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Communitarianism on the Internet: An Ethnographic Analysis of the Usenet Newsgroup *tpy2k*, 1996-2004

by

Kurt Reymers

September 1, 2004

A Dissertation Submitted to the
Faculty of the Graduate School of the
State University of New York at Buffalo
in partial fulfillment of the
degree of

Doctor of Philosophy

Department of Sociology

UMI Number: 3141306

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Dedication and Acknowledgements

This dissertation is dedicated to Elwin H. Powell, late Professor Emeritus at the Department of Sociology at the University at Buffalo, whose guidance, mentorship and friendship will never be forgotten.

I would also like to acknowledge all those to whom I am indebted for their contribution to this work, first and foremost to include my major advisor Dr. Lionel S. Lewis, and my committee members Dr. Christopher Mele, Dr. Michael Lichter, and Dr. Steve Schneider. The professional support of Dr. Michael Farrell, Laurie Lanning, Diane McMaster, Kelly Crean, Paul Griffin, and many other colleagues was vital to the completion of the project. I would be remiss if I did not also acknowledge the generous support of my family and friends, including but certainly not limited to Suzanne Reymers, Kenneth and Sally Reymers, Robert and Maryann Kern, David and Ingrid Reymers, Brian Kern, Kevin and Nancy Wallace and many others who instilled confidence and courage in me throughout the writing process.

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Abstract

Communitarianism on the Internet: An Ethnographic Analysis of the Usenet Newsgroup *tpy2k*, 1996-2004

Kurt Reymers

For over a century, sociologists have been debating the meaning of the term "community." One reason a consensus has never been reached is the changing nature of society itself. Changes in the political, economic, cultural or technological structure of a society can have a clear relationship to the types of community that are built (Tonnies 1957, Durkheim 1951, 1954). It is argued that contemporary changes in technology have fostered such social changes (Baym 1998, Jones 1998, Wellman 2001). The dissertation examines this argument more closely by investigating an online forum that emerged in 1996 to facilitate technical solutions The 2000 computer problem. Usenet forum, "tech.problems.year2000," or tpy2k for short, is evaluated in terms of its communitarian potential. Communitarianism (Etzioni 1993, 1999) states that a balance is necessary between individual rights and social responsibility in order for a community to function well and produce public goods. The dissertation asks the question, "can a Usenet newsgroup strike a balance between individual and group needs, and does it produce a demonstrable public good?" Analysis of the evidence suggests that, despite remarkable incivility in the newsgroup, the "networked individualism" described by Wellman (2003) and a "cooperative anarchy" (Tepper 1997) that balances individual freedom with the conscientiousness of community appears to exist.

Chapter 1 Introduction

Community Sociology and Technological Change

Our families, our communities, and our culture make us what we are. And once we are what we are, we are still unthinkable outside the groups with whom we live...So, if a new infrastructure comes along that allows us to connect with everyone else on the planet and to invent new types of connections, this is big news indeed. — David Weinberger (2002), Small Pieces Loosely Joined: A Unified Theory of the Web

The sociologists are going to love the next 100 years. – John C. Dvorak (1996), PC Magazine

For years, sociologists have been studying communities to help them understand ourselves better. *Community* is one of the most ubiquitous concepts in the discipline. Yet, despite our commonsense ability to recognize it, scholars have had difficulty in establishing theoretically rigorous propositions and analytical criteria with which one can define community. Perhaps most bedeviling to community scholars is the ineluctable fact that communities constantly change, thus leaving scholars to alter the concepts to fit a new reality. Because of the vagaries involved in defining community, interest in the phenomenon has waxed and waned through the years.

One of the chief factors that spurs new interest in community studies is the emergence of new technology that fosters new ties between people. Ferdinand Tonnies (1957; orig. 1887), for example, took the emergence of modern, industrial society in the nineteenth century as the stepping off point for his investigation into the changes in community, from traditional community to industrial society (gemeinschaft to gesselschaft). Classical sociologists of the same era, such as Georg

Simmel, Max Weber, and Emile Durkheim, all recognized the new patterns of social ties emerging from the new industrial society and the impact that those new patterns had on what they traditionally had called community.

The propensity to polarize the understanding of human-technology relationships has a long history. In sociology, the love-hate relationship with technology goes back at least as far as the early community studies of Tonnies. Gesselschaft, or "society," is the type of political-economic social organization typified by technologically-driven industry. Marx recognized the important correlations between technology and the industrial process, creating the greatest source of conflict in society due to cultural lag. "In general, Marx believed that the means of production change more rapidly than the relations of production (for example, we develop a new technology, and only later do we develop laws to regulate that technology)" (Osinga 2003). Mumford (1964), Ellul (1964) and Postman (1992) all point to the domination of the technical over the human. Mumford, for example, draws the analogy between the computer and God, and "control from above" is a central motif in such "community lost" theories. "With nuclear energy, electric communication, and the computer, all the necessary components of a modernized megamachine at last became available: 'Heaven' had at least been brought near. Theoretically, at the present moment, and actually soon in the future, God - that is, the computer- will be able to find, to locate, and to address instantly, by voice and image via the priesthood, any individual on the planet..." (1964:274). Such frightening imagery stirs emotions, but has not yet come to pass (perhaps much to the chagrin of leaders who currently are seeking fugitive global terrorist Osama bin Laden).

