect, felt they underwent a large, yet

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<sup>191</sup> Julie Kemker, interview by author, tape recording, Memphis, Tennessee, 22 May 2002.

<sup>192</sup> Julie Vinson, “Q-A,” Personal Email, 15 May 2002.

<sup>193</sup> Kemker, interview.

<sup>194</sup> Travis Fricke, “Q-A,” Personal Email, 25 May 2002.

gradual, increase in self-esteem and confidence directly related to their experiences on Shadowscape. Julie Kemker claims “it made me more confident,” while Daniel Tolson believes “it made me a more outgoing person.”<sup>195</sup> This boost in confidence carried with it an increase in self-worth. Julia Moorhead suggested that her time on the BBS allowed her “to become more comfortable with who I was.”<sup>196</sup> Thus, BBSes provided more than just a location for outcasts to meet and share tales of woe. Shadowscape acted as a meeting ground for the socially awkward to gather on equal footing, develop social skills and self-esteem unavailable to them in the real world and, thus, aided their transition through and out of the uncomfortable adolescent years.

Many of the uncomfortable aspects of adolescence come from teens seeking who they are and how they fit into society. Although some personality experimentation characterizes this period of life, interaction on the semi-anonymous Shadowscape increased both its commonality and scope. Real life interactions included not only matters of personal presentation, but also appearance, body language, and personal history. Shadowscape removed almost all visual and auditory clues, leaving no quavering voice, uncomfortable shifting, or nervous laughter to shatter a constructed illusion. Users expected some degree of identity experimentation.

Many, if not most, users found this ability to subtly or overtly alter one’s persona to be positive. The ability “to put on some sort of front” offered another level of attraction to online interaction.<sup>197</sup> Julia Moorhead commented, “there was always a chance to create a new online identity without anyone knowing that you were that other

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<sup>195</sup> Kemker, interview. Tolson, interview.

<sup>196</sup> Moorhead, “Q-A,” 24 April 2002.

<sup>197</sup> Tolson, interview.

person that got bashed your first day.”<sup>198</sup> Mandy Ferguson agreed, “You can be anyone you want to be, within reason, considering . . . you had to encounter these people at some point.”<sup>199</sup> Levels of experimentation differed with the user. For example, one user recollected, “I knew people online who could be themselves more online and I knew people who would go online and become someone totally different.” Generally, however, users tended to only subtly alter their persona. The average user encountered in real life, according to Preston Simpson, “[was] pretty much they way they were online.”<sup>200</sup> Nancy K. Baym’s insights about online community support this theory. In “The Emergence of On-Line Community” she suggests, “The reality seems to be that many, probably most, social users of CMC create on-line selves consistent with their off-line identities.”<sup>201</sup> Uncharacteristic daring tended to be the most common form of alteration. Most users were “bolder than they otherwise would be,” with “personalities that were turned up quite a few notches.”<sup>202</sup> Overall, these changes tended to be minor alterations rather than wholesale fabrications. As Stephen G. Jones pointed out in “Information, Internet, and Community: Notes Toward an Understanding of Community in the Information Age,” “Research is beginning to suggest that personal traits on-line are very similar to personal traits off-line – those who are able to make fast friendships off-line do so online, and vice versa.”<sup>203</sup>

The most popular and pervasive form of identity manipulation came in the form of handles. Users of Shadownscape felt handles were more than simply a name: they were

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<sup>198</sup> Moorhead, “Q-A,” 24 April 2002.

<sup>199</sup> Mandy Ferguson, interview by author, tape recording, Memphis, Tennessee, 14 May 2002.

<sup>200</sup> Simpson, interview.

<sup>201</sup> Baym, “Emergence of On-Line Community,” 55.

<sup>202</sup> Randy Allen, interview by author, tape recording, Memphis, Tennessee, 20 May 2002.

<sup>203</sup> Jones, “Information, Internet, and Community,” 21.

the first step in crafting an online persona. Rarely did users choose handles lightly, and they usually put a great deal of thought and effort into finding the perfect moniker. Sarah Rushakoff recalled, “I spent about an hour in front of that prompt saying ‘what can I call myself?’”<sup>204</sup> Often, users desired a handle that imparted a great deal of information about themselves. For example, Rushakoff picked Greenbean, “because I was new, I was green. I wanted to describe myself. I didn’t want to be Sarah [and] I was almost a vegetarian at the time.”<sup>205</sup> Even the handle “Sarah,” however, could have possessed significant characteristics. David Myers argues, “Whether the name is chosen is the same as that used in other communication environments is immaterial. Even when the name is superficially the same, it has one important difference: it has indeed, in its new incarnation, been chosen by the owner.”<sup>206</sup> Thus, a handle is not important because it identifies an individual, but rather because it identifies an individual in a self-chosen manner.

Users of Shadowscape usually picked one primary handle and stuck with it for the duration of their involvement, while simultaneously experimenting with secondary names. For example, Julia Moorhead went by the aliases Just Me, Taurus, and a host of others. However, users knew her as D’arque Aynjil regardless of which identity she presented on a day-to-day basis.<sup>207</sup> In rare instances, a user decided to change primary handles. This change, in effect, indicated a transformation of persona. After losing her connection for several weeks during an ice storm in 1994, Julie Kemker signed on as

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<sup>204</sup> Sarah Rushakoff, interview by author, tape recording, Memphis, Tennessee, 8 May 2002.

<sup>205</sup> Ibid.

<sup>206</sup> David Myers, “A New Environment for Communication Play: On-Line Play,” in Meaningful Play, Playful Meaning ed Gary Alan Fine. (Champaign: Human Kinetics Publishers, 1987), 239.

<sup>207</sup> Moorhead, “Q-A,” 24 April 2002.



Phoenix. According to her, the handle “was symbolic of rising from the ashes because I was disconnected for several days . . . In my 14-year-old-mind, that was the coolest way ever to make a comeback.”<sup>208</sup>

Others created different handles for different venues. For example, Users of Artificial Reality, a popular message based discussion BBS, knew Julie Vinson as Fionnguala, while those she encountered in IRC recognized her as Nimue. Those stumbling across her website encountered Kryseis, and members of Shadowscape recognized that Agony, Drust, and Kageko all equaled Crysania.<sup>209</sup> Sometimes, users simply got bored with their handles. As Myers comments, “Even self-created handles grow tiresome and must be replaced.”<sup>210</sup> However, even those who “loved the practice of getting many handles and using them for a month” possessed a primary name.<sup>211</sup> Joey Anderson went through “about a million” handles, although users typically knew him as Bucky the Flying Clown.<sup>212</sup> Randy Allen, likewise, created a host of alternate identities, although Patient Zero remained his primary method of address.