Nonetheless, change is inevitable. A different kind of change is occurring today. Bell (1973) identified the socio-technical changes taking place in the contemporary era as "post-industrialism." It is computerization and the Internet which is the technological focus of an emerging field of community study within the discipline of sociology. These studies focus not on "top-down" control, because the "megamachine" Mumford foresees is remarkably democratic and, not surprisingly, frontier-like. This is due to the fact that many people are engaging in "group" interaction online. The Internet is changing our vocabulary, our metaphors, our way of thinking about social life in a new and popular human space of verbal exchange.

Popular culture has shown increasing attention to the phenomenon of the Internet for nearly a decade, so much so that many people claim that a "revolution" is occurring, or even a new historical epoch that is sprouting from these changes. Barlow (2002), in fact, suggests that the Internet is the greatest human invention since fire. Birkerts (1994) offers that the introduction of information technology into the educational arena is one step away from resulting in the decline of Western civilization. But what really catches the imagination of these claimants is not necessarily the communicative phenomenon of the Internet itself – the focus is on how the Internet affects our social institutions, how it is being *used*. The real measure of a technological revolution is the degree to which changes are made in the way we live our lives. As Weinberger says, "the Web is not the messiah dressed

in cables and bits. It does not signal the apocalypse. It does not even make us all millionaires. But it is also more than merely another new technology" (2002: 194).

The recognition that there is a connection between our sociality and the Internet has also created increasing attention in the academic study of the Internet in the social sciences. Although the academic study of computer mediated communication coincides with the emergence of the World Wide Web (or WWW) (some rare early exceptions being Turkle 1984, Danowski and Edison-Swift 1985, Sproull and Kiesler 1986, Beniger 1987, or Rogers 1987), the phenomenon itself goes back to the days before the WWW, which emerged in 1991. In the 1970s and 1980s people were engaging in communicative practices, particularly through the technologies of computer bulletin board systems and Usenet (once called "the Usenet" – the disappearance of the introductory article indicates its increasing normative status). Although active since the early 1980s, Usenet took on a new face in 1995 when the message groups (called newsgroups) became available through a web page interface.

Through Usenet, bulletin board systems, e-mail, instant messaging, Internet relay chat, and various other text and graphical user interfaces, people have been contacting one another via this medium. Some people contact each other regularly and establish relationships online. This fact has led many people to conjecture that "communities" are popping up online. This claim has been investigated with increasing frequency by sociologists in the mid-1990s and this dissertation is a continuation of this emerging new field within the discipline.

In 1993, Howard Rheingold wrote The Virtual Community: Homesteading on the Electronic Frontier, which was about an electronic forum using a bulletin board system (BBS) called "the WELL" - an acronym for the Whole Earth 'Lectronic Link. Rheingold's case study describes how many of the members based in the San Francisco area (which seems to attract subcultures with magnetic force) shared personal and intimate aspects of their consciousness with others through computer-mediated communications. In 1993, "virtual" community did have a subcultural character, even with the peak of the great meta-cultural hype about the Internet and all its possibilities several years away. It was Rheingold's work, among others, that caught the attention of sociologists, psychologists, political scientists, and others in the social sciences to inspire a growing body of research that is becoming increasingly germane to their respective disciplines. Today, it is impossible to deny the great extent to which people in all industrialized nations, and some developing nations, are using computers to communicate. Whether or not what is created from that computer-mediated communication can and should be called *community*, particularly the definition that informs the sociological tradition of communitarianism, is the question of my research.

The Emergence of Computer-Mediated Communication in the 1990s

Before delving more deeply into the concepts of computer-mediated communication (CMC) and community, it is necessary to examine some empirical evidence that a general phenomenon is indeed at hand. Fortunately, several government and private agencies have kept busy over the past decade keeping

aggregate statistics regarding how many people have been using the Internet in all of its various guises.

According to the National **Telecommunications** and Information Administration (NTIA), the percentage of households with computers more than doubled from 22.8 percent in 1993 to 56.5 percent in 2001 (U.S. Census report 1993, NTIA report 2002). This increase in personal computer use has gone hand-inhand with an increase in the use of computers to communicate; computers have taken on the characteristics previously reserved for such social technologies as the telephone and letter-writing. As of September 2003, the number of Internet users in the United States was estimated at 182.1 million (Global Reach 2003), up from 143 million in September 1991 (NTIA report 2002). The figure for U.S. households with Internet access in 1994 was a mere 5.8 million. President Bill Clinton remarked that when he began his term in office in 1993, "there were fifty sites on the World Wide Web. When I left office, there were three hundred and fifty million. There was never anything like it in the history of communications" (speech at Yale University, October 6, 2001).

The statistics of users in the United States provide just one indicator of the brevity with which online communications have blossomed. Non-English speaking countries (including large numbers of Chinese, Japanese, Spanish, German, Scandinavian, and other populations) shot up from merely thousands of people in 1996 to over 600 million today (Global Reach 2003). It is interesting to note that, because the Internet transcends geophysical boundaries, language rather than nationality is used to measure quantities of people using the Internet.

What is equally as compelling as these statistics is what people are *doing* online. What is the impetus for this incredible trend in Internet use? A majority of home users (59.8 percent) use the Internet for "information searches" (NTIA 1999). Thirty-six percent of the U.S. population use their connection to get information on products and services. Thirty-five percent use the Internet to get health information. Another use is commerce. Thirty-nine percent of Internet users make purchases online. Even more popular, however, is the use of the Internet to exchange personal messages. Forty-five percent of the population now uses e-mail (up from 35 percent in 2000) (NTIA 2001). Of those accessing the Internet at home, 77.9 percent use it to e-mail; of that group, 93.6 percent use e-mail to communicate with family and friends (NTIA 1999). After e-mail, Usenet, an amalgamation of tens of thousands of topical discussion groups, is probably the most widely used resource on the Internet.