Handles possessed the ability, in one or two words, to give users a glimpse into a user’s personality, interests, outlook, and image. For users of Shadowscape, where handles were the primary method of identification, such functions proved even more important. Unlike Uplink, where users assigned alter egos to each other as roles to play based on the situation, on Shadowscape a user’s handle could not be separated from the user’s persona. In fact, the identifying power of handles transcended the BBSes. “Even

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<sup>208</sup> Kemker, interview.

<sup>209</sup> Vinson, “Q-A,” 15 May 2002.

<sup>210</sup> Myers, “On-Line Play,” 240.

<sup>211</sup> Allen, interview.

<sup>212</sup> Anderson, interview.

now,” Sarah Rushakoff commented, “that’s how you introduce yourself to someone who was on the boards: ‘What’s your handle?’”<sup>213</sup> Kemker agreed, saying that people she met from the BBSes “don’t remember me, they remember my handle.”<sup>214</sup>

Although semi-anonymity and identity manipulation characterized BBS interaction, the community as a whole developed around a sense of trust. This is not to say that deception did not occur. Users regularly created false handles and fabricated identities to mislead other users on Shadowscape. Such events disturbed the overall level of trust on the boards only slightly. Chris Barnett commented, “You couldn’t trust the people online. But, after awhile, they present the same face to you over and over again. You tend to start trusting them because it’s a recognized pattern. The way they socially interacted is something that you become used to, so you tend to trust that.”

Thus, users accepted the possibility of deception and still assumed that the identities they conversed with were being genuine, or at least “honest enough.” This assumption of honesty perpetuated a sociological “culture of trust.” In such a system, reciprocal and self-perpetuating honesty exist. Users expect that others are genuine, and thus are reasonably genuine themselves.<sup>215</sup> Katie Argyle, a researcher with experiences on a similar, Toronto-based BBS, described her experiences:

Many people trusted this ‘other’ that I gave them of myself, and they revealed parts of themselves to me in turn. What we exchanged was *real*. I felt in my body that they were honest about the facts of their lives . . . as I was. I was very concerned with being authentic and true to my real self via the electronic persona I was projecting.<sup>216</sup>

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<sup>213</sup> Rushakoff, interview.

<sup>214</sup> Kemker, interview.

<sup>215</sup> Piotr Sztompka, “Trust: A Cultural Resource.” [<http://www.colbud.hu/honesty-trust/sztompka/pub01.PDF>]. (12 February 2003).

<sup>216</sup> Katie Argyle and Rob Shields, “Is there a Body on the Net?” in Cultures of Internet: Virtual Spaces, Real Histories, Living Bodies, ed. Rob Shields. (Thousand Oaks, CA: SAGE Publications, 1996), 59.

In addition, users rarely performed such masquerades out of malice. Generally, Shadowscape's denizens deceived their cohorts out of jest or experimentation. Although users rarely incorporated aspects of these false handles into themselves, they often found it an educational experience. Once other users exposed the charade, the handle typically became part of a user's litany of identities. Chris Barnett recounted, "I remember times that I logged on under a false account, either male or female, and just played. I remember having it done to me . . . It was great."<sup>217</sup>

Other than the general assumption of honesty, regular meetings served to keep users honest. The expectation existed that, although these handles were just names on a screen, users interacted in the "real world" eventually. Regular HAH and GT meetings provided a forum for users to interact face to face after meeting on the BBSes. These almost-inevitable real-life encounters made users loathe to commit themselves to flagrant falsehoods. Katie Argyle's experience, although almost two thousand miles away, demonstrated a similar expectation. Argyle commented "I have noted on many occasions that new users will leave the system if they do not participate in 'events' that bring them together in a social setting to meet each other in person."<sup>218</sup>

Julie Kemker, for example, believes, "The existence of HAHs changed the way that people described themselves . . . HAHs kept them honest."<sup>219</sup> Kris Merideth concurred with this statement, saying, "People who present themselves falsely aren't going to show up at a HAH." John Fannon believes that many Internet users "pretend to

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<sup>217</sup> Barnett, interview.

<sup>218</sup> Argyle and Shields, "Body on the Net," 68.

<sup>219</sup> Kemker, interview.

be someone else or just start shit,” but such occurrences were rarer on the BBSes than on the Internet because “if you did that on a BBS, people would find out who you were.”<sup>220</sup> In addition, a subtle network of verification existed: users made subtle inquiries to friends attending the same school, for example, in order to verify claims. As Argyle learned, “Due to the use of pseudonyms, and the inability to physically check whether the gender that you present on the board is consistent with your physical body, users often ask each other if they have met the new user.”<sup>221</sup> Argyle also states, “Often there will be mistrust as to whether this user is ‘real’ until there has been physical verification. . . Physical contact is the determining factor of reality.”<sup>222</sup>

Generally, users presented themselves in a relatively straightforward and honest manner. Subtle alterations or key exclusions characterized the majority of deception online. Argyle admitted as much; “Although I could not resist using the cover to heighten aspects of myself I thought a bit inappropriate in person.”<sup>223</sup> Users created and maintained registries that contained personal information about themselves that other users could call up and browse at will. Categories included “Real Name,” “Physical Description,” “Favorite Book,” “Instrument Played,” “Sex,” “Age,” and several others.<sup>224</sup> As stated, most obfuscation occurred on line five: “physical description.”

Lindsey Scott admitted, “Everybody kind of heightened themselves a bit, or changed little aspects of their personality or lied about their appearance . . . but for the most part . . . most of us are fairly genuine.” Later, she admitted, “I think I intentionally

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<sup>220</sup> Fannon, interview.

<sup>221</sup> Argyle and Shields, “Body on the Net,” 68.

<sup>222</sup> Ibid.

<sup>223</sup> Ibid, 59.

<sup>224</sup> Log file of Shadownscape teleconference, dated 27 January 1997. Provided by Ted Shroyer.

left out things about myself that would make me seem unattractive. But I did put that I was 5'9" with blonde hair and blue eyes."<sup>225</sup> So-and-so noticed a similar trend in her study of online dating, commenting, "Several teen girls reported that they adopt new physical personae, describing their looks in such a way as to appear more attractive to the males."<sup>226</sup>

Other than attempting to give the impression of attractiveness, most fabricated registries were intended to provide humor, not deception. Chemical Teardrop described herself as "invisible to the naked eye." The registry of Mystery, another of Chemical Teardrop's handles, claimed, "I have one eye in the middle of my head and a forked tongue." Even honest entries contained as much mystery as enlightenment. Angel Anathema described herself as having "red hair, spiked, dark clothes, boots, braces everything 80's, [and] tattoos."<sup>227</sup> Users practiced omission as their most common form of deception. For example, the user Last Gentleman entered "I am who I am, If you want to see me, call me." in his registry. Congas, a fifteen-year-old female user, said simply, "I look like me."<sup>228</sup>

Although most obfuscation centered on personal appearance, outright deception usually came in the form of gender manipulation. The most common form of gender manipulation came in the form of males pretending to be females, although females did occasionally pretend to be males, as well. Generally, users made these handles to discover how differently males and females were treated, or, as Chris Barnett suggested,

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<sup>225</sup> Scott, interview.