Quantitative indicators illuminate only the increasing *amount* of Internet usage among the United States population. The Internet is also a worldwide communications system linking a wide array of cultures and peoples. Beyond its material capacity to act as a system of communication, the Internet transmits social norms, values, meanings, and beliefs – the stuff of which culture is made. As cultures collide online, new institutions emerge to handle the differences and similarities of a new social setting, creating new varieties of social relationships.

Because it involves social institutions, the intersection of cyberspace and community is at once a real social phenomenon and an intangible abstraction. It is real because people are, in fact, relating to one another using electronic

communication. They are typing on keyboards, staring at screens, somewhere in the material world. But what drives the typing and the staring is the fact that people are finding shared interests or mutual discontents in their new relationships with their cyber-others. People who have never met are enjoying each others "company" in chat rooms online. Families are keeping in touch through e-mail online. People who are the victims of tragic experiences are consoling and commiserating with one another online. Through online shopping people are "going" to the mall online. Through private chat rooms, web cams, and internet pornography, people are "having sex" online.

This intersection of intercourses is a sociological issue because it represents the possibility of an addition to or even a fundamental transformation of communal social processes as we have known them (Hakken 2000). What is important is not the extent of peoples' online relationships, but the fact that relationships form *at all* in the cultural morass that is the Internet (Smith 1999).

This research will investigate the growth of relationships in the new communicative arena of the Internet, and link that trend to existing community theory and research in sociology, examining specifically if the relationships borne online constitute a community that can produce a public good. It is the potential which online relationships have for transforming social relationships that is the chief justification for investigating culture in cyberspace, even though the future importance of this communication medium is admittedly uncertain (i.e., the rhetoric of an unstoppable "computer revolution" will not be assumed by this investigator). Also, given the debate surrounding the strength of community and civility in our

contemporary era (Putnam 2000), it is worthwhile to acknowledge and examine the fountain springs where community is alleged to reappear – in cyberspace.

The Internet has become a major influence in the lives of people in the industrialized nations. This influence has been primarily in the domain of individuals' personal communications: e-mail and the online discussion groups of Usenet are more widely used than the World Wide Web (NTIA 1999). The influence of these personal communications on social relationships, particularly those relationships which create and sustain communities, is the subject of this research.

The Social Construction of Cyberspace Community

Interest in the community aspect of online interaction emerged in the early 1990s. Where early empirical studies examined relationships using computer-mediated communication (CMC) in the workplace (Turkle 1984, Kiesler and Sproull 1987, Danowski and Swift 1984), a greater focus on community was wrought after several articles and books emerged delineating the community aspect of CMC.

Rheingold's (1993) *The Virtual Community* recognized years ago that people were organizing and constructing meaningful discourses through the use of computer-mediated communication, discourses that went far beyond simple information sharing. "Virtual communities," says Rheingold, "are social aggregations that emerge from the Net when enough people carry on public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace." This definition is too ambiguous to use within a

research framework, due in part to the vague character of the terms "emerge," "long enough," and "sufficient." How do aggregations emerge? How long is long enough? What constitutes sufficient human feeling? While one can appreciate Rheingold's definition from a rhetorical standpoint, its scientific treatment demands greater exactitude.

Other proponents of online community have recently emerged in the business community. Self-proclaimed entrepreneur, high-tech industry analyst, government adviser, and Net expert Esther Dyson states that "by 1997, 'community' had become one of the trendiest words around, both on and off the Internet....The Internet can be a powerful enabling technology fostering the development of communities because it supports the very thing that creates community – human interaction." (1998:43-44).

The business world appropriated the idea of community in the late 1990s because it offers the opportunity for connection and interaction, both of which people respond to almost automatically, and both of which have the potential for enhancing economic relationships. Businesses have even started up to provide for the creation of online communities for other businesses. Take this example from Multicity.com:

As a follow-up to Liz's e-mail, I am writing you to extend a personal invitation to contact me directly for support with online community-building strategies.

My name is [removed for privacy]. I'm an online community expert with Multicity.com. I work with IT executives, marketing managers, and community directors in small and large corporations who are having difficulties getting either employees, customers or prospects to stay around their Web site. At Multicity.com, we work with these managers to develop community strategies using Web-based tools that not only prevent attrition, but create opportunities to gain more information that can be used to enhance customer relationships or drive new product sales (personal communication, August 13, 2001).

The irony of trying to integrate community into business is that there is no cookie-cutter format to community building, no assured, practical business-sense that can be applied to the process of community creation and maintenance. It is difficult to ensure the survival of such communities even when the technical infrastructure is put into place. As Howard Rheingold said at *Edgewise 99*, a new media conference held in New York City, "the Web is operating on false assumptions about community....The best communities are being built by amateurs, not businesses" (Krochmal 1999). Community building on the web is an amateurish process precisely because of the unpredictability involved with human behavior. "High-quality communication, a registration process, and trust are keys to online community, as well as a technology that engenders a free flow of conversation."

The Dark Side of Online Community

Unpredictability and trust are key themes in the examination of online community, and it is high levels of unpredictability and low levels of trust that concern those who proselytize the "dark side" of online communities.

Julian Dibbell's "ethnography of an online community," first published in *The Village Voice* (1993), brought a pressing issue of online community to the public imagination – the dark side of anonymity online. The article was entitled "A Rape in Cyberspace," indicating a clear rejection of the nearly automatic reflection of "goodness" found in Rheingold's concept of online community. It sponsored a new line of thought, condemning cyberspace as a place for "nuts, sluts, and preverts" (Liazos 1972).