<sup>226</sup> Lynn Schofield Clark, "Dating on the Net: Teens and the Rise of "Pure" Relationships," in Cybersociety 2.0: Revisiting Computer-Mediated Communication and Community. (Thousand Oaks: SAGE Publications, 1999) 166.

<sup>227</sup> Log file of Shadowscape teleconference, dated 27 January 1997. Provided by Ted Shroyer.

<sup>228</sup> Log of Shadowscape teleconference, dated 16 June 1997. Provided by Ted Shroyer.

“Just to play.”<sup>229</sup> Often, however, users created accounts with the express purpose of misleading members of their own sex. Julie Vinson believed that “lot of guys tried out having a ‘female’ logon just to toy with other guys on the BBS.”<sup>230</sup> Sometimes, of course, males created female accounts for the purposes of exploitation. Carrie Ellis commented, “Guys would make chick accounts just to get credz (credits) from some unsuspecting guy.”<sup>231</sup> Although users tolerated, or even enjoyed, deception in the name of experimentation or humor, a much harsher opinion came down on those who lied for nakedly exploitive purposes.

The scarcity of females encouraged gender manipulation. Because BBSing and hobbyist computing tended to be “a boy thing to do,” the male/female ratio on Shadowscape “was very skewed.”<sup>232</sup> The rarity of females, coupled with the general social awkwardness of the average Shadowscape user, acted to present female users, often socially awkward themselves, with more opportunities than real-life interactions. Memories vary by user, but most users recall the BBSes as a forum largely lacking in outright sexism, but characterized by a predator-prey relationship.<sup>233</sup> However, females were hunters as often as males were. Reaction to this dynamic varied by individual, but largely female users saw it as positive and welcome. Such empowerment still manifests in online dating. Lynn Schofield Clark’s study into teen relationships in Internet chat rooms showed that “Net relationships provide many routes to emotional satisfaction

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<sup>229</sup> Barnett, interview.

<sup>230</sup> Julie Vinson, “Follow up Q-A,” Personal Email, 23 May 2002.

<sup>231</sup> Carrie Ellis, “Q-A,” Personal Email, 19 August 2002.

<sup>232</sup> Kemker, interview. Vinson, “Follow up Q-A,” 23 May 2002.

<sup>233</sup> Scott, interview. Jason Orendorff, “Q-A,” 31 July 2002. Ferguson, interview.

among their participants, and Internet dating affords teen girls in particular the opportunity to experiment with and claim power from heterosexual relationships.”<sup>234</sup>

“A lot of them found it empowering,” Joey Anderson recalls, although for some, “it kind of weirded them out.”<sup>235</sup> Olivia Orendorff, who recounted being a “socially inept” teenager, commented, “As a female, I received much more attention and acceptance than [an equally] socially inept male would have.”<sup>236</sup> The empowerment granted by desirability proved popular with many females, although the consequences of such desirability often backfired. Overall, however, females online “were treated pretty well by the guys.”<sup>237</sup>

Overwhelmingly, female users enjoyed logging on and watching the males “come flocking.” J.P. Pinto succinctly stated, “The girls definitely got preference.”<sup>238</sup> “A lot of girls,” Lindsey Scott felt, “kind of got off on it.”<sup>239</sup> Almost every girl felt “females got all kinds of attention and loved it,” while Mandy Ferguson added, “It was flattering, honestly.”<sup>240</sup> Even those who enjoyed the attention, however, agreed that such attention carried with it many negative aspects.

Despite a general lack of sexism, harassment occurred regularly on the BBSes. Although males occasionally dealt with the advances of overly-aggressive females, most users believed that many males particularly targeted females. Julie Vinson, for example,

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<sup>234</sup> Clark, “Dating on the Net,” 159-160.

<sup>235</sup> Anderson, interview.

<sup>236</sup> Olivia Orendorff, “Q-A,” 21 August 2002.

<sup>237</sup> Tolson, interview.

<sup>238</sup> J.P. Pinto, “Q-A,” Personal Email, 9 June 2002.

<sup>239</sup> Scott, interview.

<sup>240</sup> Moorhead, “Q-A,” 24 April 2002. Ferguson, interview.

believed that “females were often targets for lonely or prepubescent males to hit on.”<sup>241</sup> Joey Anderson agreed, saying, “If a woman logged online she would be almost completely mauled.” He continued, “If a woman logged on, usually the majority of the guys would focus all of their attention on the new woman and try to be the one who gets her to like them.”<sup>242</sup> Lindsey Scott described the process in more detail: “There would always be the girl of the month, or the couple of months, and all the guys would be ‘Oh, she’s so hot.’ All it took was one girl logging on who everybody hadn’t dated already and who was not unattractive. She became ‘the girl’ and everyone went after her.”<sup>243</sup>

Females recognized this effect and almost immediately played it to their advantage. Female users fearlessly exploited their power over males online, often accepting preferential treatment, favors, and gifts from male admirers. Oddly, males recognized their exploitation almost as quickly, yet accepted it as the price paid for female company. Capture files of teleconference indicate male users’ willingness to give credits to female users whom they knew little or not at all.<sup>244</sup> A system developed whereby females received rewards for nothing more than being female and giving males some small bit of attention.<sup>245</sup>

Robynn Krause commented, “Everybody just wanted to talk to females . . . we got free stuff.”<sup>246</sup> Even those who felt that males “targeted” females agreed that female users possessed power over their male counterparts, admitting, “It was easier for girls to get

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<sup>241</sup> Vinson, “Follow up Q-A,” 23 May 2002.

<sup>242</sup> Anderson, interview.

<sup>243</sup> Scott, interview.

<sup>244</sup> Log file of Shadownscape Teleconference, dated 16 June 1997. Provided by Ted Shroyer.

<sup>245</sup> Rushakoff, interview. Moorhead, “Q-A,” 24 April 2002.

<sup>246</sup> Krause, interview.



credits on credit-based BBSes by flirting with guys.”<sup>247</sup> Julia Moorhead commented even more bluntly, admitting that females “snubbed most of the guys that were hitting on them, unless they had some remote kind of personality or attractiveness away from the computer.” Even those that possessed a “remote kind of personality or attractiveness . . . were mostly used for what they could provide for the girls.”<sup>248</sup>

Shadowscape’s SysOp quickly realized the inherent power of female identity. Many encouraged or actively sought female users. Clayton attempted to attract and retain female users, believing that such an addition would be good for business.<sup>249</sup> Many users noticed this commodification of females, although few, if any, female users felt offended by it. Males and females acknowledged and accepted the system of mutual exploitation.

For many users, Shadowscape turned into the primary outlet for interaction with the opposite sex. Although users of Uplink maintained a primary social network outside the conference, Shadowscape users usually did not. In addition, because these teens used Shadowscape as their primary social outlet, interaction between sexes differed greatly from that found on Uplink. As noted in the previous chapter, much of the interaction between the sexes focused on innuendo, role-playing, and good-natured humor. Although one couple met and fell in love on Uplink, such behavior proved to be the exception rather than the rule.<sup>250</sup>

These frequent couplings stand in direct opposition to Clark’s research on the subject. She suggests, “Teen chat room relationships therefore would be expected to favor intimacy that is achieved through conversation and self-revelation . . . In contrast,

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<sup>247</sup> Vinson, “Follow up Q-A,” 23 May 2002.

<sup>248</sup> Moorhead, “Q-A,” 24 April 2002.

<sup>249</sup> Anderson, interview.

<sup>250</sup> Brooks. interview.

trust and ‘authenticity’, are *not* central to teen chat room relationships; *fun* is.”<sup>251</sup> The primary difficulty comes in defining just what a “relationship,” online or otherwise, entails. To Clark, who never explicitly defines her use of the term, a relationship seems to entail whatever the teen considers to be “dating.” Thus, meeting in a private chat room carries as much weight to the researcher as meeting in the back seat of a Pontiac. The relationships Clark describes are fluid, ephemeral, and “hold little consequence in ‘real’ lives.”<sup>252</sup> Users of Shadowscape would never describe such a shallow and emotionally pointless endeavor as “dating.”

On Shadowscape, sexual activity replaced innuendo and user romance occurred regularly. Interaction between sexes generally took center stage. Even if an individual user did not use online interaction primarily to engage members of the opposite sex, such a quest tended to be high on the average user’s list of priorities. In addition, the high male/female ratio made some degree of overlap inevitable. Carrie Ellis commented, “There was a whole lot of dating/sleeping around going on.”<sup>253</sup> Keith Perhac recalled, “Everyone kept picking each other up. I went out with a number of people from Shadowscape, and later found out that they had gone out with other friends that I knew.”<sup>254</sup>

Most users acknowledged that, at any given time, “there was a meat market for both genders. Everyone was sleeping with each other.”<sup>255</sup> A number of users admitted that the majority of their romantic involvement derived, directly or indirectly, from their

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<sup>251</sup> Clark, “Dating on the Net,” 178-179.

<sup>252</sup> Ibid, 180.

<sup>253</sup> Ellis, “Q-A,” 19 August 2002.

<sup>254</sup> Keith Perhac, “Q-A,” Personal Email, 5 June 2002.

<sup>255</sup> Paul Counce, “Q-A,” 15 May 2002.

experiences on the BBS. Sarah Rushakoff noted, “Every boy I went out with all through high school, and I guess my whole life, was from the boards except for two,” adding, “on the other end of that were seven or eight.”<sup>256</sup> The prevalence of online dating prevented the stigma common to the non-connected world.

Randy Allen described online dating as “constant and extremely pervasive,” as well as something that “was accepted . . . by the online group” because “they knew how it could happen.” He added that by the demise of the BBSes, “Everyone had slept together, dated each other, [and] broken up.”<sup>257</sup> Despite the appearance of constantly shifting relationships, a great number of successful and long-term relationships developed out of the BBSes. For example, Olivia and Jason Orendorff met each other through online connections, and many respondents noted that they acquired long-term, positive relationships from their days of BBSing.<sup>258</sup>

Platonic, as well as romantic and sexual, relationships thrived on the BBS. Clark warned, “There should be no mistake about the perceived ‘realness’ of the reality encountered on-line – Internet users have strong emotional attachments to their online activities.”<sup>259</sup> To many users of Shadowscape, the BBSes provided their primary outlet for socialization. Once presented with the opportunity to socialize without the stigmas so often attached to unusual appearance and mannerisms, teens eagerly signed on, purchased credits, and spent a great deal of their leisure time chatting with their friends. Generally, within six months or less, users fully integrated themselves into the Shadowscape

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<sup>256</sup> Rushakoff, interview.

<sup>257</sup> Allen, interview.

<sup>258</sup> Olivia Orendorff, “Q-A,” 21 August 2002. Jason Orendorff, “Q-A,” 31 July 2002. Tolson, interview. Ellis, “Q-A,” 19 August 2002.

<sup>259</sup> Jones, “Information, Internet, and Community,” 5.

community.<sup>260</sup> Users formed bonds as strong as, if not stronger than, their unconnected peers did. Wellman and Guila argue that “people on the net have a greater tendency to base their feelings of closeness on the basis of shared interests rather than on the basis of shared social characteristics such as gender and socio-economic status,” thus leading to close-knit relationships.<sup>261</sup> In most situations, the social networks developed on the BBS continued to provide the primary social community for users long after Shadowscape gave up the ghost. As Olivia Orendorff commented, “My social life centered around people I met on the BBSes.”<sup>262</sup>

The majority of those interviewed indicated that the BBSes produced anywhere between fifty to ninety percent of their teenage social networks, and a smaller majority indicated such numbers held true in their current-day social network.<sup>263</sup> Carrie Ellis admitted that “my social life revolved around the BBSes,” and Randy Allen suspected that “it was a very, very powerful aspect in many people’s lives.”<sup>264</sup> Such strong bonds should not surprise anyone. With the BBSes, teens possessed the ability to contact each other constantly and for long periods. This continual exposure increased the speed with which community ties developed. Chris Barnett felt “it just seemed natural for us to be really close. We spent a lot of time nurturing friendships to deeper levels than most people reach at that age.”<sup>265</sup> Meanwhile, Julie Kemker “hung out with my friends every single night,” and Preston Simpson felt the BBS community “started to become involved

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<sup>260</sup> Simpson, interview. Moorhead, “Q-A,” 24 April 2002.

<sup>261</sup> Wellman and Guila, “Virtual Communities as Communities,” 186.

<sup>262</sup> Olivia Orendorff, “Q-A,” 21 August 2002.

<sup>263</sup> The vast majority of those interviewed or given a questionnaire indicated between 50 and 90 per cent of their current social network derived from the BBSes.

<sup>264</sup> Ellis, “Q-A,” 19 August 2002. Allen, interview.

<sup>265</sup> Barnett, interview.

with what these people did and what they seemed to think in a very serious and substantive sort of way. After awhile, some of them developed into people I actually cared about.”<sup>266</sup>

As the BBS individual users grew older, these strong bonds continued, even in the absence of the BBSes. Jason Orendorff stated that BBS users “make up about half of my social circle, even today, and the rest are mostly people I met through them,” adding that “two or three” such friends from the Memphis BBSes live in New Hampshire.<sup>267</sup> When Chris Barnett married in the summer of 2002, Joey Anderson “noticed that most the board people were still around board people. They didn’t bring any new people to the wedding. They brought their old friends from the board.”<sup>268</sup> Julia Moorhead felt a similarly strong bond to her BBS friends, revealing that “nearly every single person I have contact with from Memphis . . . is connected to the boards.”<sup>269</sup>

In addition to constant interaction, the BBS community solidified around a shared belief of second-tier status vis a vis everyday society. Although a number of users maintained thriving and meaningful social interactions outside the BBS, the majority, while not fully exhibiting the computer-nerd stereotype, felt themselves to be “social outcasts.”<sup>270</sup> Sarah Rushakoff believed that “most of the people that were really hard core online didn’t feel they fit in anywhere else.” Upon finding a group of peers similarly ostracized in their regular lives, they formed “definitely a group aside from everyday society.” This society served to validate many quirks, eccentricities, beliefs, and

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<sup>266</sup> Moorhead, “Q-A,” 24 April 2002. Simpson, interview.