The facts begin (as they often do) with a time and a place. The time was a Monday night in March, and the place, as I've said, was the living room--which, due to the

inviting warmth of its decor, is so invariably packed with chitchatters as to be roughly synonymous among LambdaMOOers with a party. So strong, indeed, is the sense of convivial common ground invested in the living room that a cruel mind could hardly imagine a better place in which to stage a violation of LambdaMOO's communal spirit. And there was cruelty enough lurking in the appearance Mr. Bungle presented to the virtual world--he was at the time a fat, oleaginous, Bisquick-faced clown dressed in cum-stained harlequin garb and girdled with a mistletoe-and-hemlock belt whose buckle bore the quaint inscription "KISS ME UNDER THIS, BITCH!" (Dibbell 1993).

Dibbell's description of the rather abhorrent behavior of one "trickster" online, and the reaction to that behavior from one of the "MUD" (Multi-User Domain) members, provided for a renewed counterpoint in the discourse surrounding online community.

The counterpoint to online community is pseudo-community. Pseudo-community is the appearance of community - social groups with a shared culture – but absent of the attributes of the ties that bind and absent of the production of a public good. Those who follow this position use metaphors such as being *Trapped in the Net*, (Rochlin 1997) or the totalitarian control of "Metaman" described by Slouka (1995) in his *War of the Worlds* (the "real world" versus the "virtual world"). Clifford Stoll (1999) describes himself as a *High-Tech Heretic* in his book about the vicissitudes of depending too strongly on technology within educational institutions. Most recently Quentin Schultze (2002), steals some thunder, and the title, from Robert Bellah's community study to tell us about our bad *Habits of the High-Tech Heart*.

The point of counterpoint is well-taken, and can be useful in determining the boundaries of a phenomenon. Yet, it is important to recognize that to polarize the argument to one extreme or the other is to display what Anthony and Robbins (1995) call "exemplary dualism": a tendency to see an issue in terms of black and

white, a bipolar perspective recognizing only the "real" world and the "virtual" one, with nothing in between. Many of the detractors of online community do not recognize the quite variable nature of social life online and that its ethnographic character allows for a plethora of different outcomes, ranging between online and offline, not restricted to those ideal opposites. Dibbell is keen to recognize this "inbetween" space. In the following passage, which describes the response of the "victim" of the "rape," he notes the cultural character of online experience:

Where virtual reality and its conventions would have us believe that legba and Starsinger were brutally raped in their own living room, here was the victim legba scolding Mr. Bungle for a breach of "civility." Where real life, on the other hand, insists the incident was only an episode ... confined to the realm of the symbolic and at no point threatening any player's life, limb, or material well-being, here now was the player legba issuing aggrieved and heartfelt calls for Mr. Bungle's dismemberment. Ludicrously excessive by RL's lights, woefully understated by VR's, the tone of legba's response made sense only in the buzzing, dissonant gap between them (Dibbell 1993).

This "gap between" that Dibbell describes is what anthropologist Victor Turner (1969) might have called "liminal cyberspace" if he had lived long enough to experience MUDs. The cultural character of online community involves this ritual space in-between the not quite real and the not quite purely symbolic.

But, of course, that is the same space where all human experience takes place. People do not live in the black-and-white worlds that is typified by those taking either a "technological optimist" or "technological pessimist" stance. Our perceptions of the real-world effects of technology are colored not only by the specific application of the technology involved, but also by the cultural lens of language (Sapir 1929) and upon the endless stories, myths, narratives and dialogues we carry on in our social interaction. Writing, language, communication and community are fundamentally symbolic and uniquely human qualities. It is when

the "space in-between," the socio-cultural chasms introduced by new technologies, become recognized and consciously important to us that we ritualize the space and create rules regarding it which help us guide each other through new situations and unfamiliar social territory.

Pitirim Sorokin (1964) identifies this type of space in-between as "sociocultural space." In his study of the referential principles of sociology he identifies the importance of understanding the differences between the pure meaning (what today might be called "virtuality") and pure causality (the principles by which natural scientists can create laws). Researching social life in the new space which coexists between pure virtuality and the purely causality is what most scholarly studies of online community have thus far attempted. To put this another way, sociologists have typically examined online community from a cultural perspective and have become interested in how the reality of computer communications effects the meaning systems and social relations created by role, status, and network.

Studying these aspects of online relationships has precedent. The first studies were done not long after the rhetoric of computer salvation and computer doom were reinvented in the mid-1990s. Correll (1995) ethnographically examined sexual identity online in a "virtual lesbian bar," and Turkle (1984, 1995) examined identity and psychological effects of online group behavior. Jones (1998) looked specifically at idea of community, as did Kollock and Smith (1999). Wellman et al (1996, 1999, 2001, 2003) have examined the social network aspect of online community. Baym (1995), Tepper (1997), and Lee (2003) have all examined the impact of Usenet specifically on the development of virtual communities. The

findings of each of these researchers will be examined in greater detail in the next chapter.

Outline of the Research

The main goal of this research is to identify how social groups that are conferred the status of "community" are created and maintained in an online setting. This is an investigation into the sociological process of community-building, a longevity study of how social roles and status integrate individuals into an online community, particularly in the case of a Usenet discussion forum. As such, it will employ sociological methods designed to measure structure, role, and status, then analyze the data collected to discover more about this contentious, contestable new social arena of cyberspace.