<sup>267</sup> Jason Orendorff, “Q-A,” 31 July 2002.

<sup>268</sup> Anderson, interview.

<sup>269</sup> Moorhead, “Q-A,” 24 April 2002.

<sup>270</sup> Olivia Orendorff, “Q-A,” 21 August 2002.

shortcomings that made the average BBS user feel out of sync with the general public. As a result, the community generally took a defiant stance in regard to the expectations of everyday society. Shadownscape users reveled in their separation from mainstream culture, often wearing their differences as an invisible badge of honor. As Julia Moorhead stated, “In the BBS circle, we weren’t all considered outsiders anymore. We suddenly became the popular people.”<sup>271</sup>

Much of the separation stemmed from a lack of general understanding about BBSes in general. Randy Allen felt that BBS interaction, “was very difficult to describe to people at my high school . . . they had no idea what I was talking about.”<sup>272</sup> Joey Anderson realized early on that “the mainstream didn’t really understand” BBSing as a hobby, much less its power to build communities.<sup>273</sup> Before the ascendance of the public Internet in the mid-1990s, the public’s concept of computer hobbyists generally materialized as hopelessly under-socialized nerds or maliciously talented hackers. Movies such as Wargames, Hackers, Weird Science, and The Net, as well as journalistic coverage of high profile cases of computer vandalism encouraged such stereotyping. Although BBS users created a vibrant and dynamic community, many outsiders viewed CMC interaction as somehow aberrant or even dangerous. Such misunderstanding proved to be the heart of differences between BBS culture and everyday society. Users “knew that the outside world looked upon this as a kind of nerdy activity,” but the users of Shadownscape largely felt content in their “haven of nerdliness.”<sup>274</sup>

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<sup>271</sup> Moorhead, “Q-A,” 24 April 2002.

<sup>272</sup> Allen, interview.

<sup>273</sup> Anderson, interview.

<sup>274</sup> Scott, interview.

Many other users, victim to ridicule in their daily lives, expressed more bitter sentiments. Chris Barnett took solace in the fact that his non-connected peers “don’t know what we’re doing. We’re doing something you have no idea about.” Often, users demonstrated bitterness and anger towards the “fucking idiots” and “fucking tools” that “just have no clue.”<sup>275</sup> Often, the stigma of interacting online increased already high levels of ridicule and scorn.<sup>276</sup> The BBS community countered this with scorn and ridicule of their own. They formed a front “united because they were geeks and by the fact they were outcasts.”<sup>277</sup> Without a doubt, the majority of those who used Shadowscape as their primary social outlet felt “a sort of superiority” in relation to those who missed out.<sup>278</sup>

Shadowscape stands in contrast to Uplink in another way. Stability of the user base proved one of the hallmark traits of Uplink. New users trickled into Uplink, new regulars appeared infrequently, and the introduction of large groups almost unheard of. In addition, the insular community of Uplink spawned a host of inside jokes, catch phrases, understandings, and expectations that most new users found difficult to penetrate. On Shadowscape, such elements did not hold true. Change and turnover became the hallmark of Shadowscape. New users appeared on a weekly or even daily basis.

Several factors combined to give Shadowscape the unique ability to perpetuate a changing, yet active, user base. First, the proliferation of modems meant more users had access to the BBSes. Additionally, sheer size worked to its advantage. Locally, only a

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<sup>275</sup> Barnett, interview.

<sup>276</sup> Kemker, interview.

<sup>277</sup> Ibid.

<sup>278</sup> Ferguson, interview.

handful of boards carried Uplink, and those which did included it among dozens of other local and national echoes. Any new user seeking to test his or her new modem likely stumbled on to Shadowscape. The immensity of its user base, the scope of its operation, and the recognition of its name worked together to assure that few users could operate ignorant to its existence.

Although all these factors aided in the success of Shadowscape locally, the largest cause for turnover involved the simple fact that users got older. Members of Uplink all possessed established lives, “real” jobs, and pressing social obligations. Members of Shadowscape, on the other hand, tended to lack all three. As users got older, they began to develop personal ties to the world outside the BBSes, got jobs, and went to college. This regular turnover prevented any one group from becoming core users. This turnover meant that no group of users exercised enough individual or group influence to create a setting hostile, or simply incomprehensible, to new users. Baym commented on the importance of such change, arguing that new users challenge the set ways of the entrenched elite. He agreed that new users “prevent the fossilization of the community by undermining the authority that comes from elitism.”<sup>279</sup> As Joey Anderson recalled, “People changed, people got older, graduated high school, started calling less as they started getting lives.”<sup>280</sup>

“Calling less” did not mean “stop calling,” and “getting lives” meant getting out and interacting in the “real world.” Generally, users of the BBS simply made the transition from virtual meeting places to real ones. As Julia Moorhead commented,

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<sup>279</sup> Baym, “Emergence of On-Line Community,” 62.

<sup>280</sup> Anderson, interview.



“People started learning to drive, having later curfews, and the BBS moved off the computer and into the coffee houses.”<sup>281</sup> Thus, a trend developed. Users typically logged onto Shardscape before they possessed the autonomy to develop and maintain social networks over distance. The BBS community, then, initially replaced face-to-face social networking and community development. Regular meetings, in the form of HAHs, GTs, and so forth, allowed the virtual communities to interact in real spaces on a predictable schedule. After age lifted the barriers of locomotion, BBS users began to maintain “real life” communities. In the majority of such cases, the real life networks and the virtual networks were all but identical. Chris Barnett felt, “We became a real group of friends at that point. It moved from on the computers into real life . . . The computer, maybe, was the start of it.”<sup>282</sup> Daniel Tolson agreed, stating, “The chat board . . . was a way of meeting a lot of people . . . once I was able to drive and go out and do that sort of thing.”<sup>283</sup> In addition, users did not abandon the BBSes completely once they discovered “real lives.” Instead, CMC became one of many diverse ways in which communities interacted.

Because older users maintained a lower, but still noticeable profile, an unwritten but well understood pecking order emerged. Simply put, the longer a user maintained membership and the older such membership, the more status vis a vis the community he or she possessed. As Julia Moorhead stated, “We suddenly became the popular people, but that didn’t mean we didn’t see a hierarchy in the world.”<sup>284</sup> As users became cognizant of such a hierarchy, they began to divide blocks of users into semi-arbitrary

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<sup>281</sup> Moorhead, “Q-A,” 24 April 2002.