In chapter 2, past and current research on the sociological work that involves community (offline and online), particularly the theory of communitarianism, will be examined to discover a niche in the theory that a study of Internet community can fill. Here I will develop the hypotheses of the research. Chapter 3 discusses the most attuned method for investigating these hypotheses, "cyberethnography." Cyberethnography is a methodology that will be discussed, as well as narrative methodology, and this discussion will set the stage of the case that I will research, a Usenet forum abbreviated by the acronym "tpy2k," short for the network location of the group, tech.problems.year2000.

Chapter 4 will connect *The Intersecting Cultures of the Internet and Y2k* and describe the milieu of the actors that inhabit the online space of *tpy2k*, where they

come from, who they are, and how the values of these intersecting cultures influence the social relationships in the group. In Chapter 5, *The Symbolic Construction of tpy2k*, the research will examine the issues of access to the group and the emergence of social structure, particularly boundaries, within the symbolic communication of the newsgroup participants which help shape the emerging roles within the group.

Chapter 6 investigates the *The Growth of Personal Knowledge and an Evolving Gulf*, focusing on the development of bonding and culture in the group and how the interactive exchange of messages created a schism in the newsgroup. Chapter 7 will empirically investigate *Civility, The Rollover, and Community Memory* examining the extent to which "flaming" and "trolling" effected the newsgroup's sustainability and looking at the changing roles in the group after its main purpose for existence had passed. And finally, chapter 8 will provide a final analysis of the data and summarize the conclusions wrought from the body of the research.

Chapter 2 Community, Sociology and the Computer

All expression by dolt or by the artist and all communication, from the casual talk of acquaintanceship to the deepest intimacies of perfect love, have their source in the elemental passion to impress and to know one another and to define the consciousness of kind. – Franklin Giddings (1896), Principles of Sociology

The concept of community is remarkably paradoxical. It is at once the only concept that matters in the discipline of sociology and at the same time elusive, indefinable, empirically non-testable. The foundations of sociology rest on the concept of community. Yet, Hillery in 1968 found ninety-four different definitions within disciplinary writings on the topic.

Some sociologists have suggested community is merely a myth and recommend throwing the concept out entirely (Stacey, in Bell and Newby 1974; Friedland 2001). But there is little reason to banish a concept from the meaning system of an intellectual discipline simply because we do not now understand the nature of the paradox, especially when that concept is so regularly used by people worldwide. Exploring its meaning is more academically rigorous than jettisoning it. Redefinition, if empirically justifiable, is the key to understanding social changes which effect our bedrock notions of community.

Over the years, the meaning of community has changed dramatically. Early in the twentieth century sociologists primarily focused upon place when investigating community. By the end of the century, however, community became viewed more as a process, irrespective of where it was taking place.

The symbolic elements of community became more important to sociological explanations of the term as the twentieth century moved forward. This change in perspective on the meaning of community parallels the changes in transportation and communications technologies made throughout the century, and recognizes important attending changes within our social institutions. In the U.S. and other industrialized countries, we are more mobile than ever before – and more communicative as well. Both conditions have created for us a broader range of social networks than in the past (Wellman 1988, Mulgan 1997, Gergen 2000). But with that broader range, some analysts (Etzioni 1993, Putnam 2000) believe that we are losing the sense of "closeness" we once had, a characteristic traditionally associated with community.

Community fosters a sense of Cooley's (1909) primary groups (with emotional, long-term bonds laden in the group), while also promoting a sense of secondary groups, an interconnectedness of many people, each occupying unique roles that contribute to the function of the whole. However, the idea of community is also represented by *difference*, the important disagreements and conflicts that people share when attempting to live together in an ordered, organized fashion. Without consensus and togetherness, anarchy and anomie exist; without difference and conflict, fascism and authoritarianism brew. Between these polar opposites lay community.

The arguments between community lost and community found revolves around a perceived imbalance between these points of consensus and difference, and thus between traditionalism and liberalism. These arguments have evolved to reflect

on socialization occurring through computer-mediated communications. In the contemporary era of the "computer revolution," some scholars have argued that computer-mediated communications (CMC) enhance and support communal social formations and foster collaborative relationships. Others argue that computers are isolating influences, with differences leading to a kind of "cyberbalkanization" (Putnam 2000) which will ultimately drive people apart and trap individuals behind technology instead of allowing them to act within their local, geographical, physical communities. In attempting to gain a better understanding of community, it will be useful to chart out how this struggle of community lost and found has hitherto proceeded. Durkheim advises, "history is not only the natural framework of human life; man is a product of history" (in Giddens 1972, orig. 1897).

Interest in community has always been at the heart of sociology. From the nineteenth century writings of Tonnies through the twenty-first century writings of Etzioni, community is a conceptual thread that weaves sociological analyses together. The term community is so widely used, in fact, that it has become a word with amorphous and ideographic meaning, and thus difficult (but not impossible) to use as a conceptual basis for empirical analysis.

The *Penguin Dictionary of Sociology* claims the concept to be "the most elusive and vague in sociology." Despite our ability to "feel" community ideologically, we have great difficulty in establishing more stringent, empirical criteria for its existence. The concept of community was so central to early sociology that an outline of the development of community theory and research is in many ways a history of sociology as well.

Ferdinand Tonnies is perhaps the most quoted progenitor of the sociological investigation of community and his *Gemeinschaft und Gesselschaft* (1957, orig. 1887) he discussed the emerging modern differences between the local community and the larger society. He came to recognize the importance of kinship and a sense of belonging and noticed a rural/urban distinction emerging near the end of the nineteenth century.