<sup>282</sup> Barnett, interview.

<sup>283</sup> Tolson, interview.

<sup>284</sup> Moorhead, “Q-A,” 24 April 2002.

“generations.” This division happened slowly and was at best an inexact science.

Although most users agreed such a system existed, how each user fit into the scheme largely varied by individual. Chris Barnett said that “I think it was just because I logged on and there it was the same group of people on there all the time, and then these new people came in . . . people who came on and were on all the time . . . a new crop of regulars.”<sup>285</sup>

For example, older members noticed far more generations than their newer cohorts did. In addition, although users universally accepted early adopters as the first generation, individual definitions differed. At the very least, a user must have been a member of TMS, the first iteration of Shadowscape. More specifically, a user could not generally claim to be a member of the first generation unless he or she signed up when TMS ran at four nodes. Further subdivisions fell across group lines. Users recognized the appearance of what became generation two, because what developed into generation one already existed as a close-knit community. The sudden appearance of numerous new users, while not unwelcome, came suddenly and altered the group dynamic. The actual generation tiers did not develop until at least the third generation. Travis Fricke, who ceased logging on before the acknowledgement of the generations, “was most aware of the ‘old’ vs. ‘new’ crowds. I considered myself and my friends the core of the old crowd, and pretty much everyone who started calling the BBSes after a certain point was considered the new crowd.” As an odd quirk, those who signed up to the two node TMS, or the Wildcat! TMS fell outside the system. Although lumped in with the first generation, they actually formed a “proto-generation” of elite early adopters. As the

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<sup>285</sup> Barnett, interview.

“proto-generation” faded away, along with the knowledge of the first iteration TMS, users wrote them out of their collective history.

The existence of these divisions does not mean, however, that a hard and fast system of stratification developed. Users generally possessed a rough estimate as to where they fell in the hierarchy. More specific information, such as a user's actual generation, or even the number of different generations that existed, varied by individual account. Chris Barnett, for example, felt that Sarah Rushakoff fell somewhere in the fourth or fifth generation, while Sarah felt that she was solidly in the “three-and-a-half” generation.<sup>286</sup> Additionally, the length of time between generations differed between individuals. Sarah Rushakoff felt it happened “about every four months,” while Chris Barnett noticed significant new users “about every six months,” and Daniel Tolson estimated “every year and a half or two years.”<sup>287</sup> Thus, the “generations” existed to subdivide users based on seniority and, thus, on status. Users tended to meet challenges to their seniority not with “I’m a member of the first generation,” but rather “I’ve been on since Shadowscape was TMS,” or “since TMS ran four nodes.”

There existed significant reasons for a user to advertise his or her length of membership. Randy Allen noticed that it “was a really important staging point for how much right you had to be on the BBS.”<sup>288</sup> In addition, new users often saw the older generations as elder statesmen of sorts, above the day-to-day bickering and mudslinging inherent in teleconference. Sarah Rushakoff noticed that “fitting in wasn’t defined by how we [the newer users] thought of [older users], but really what they thought of

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<sup>286</sup> Barnett, interview. Rushakoff, interview.

<sup>287</sup> Rushakoff, interview. Barnett, interview. Tolson, interview.

<sup>288</sup> Allen, interview.

everyone else.”<sup>289</sup> Allen, meanwhile, “looked everywhere for people who were neutral . . . that were pretty safe characters to attach themselves to” and found “the first generation of people.” Although his notions of “first generation” differ greatly from Chris Barnett’s, his meaning is clear. Users accorded more respect and more status to older users than younger users.

Although status centered on length of time online or generation, loyalty tended to fall across group lines. As more users logged on, users began to divide themselves based on any number of esoteric criterions. As Andrew Shapiro wrote, “Online associations tend to splinter into narrower and narrower factions . . . undermine the strength and cohesion of local communities.”<sup>290</sup> Such divisions possess little fundamental difference from their real life counterparts. Subgroups form within communities based on common interest, personality, beliefs, and a host of other reasons. In real life, we know these as social networks, coteries, circles, and so forth. On Shadowscape, users came to know such divisions as cliques.

Users often used the term “clique” with some degree of distaste, perhaps feeling that cliques represented a separation from the ideal of a unified, non-confrontational meeting place. Yet, the idea of a conflict free community proved to be unrealistic. Thomas Bender argues, “The solidarity that characterizes communities does not mean, however, that all is unity and harmony within.”<sup>291</sup> Thus, conflicts as well as cooperation both are crucial elements in community interaction. Travis Fricke believed “there was a noticeable amount of cliquishness that eventually arose,” as if when he first logged on, no

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<sup>289</sup> Rushakoff, interview.

<sup>290</sup> Luciano Paccagnella, “Perils and Possibilities,” 374.

<sup>291</sup> Bender, *Community and Social Change in America*, 8.

such divisions existed.<sup>292</sup> Julie Kemker felt that a lack of group division characterized early Shadownscape, while “towards [Shadownscape’s] death . . . they were very cliquish.”<sup>293</sup>

Despite their negative associations, almost all users found themselves surrounded by a clique, consciously or unconsciously. Therefore, while Daniel Tolson felt “I wasn’t part of a big ‘clique’ on there,” and “I didn’t like the things I saw in the people that were in a big clique,” he still maintained an active social circle of like-thinking individuals. Although his clique identified itself by not taking part in what members considered the negative aspects of cliquishness – gossip, user trolling, and needless conflict – they formed a clique nonetheless.<sup>294</sup> Gossip, trolling, and conflict, in fact, comprised much of clique activity. Randy Allen recalled, “There were probably more confrontations than cooperations among the groups.”<sup>295</sup> Such conflicts do not preclude the formation of community. If anything, they only further demonstrate its existence. As Bender asserts, “Many commentators err . . . by insisting that absence of conflict be a part of the definition of community. Communal conflict, like the family conflict we all know, is real.”<sup>296</sup>

Despite the constant feuding of cliques, the existence of such groups ultimately aided rather than detracted from Shadownscape’s ability to maintain itself as a self-perpetuating community. Smaller BBSes with little or no turnover and static user bases rapidly became insular and, at times, xenophobic. Such BBSes consciously worked to

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<sup>292</sup> Fricke, “Q-A,” 25 May 2002.

<sup>293</sup> Kemker, interview.

<sup>294</sup> Tolson, interview.

<sup>295</sup> Allen, interview.