Also recognizing this trend in social development, Durkheim explicitly built upon Tonnies' theme of community and society. In *The Division of Labor in Society* (1893), he reframed the ideas in his own similar concepts of mechanical and organic solidarity. His emphasis on moral individualism and a *conscience collective* in *The Elementary Forms of Religious Life* (1912) went beyond the utilitarian empiricism common to the science being produced in the United Kingdom at that time. Durkheim's famous study *Le Suicide* (1897) gave importance to understanding what happens when community is missing (using his famous concept of *anomie*, or normlessness).

At the turn of the twentieth century, several important American social scientists and philosophers contributed to the discussion on community. Charles Horton Cooley (1902) succinctly wrote that "in order to have a society it is evidently necessary that persons should get together somewhere." However, he next de-emphasizes the importance of physical space: "They get together only as personal ideas in the mind. Where else? What other possible locus can be assigned for the real contacts of persons, or in what other form can they come in contact except as impressions or ideas formed in this common locus?" George Herbert

Mead also spoke of the importance of ideas and symbols to the development of the individual and of his or her integration into a community of significant others. Although he never explicitly invoked the term community, his theory of the self would have no foundation without the reference to others and their significance to us.

Most importantly though, this group of early twentieth century American sociologists contributed the notion of primary and secondary reference groups, an idea proposed by Cooley (1909). A primary group is small, being traditionally defined by face-to-face interaction and close psychological bonding. Family, groups of friends and some work groups are examples. A secondary group is larger and each member does not directly interact with every other. The secondary group could be considered less "communal" than the first, more distanced by interest and emotive attachment. The differences between primary and secondary groups will come to be important to understanding online community.

The urban sociology of the Chicago School in the 1930s represents the emergence of American academics *en masse* to the relatively new discipline of sociology. Their definitions of community differed somewhat from Tonnies and Durkheim, however, in that they had a greater inclination to align themselves with the definition within the biological sciences, and focused therefore theoretically on "human ecology." Their empirical work focused on physical communities, namely neighborhoods within urban areas. However, many of these sociologists, including Robert Park and Louis Wirth, were also exploring the formation of values, meanings and identities that exemplified and differentiated these communities. The Park-

Wirth formulation of the "community lost" argument is well summarized in Fischer (1977:7): "The key proposition is that limitation on the number of potential social relations available to individuals leads to more communal social relations. Communal refers to relations of intimacy and moral commitment, the sort of relations sociologists generally assume to be important for psychological well-being." Additionally, there is a historical argument (Tonnies') that regards modernization as the root cause of the expansion of potential social relations and the consequent decline of community. The technological character of modern bureaucracies and the state are what influenced politically minded sociologists, such as Robert Nisbet, investigating community.

In *The Quest for Community* (1953), Nisbet rails against "statism," the bureaucratic "national community" that created the "organization man" (Whyte 1956) and the "one-dimensional man" (Marcuse 1964), whose local community politics have been subsumed by the workings of the state. Nisbet argued that people are at their best when small groups, like family, church, and neighborhood, dominate their society – these are the most natural, effective sources of security, morals, and identity.

In the 1960s, Nisbet's work was seized upon by neo-Marxists and young counter-culturalists seeking an intellectual lever to elevate their growing antiestablishment views. The title of *Quest for Community* was changed to *Community and Power* in 1962 to reflect renewed interest from the young left. This led Nisbet to reorganize his ideas in a 1975 book, *Twilight of Authority*, about which New Left political theorist Sheldon Wolin wrote "the truth is that for all his talk about

'community', Nisbet's main passion is for authority: and it matters less to him how authority is used than whether it is reverenced" (in Forcey 1996). After his ideas were drawn upon in the neo-conservative Reagan administration, Nisbet became even more well recognized as a conservative traditionalist.

Serious sociological investigations of community that were not as politically motivated as Nisbet's or the New Left during the sixties tended to rely upon more empirical than theoretical work. In a movement away from grand theory and toward more empirical research, George Hillery, Jr., noted in 1968 that "as far as science is concerned, the important objective is not what someone says the community is or is not; the scientific goal involves an understanding of the phenomenon which the word is describing." After spending seven years studying the theoretical question "What is community?," Hillery came to the conclusion that the search for an answer was fruitless: community can mean practically anything. In fact, he arrived at no less than 16 concepts using 94 different definitions. Rather than pursue which concept was accurate, Hillery changed his focus. Stating that "our definitions must be wedded to facts," he concluded that one is able to show where community theory is inaccurate best on the basis of empirical rather than a priori criteria.

Largely because of this shift to empirical rather than ideologically driven concepts of community, sociologists during the past several decades have come to recognize that community is both place *and* process. Harkening back to Cooley's (1902) words that people "get together only as personal ideas in the mind," sociologists and philosophers such as Bell and Newby (1974), Cohen (1985), and Young (1986) were clear to acknowledge that place-oriented definitions of

community have a weakness, and that their symbolic construction and their network processes, especially those organized around difference and dissent, today more clearly illuminate the idea of community.

Acceptance of the idea of community without propinquity came about thirty years ago, emerging in the early 1970s when a Kuhnian "paradigm shift" occurred in the discipline. Particularly with the recognition of the shift in momentum that communications and transportation technologies brought to social mobility and information sharing, the notion that a community could exist without locality has become more widely acknowledged and accepted.