<sup>296</sup> Bender, *Community and Social Change in America*, 8.

alienate newcomers to protect their static vision of normalcy. For example, those not of a philosophically thoughtful bent found little of interest on Artificial Reality, while those uninterested in gaming culture possessed little commonality with those on The Dragon's Lair BBS. Ultimately, cliques provided a diversity that encouraged new users to join and, more importantly, stay active. Joey Anderson recalled, "Everybody found their own cliques they could hang with."<sup>297</sup> Carrie Ellis commented, "I think everyone was accepted by someone. Everyone found their niche somewhere."<sup>298</sup>

The cliques grew and interacted, although not always in a friendly way. Yet, unlike their experiences in high school and elsewhere in the "real" world, the adolescent users of Shadownscape found acceptance somewhere amid the chaos. In addition, although such animosity still holds to this day, the separate camps felt a strange, unifying bond. This world they created, communally, did not possess the pecking order that, to their minds, characterized high school. No one group reigned supreme over the patchwork community of Shadownscape. As Julia Moorhead pointed out, "There was no upper crust of cheerleaders and jock."<sup>299</sup> Rather, even though the various groups "didn't get along at all," users of Shadownscape possessed "their own weird, unifying battle cry" that distinguished them as a community apart from the banality of the everyday world.<sup>300</sup>

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<sup>297</sup> Anderson, interview.

<sup>298</sup> Ellis, "Q-A," 19 August 2002.

<sup>299</sup> Moorhead, "Q-A," 24 April 2002.

<sup>300</sup> Kemker, interview.

## Conclusion

Much of the historical notion of community involves an axis of decline or corruption. Grand narratives on modernity, as well as studies of small communities, portray those living through industrialization, the rise of the free market, mass communication, or a host of other developments as agents of their own destruction. By embracing these new developments, traditional modes of community and social morality inevitably crumble and fall.

Unfortunately, this view is as simplistic as it is erroneous. Such a modal view of events is inherently ahistorical. Prescribing a set of traits for communities, and viewing any deviation from those traits as decline, automatically precludes any notion of change over time. The idealized, pastoralist, village-oriented community, if it ever actually existed outside theory, is long dead. Yet, community did not die with the pastoralist myth. Community, despite the numerous prognostications of its eminent demise, stays with us still and, in all likelihood, is in no danger of extinction.

Advances in communication technology always affect social networks in noticeable, often drastic, ways. The proliferation of the telephone, the radio, the television, and the Internet allow community bonds to extend beyond the line of sight. Instead of taking for granted that such advancements work to the detriment of community, researchers should concentrate on how these changes alter community interaction. Technological changes often foster community in unlikely places, allowing bonds to grow where they would be otherwise unable to do so. Industrialization did not destroy communities; it only relocated and modified them. The telephone did not reduce

human interaction; it only altered the way such interaction took place. Likewise, CMC will not end communal interaction, but rather transform it.

There is little doubt that the Internet and the numerous possibilities it presents has already had a dramatic impact on the lives of Americans. This trend will only continue, further altering the way that individuals interact and form communities. Yet, even if the above alteration to historical theory takes place, several other pitfalls must still be avoided. Searching for how “Online Communities” interact is fruitless. In fact, the term online community is vague to the point of uselessness. The community that develops on a Multi-User dungeon is dramatically different from that which arises on a discussion group. In addition, many arguments create false divisions between “real” and online communities. In many cases, those who formed bonds online integrated their “virtual community” with their real life communities, or even used BBSes to build and maintain almost all of their communal bonds.

Though a handful of BBSes still operate, the twenty-year period between the first CBBS in 1979 and 1999 generally marks the era of electronic bulletin boards. The BBSes, confined as they are in a recognizable and finite period, serve as an ideal place to begin forays into the varying forms online communities can take. In addition, the BBSes are localized enough to make community studies feasible while still providing parallels to the larger world of the Internet. The hobbyists who took part in this strange and novel form of interaction developed a community unlike any that had come before. This new form of communication did not disrupt their lives, but rather enriched them. In addition, BBSes were crucial to the evolution of CMC. Yet, they still remain on the periphery of historical inquiry. Rupert Goodwins, a writer for ZDNet, commented that thanks in part



to the BBSes, “every country had its own set of local experts who . . . knew what to do” when the Internet rose to widespread popularity.<sup>301</sup>

Many BBSers felt themselves alienated from everyday society. In response, they latched onto a largely unknown medium and pioneered new forms of interaction, built new friendships, and, ultimately, developed a community as real and tangible as any that had come before. In so doing, they unknowingly became the first generation to use CMC to foster communities. Even the smaller groups that made up BBS culture as a whole allowed for substantial deviation.

One of the largest determining factors in BBS community formation was age. Even though the BBSes created a forum that obscured physical realities, differences in worldview and experience caused natural divisions. Although numerous instances exist of young and old mixing, by and large adolescents and adults maintained separate virtual meeting places. This occurred not only because adults and teens saw the world through different lenses, but also because they saw CMC in fundamentally different ways.

Adults, introduced to BBSing after already developing community ties, used CMC to augment their socialization. Members often looked for communities on BBSes that would fill a need otherwise lacking in the social networks to which they already belonged. Some looked for political debate, others sought a forum to vent their creative urges, and others still looked for a place simply to discuss topics unapproachable in their existing social circles. In these cases, CMC became like another world, where users

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<sup>301</sup> Rupert Goodwins, “It’s a blizzard – Time to innovate.” ZDNet. [<http://zdnet.com.com/2100-1107-984865.html>]. (4 March 2003).

could forget about the banal shortcomings of their lives and instead take part in a cooperatively created universe.

To the teenager, however, online community meant something entirely different. Having grown up surrounded by the wonders of the computer age, these individuals understood rather than marveled over the potential of these machines. Instead, these users, having no established community of their own, dove in headlong and built one online. Unlike adults, teenagers did not seek respite from their lives online. Rather, they sought to *live* their lives online. The bonds formed by these users were powerful and long lasting, generally continuing to provide the individual's social circle long after the BBSes faded into memory. While teenagers have used communication technology, such as the telephone, to maintain bonds independent of geography for years, such wholesale integration of technology in community building likely has little, if any, historical precedent. Users fell in love, made friends, fell out of love, started fights and, in general, created a community in the real world, yet hidden from it.

The term "real," in fact, took on a unique meaning to those involved in BBS culture. Online life was no less influential, or "real," to these users than their online lives, despite the offhanded way they used the term. Instead, "real" was a point of reference, a way to distinguish the online from physical. Eventually, users found a way to balance "real" and "virtual" interaction by incorporating both into a larger framework of interaction, where they augmented online discussions with regularly occurring "real world" events.

In both instances, users discovered or created methods of incorporating CMC into their everyday lives. Those critics who assume the Internet will lead to fragmentation

and alienation, as well as those who assume it a universally democratizing force, would do well to examine what happened with the BBSes. In their heyday, many people assumed the BBSes were either subversive or liberating. In the end, they were neither and both. They did not destroy the establishment, or reinvent it, but modulated it, demodulated it, and sent it back and forth over the telephone line.