In his book *The Symbolic Construction of Community* (1985), A.P. Cohen emphasized that community goes far beyond neighborhood. Repeating the same theme of nearly every community scholar at some point, Cohen (1985) opens the book by stating that "community is one of those words...bandied around in ordinary, everyday speech, apparently intelligible to speaker and listener, which, when imported into the discourse of social science, however, causes immense difficulty." Cohen quickly dispenses with the "lost or found" dualism of the traditional community approach and offers an explanation of community that focuses upon its shared symbols, boundaries and culture. Following a Wittgensteinian (or Hillerian) approach of examining empirical instances of community (looking at the phenomenon, not the ideology), Cohen suggests that we examine both how communities bring people together and how they differentiate us from others in other groups. "Community'," says Cohen (1985:12), "seems to imply simultaneously both similarity and difference. The word thus expresses a

relational idea....It seems appropriate, therefore, to focus our examination of the nature of community on the element which embodies this sense of discrimination, namely, the *boundary*." The boundaries of the online community this research examines are vital to understanding the relationships between individuals that make up the community and the rules by which they interact.

Boundaries in social relationships are equally important to another area of community studies emerging since the 1970s. Community sociologists Bell and Newby (1974), whose popular reader on the sociology of community included many of the (then) new, changing perspectives on community studies, introduced the growing network aspect of community at that time, "first conceived by Barnes for use in his study of a Norwegian fishing community" (Bell and Newby 1974: I). In the introduction to *Sociology of Community*, they emphasize the social network perspective very specifically:

The analytical tool for delineating and analyzing [national and local] groups is the 'social network'....Networks for some people are locality bound, for others less so. Traditional notions of community may be subsumed under the label of 'locality bound, or close-knit network.' One of the changes that may be occurring for many, but not all, social groups is not so much the 'eclipse of community' as that their social networks are becoming less locality bound and less close-knit.

Whereas early empirically oriented sociologists (e.g., the Chicago School) tended to define such units ecologically on the basis of a purely spatial notion (neighborhoods), more recently, locality has become *egocentric*, or located in the relationships between people and not solely in the space itself (such as in Wellman's description of "personal communities," 1983:1-2). Communities shade imperceptibly from one into another, making the objective definition of any one community quite difficult.

It is precisely this egocentric perspective on community that arose in the 1970s around the problem of empirical definition. A renewed interest was found in social network analysis (which originated in the work of Moreno (1934) in the 1930s, called "sociometry"). Early network analysts looked at the objective pattern of ties linking the members of society. Because of their usefulness in conducting empirical investigations, the application of network concepts have spanned the range of sociological investigative techniques, quantitative and qualitative, although until recently a majority have been quantitatively oriented.

Lately, attention has been drawn to social network analysis by those who would differentiate "whole network" versus "ego-centered network" perspectives. University of Toronto sociologist Barry Wellman notes that "the more common whole network analyses gather information about relevant relationships within some population, where both the relevance of the relationship and the population are defined by the investigator" (Wellman 1996:2). The whole network perspective advanced by Wellman and the researchers in his wake has led to the discovery of a new community form that sociologists are calling *networked individualism* (Castells 2001, Wellman 2003), an idea which will be returned to later in this chapter.

One criticism of social network analysis is that it is politically unmotivated, that it does not take into account variables of power and control in a community, and that it is theoretically flaccid and too caught up in minutia – it misses the forest for the trees, to use an aphorism. As Boudourides (2001:39) comments, social network analysis "is imputed on its static structuralism, which is incapable to grasp the dynamic and transformative attributes of human agency."

Communitarianism: Freedom and Order, Community and Individual

A community-oriented social and political philosophy that has garnered greater attention from sociologists in the 1990s is a branch of community theory called *communitarianism*. The rise of communitarianism in the past several years marks a renewed sense of the political in discussions about community. Communitarianism is generally a theory of social order that emphasizes community over self-interest; however, this explanation is far too simplistic, for communities can enhance the benefits that individuals get from the social order (as in Nisbet's argument). Nonetheless, the ideas of recent communitarian thought are rooted directly in refutations of liberal political theory, such as that espoused by John Rawls (1971).

Communitarians make the claim that modern liberal society atomizes and alienates individuals, creating a culture that valorizes individual rights over responsibilities to the group. Particularly, the claim is made that the emphasis of liberal political philosophy on unburdened individual rights damages the understanding of responsibilities people have to the groups to which they belong. As noted communitarian activist and author Amitai Etzioni (1993) put it, "we all know on one level that our liberties are limited by those of others and that we can do what we want only as long as we do not harm others. Rights talk, however, pushes us to disregard this crucial qualification, the concern for one another and for the community. Soon, 'I can do what I want as long as I do not hurt others' becomes 'I can do what I want because I have a right to do it.'"

On a broader scope, the ideological and normative issues of order and freedom in relation to the self are what are being debated in the libertarian/communitarian breach. The balance between freedom and order is the conceptual crux of the community/individual dilemma (Bauman 2001). Where freedom goes wholly unchecked, we experience the Hobbesian state of nature, "nasty, brutish and short." When order tightens security so much that freedom is wholly constrained, we experience the totalitarian statehood and ultra-nationalism of the former Soviet Union or Nazi Germany, particularly the ultra-nationalist era of the 1930s. Individuals can suffer equally from favoring either tendency. In the former, anomie emerges as a state of normlessness takes over, a dissociation from one's community which denigrates the sense of self, sometimes leading to suicide. In the latter, the altruistic impulse erodes selfhood in deference to the state: individuals may become consumed and obsessed with following the social order.