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### **Bibliographic Essay**

Acquiring primary source material for this project presented me with many interesting challenges. Although I still maintain close contact with many I met from the Memphis-area BBSes, they represent only one small part of the larger community. I sent emails to those I still maintained contact with from the BBSes that contained a brief description of my project and a request for input. I was able to contact about two dozen former BBSers in Memphis who were willing to sit for an interview, the vast majority former users of Shadowscape, The Final Frontier, and other area chat boards.

Fortuitously, two of my interviewees both participated in Uplink. Even more fortunately, Susan Brooks maintained a healthy cache of memorabilia from her days on Uplink, including two collections of selected messages. The packets, created for those who attended the Memphis Uplink gatherings, made the Uplink chapter possible. Not only did they counteract the relative scarcity of interviews, they helped counteract the inevitable effects of time and memory. In addition, the ability to reference individual messages allowed me to have other 'plinkers add input, especially those who are not residents of Memphis.

Uplink users were not the only people not living in Memphis. Many former BBSes left Memphis, never to return. Veterans of the Memphis scene have spread all over the country and, indeed, the world. Although I only received twenty-two interview responses, I received a great number of replies from individuals interested in my project but with whom interviews would be impossible. For these respondents, I prepared an email questionnaire which I have included here as Appendix B. Of the multitude of responses, eleven included enough insight and description to be useful. I also maintained

correspondence independent of the survey with many individuals, and much of this dialogue found its way into the final product. Though many of those I discussed my project with had valuable insight, Mattie Casper, Preston Simpson, and Julia Kemker all especially aided me in drawing from many types of scholarship as well as contributing their own unique observations.

Although many users of Shadowscape were willing to contribute their stories, without something more than interviews, their chapter would not have been possible. The Uplink chapter was only made possible by the message archives of Susan Brooks, and likewise the Shadowscape chapter could not have been written without Ted Shroyer and Sarah Rushakoff, who provided me with a host of archived material. Sarah, a former staff member, had saved the bulk of several Shadowscape forums to a text file, as well as BBS lists, staff rules, and a host of other miscellaneous items. As useful as those finds were, they still only reflected the asynchronous world of Shadowscape. Ted Shroyer, by a happy accident, logged two of his forays into the Teleconference. Although many users logged conversations, few kept them for long, and fewer still kept them for several years. Ted's capture file allowed me to not only have tangible examples of how Shadowscape looked and felt, but gave me examples of how Shadowscape users interacted on a day to day basis.

Although I first began researching this project assuming it would be an oral history, which only turned out to be partially the case. Without the discovery of such a diverse source base, "Colonizing Cyberspace" could never have been written. Much that collected, particularly about the computer underground, never found its way into the narrative. The sources I collected – hours of tape, hundreds of pages of message base

archives, thousands of pages worth of electronic magazines - are all now stored in my personal collection. I believe they still have much to tell about the early days of mass-CMC, and I hope that the collected material will continue to be of use to myself and future scholars.

**Appendices**



## Appendix One Glossary<sup>302</sup>

**BBS:** An electronic bulletin board system; that is, a message database where people can log in and leave broadcast messages for others grouped (typically) into topic groups. The term was especially applied to the thousands of local BBS systems that operated between roughly 1980 to 1999.

**Cracking:** The act of breaking into a computer system. One who does this is known as a “cracker,” not a “hacker” as is common in popular media.

**Cyberpunk:** Originally coined by SF writer Bruce Bethke and/or editor Gardner Dozois) A subgenre of SF launched in 1982 by William Gibson's novel Neuromancer. Cyberpunk is characterized by fast paced action and generally focusing on the role of computers in the future.

**Echo:** A topic group on FidoNet's echomail system, or any other similar relay message network.

**Gopher:** A type of Internet service first floated around 1991 and obsolesced around 1995 by the World Wide Web. Gopher presents a menuing interface to a tree or graph of links; the links can be to documents, runnable programs, or other gopher menus arbitrarily far across the net.

**Hack:** To interact with a computer in a playful and exploratory rather than goal-directed way.

**ISP:** Internet Service Provider.

**MUD:** Multi-User Dungeon or Multi-User Dimension. Real-time chat forums with a gaming structure; they have multiple 'locations' like an adventure game, and may include combat, traps, puzzles, magic, a simple economic system, and the capability for characters to build more structure onto the database that represents the existing world.

**Node:** In common use, a host machine on a network. On a BBS, it is a dial-in line. Thus a sysop might say that his BBS has 4 nodes even though it has a single machine and no Internet link.

**Peripheral:** Hardware not packaged with a personal computer, or a device that is not required for the machine to run. Modems, scanners, and printers are all peripheral pieces of hardware.

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<sup>302</sup> All definitions, except “peripheral,” “ISP,” and “SysOp,” taken or adapted from Eric Raymond, “The New Hacker’s Dictionary.” [<http://www.catb.org/~esr/jargon/jargon.html>]. (5 April 2003).

**Phreaking:** The art and science of cracking the telephone network so as, for example, to make free long-distance calls.

**Protocol:** Any set of rules that allow different machines or pieces of software to coordinate with each other without ambiguity. For example, TCP/IP is the protocol primarily used over the Internet.

**SysOp:** System Operator, particularly of a BBS.

**Usenet:** A distributed bulletin board system supported mainly by Unix machines. Originally implemented in 1979-1980 by Steve Bellovin, Jim Ellis, Tom Truscott, and Steve Daniel at Duke University, it has swiftly grown to become international in scope and is now probably the largest decentralized information utility in existence.

**Appendix Two**  
**Email Questionnaire**

1. What is your Name?
2. Did You have a handle or handles? If so, what were they?
3. When did you first start calling BBSes?
4. How long were you involved in the BBS community?
5. What was the first BBS you connected to?
6. How did you hear about it?
7. What BBS did you connect to the most?
8. What attracted you to it?
9. What did you look for the most in BBSes?
10. Did you run a BBS? If so, what was it called and how would you describe it?
11. How did the BBS community change while you were a part of it?
12. How did the BBS community impact your life away from the PC?
13. Would you consider the internet community an improvement over the bbs scenes of the past?  
Why or Why Not?
14. What is your most memorable experience on a bbs?
15. How attached were you to the BBS community?
16. What kind of people did the BBS community appeal to in your opinion?  
Does the Internet have the same appeal? Why or why not?
17. What impact do you think the BBSes had on the Internet, if any?

18. What impact did the BBSes have on the person you are today?
19. How did your gender affect your BBS experience? How were females and males treated differently?
20. How egalitarian were the BBSes? What sort of people were excepted? Excluded?
21. What else did you use your computer for? How much time was devoted to being online?
22. How many people did you meet from the BBSes do you still associate with? What percentage of your social circle is that?

**Vita**

Matthew Jones was born and raised in Memphis, Tennessee on February 11, 1977. He attended grade school at Auburndale Elementary and junior high school at St. Benedict's. He graduated from Christian Brothers High School in 1995. From there, he went to Norwich University and received a BA in English and a BA in history in 1999. In 2003, he received a MA in history from The University of Tennessee.