Communitarians argue that the balance has shifted dramatically to the right of center since the 1980s, toward neo-conservative ideas, traditional or classical liberal (i.e. modern) ideas of scientific progress, economic growth, individuality and social and political rights. The neo-conservative traditionalists claim, however, that we might return to the values of the fifties (an era of clear enemies, solid families, and fictitious innocence). Communitarians shy away from this idea. "We do not favor," says Etzioni (1993) "a return to the 'Leave It To Beaver' family (the father at work, the mother shut in the kitchen), but to a communitarian family – one in which both parents are actively and deeply involved in their children's upbringing. Similarly, Communitarians favor not a return to authoritarian leadership, but a

climate that fosters finding agreed-upon positions that we can favor authoritatively." The necessity of authority is bound to the communitarian perspective, but this does not mean that authority cannot be questioned – in fact, that is necessary for it to become legitimate. Authority need not compromise the values of individual freedom; rather the commitment to common goals, values and beliefs add to the rights and privileges we have engendered thus far in our society. Etzioni makes this perfectly clear in this passage from *The Spirit of Community* (1993):

When Communitarians argue that the pendulum has swung too far toward the radical individualistic pole and it is time to hurry its return, we do *not* seek to push it to the opposite extreme, of encouraging a community that suppresses individuality. We aim for a judicious mix of self-interest, self-expression, and commitment to the commons — of rights *and* responsibilities, of I and we. Hence the sociological recommendation to move from "I" to "we" is but a form of shorthand for arguing that a strong commitment to the commons must now be added to strong commitments to individual needs and interests that are already well ensconced [original emphasis].

A movement toward a greater recognition of local community in conjunction with the attention given to individual rights is what is needed in our day and age, when nationalism has been reinvigorated in the United States by terrorism, when rights movements no longer recognize the difference between freedom and power, when litigation is the means by which we solve too many disputes, when family needs have been supplanted by corporate desires, and when our sense of belongingness is reduced to the latest marketing trend or fashion statement, whether it be on a rack in the store or what we learn from a sound bite in the news media.

Some communitarians assert that online community might be changing the balance of freedom and order, that it might be affecting the pendulum swing Etzioni sees as necessary. Some meta-theoretical questions that emerge from this relationship between computers and community are: What awareness is brought by

online community to the existence of others with similar or different opinions, ideas, and values? How are online communities shaping the nature of public discourse and citizenry in the twenty-first century? What effect might this have on the balance between freedom and order in contemporary societies? And what effect do online communities have on divisive versus supportive social interaction? The goal of this research will be to analyze these questions in light of a currently existing empirical case of an online community. But before getting into the project of investigating communitarian traits in online groups, a deeper understanding of the interaction taking place within these groups is necessary.

Online Interaction and Community

David Weinberger (2002) notes in his "unified theory of the web" that online behavior represents a whole new pattern of socialization, one which is shaking the foundations of sociological and political concepts that have been relatively solid until the introduction of the Internet. Weinberger states that "as we've looked at just one sample question about the Web – does it make us more or less social? – we've found ourselves brought to consider terms as basic as self, society, friendship, knowledge, morality, authority, private, and public. It is a measure of the importance of the Web that to understand it we find ourselves rethinking bedrock notions of our culture." Community is another of these bedrock notions that has been adopted by Internet users and researchers alike. The concept of community was likely an ideal candidate for connection to online groups not only because of the social behavior being exhibited online, but also because of the malleability of the

concept itself. But, as with any "grand narrative," we must look at these claims to community in both historical and scientific light in order to identify their veracity.

Such an understanding has been developed by sociologists over the past decade, as the World Wide Web realized its popularity. An emergent aspect of the historical shift in the relationship between technology and social life today has been labeled "online community," or as it is often called, "virtual community" (Rheingold 1993, Wellman and Gulia 1999). While the word "virtual" remains popular, I will use the term online community, because the term virtual community may lead to an *a priori* assumption that the community in question is not "real." This is consistent with the work of Nancy Baym who states that the "reality seems to be that many, probably most social users of computer-mediated communication, create on-line selves consistent with their off-line identities" (1998:55).

Much of the research into online community to date recognizes that some social phenomenon is at work within the Internet medium, a phenomenon that is increasingly being described as "community." As Wellman and Gulia (1999) say, "enthusiasts outnumber critics, for as the prophet Jeremiah discovered millennia ago, there is more immediate reward in extolling the future than in praising it."

There are two main reasons for the lack of research in the field of online community. First, the phenomenon is so recent that there has been little time to accumulate replicable studies. Moreover, much of the work that *has* been done has been exploratory and precursory. Second, ethnographic accounts of online community must recognize a general shift in the concept of community away from community as place and toward community as process. In fact, this has been the

direction that community theory has been leading for a number of years prior to the emergence of Internet communications. Thus, the focus of current investigations must ponder the question: "Is there a there there?" (Fernback, in Jones 1999). "Social network analysts have had to educate traditional, place-oriented, community sociologists that community can stretch well beyond the neighborhood" (Wellman and Gulia 1999). However, the study of these new types of community that stretch beyond neighborhood must be tied to *some* empirical reality to avoid nomothetic assumptions. Cyberspace is not *all* virtual.

Howard Rheingold (1993) recognized in the early 1990s that people were organizing and constructing meaningful discourses through the use of computer-mediated communication, discourses that went far beyond simple information sharing. Rheingold's virtual community relates quite closely to Etzioni's modern communitarian philosophy. As Roger Scime (1994) has illuminated in his article "<cyberville> and the Spirit of Community: Howard Rheingold Meets Amitai Etzioni",

there are several aspects of [the] growth [of the Internet] that should be mentioned, primarily in the areas of BBSs [bulletin board systems] and Usenet discussion groups....Temporary residence in [online groups] allows us to broaden our intellectual horizons and interact with groups of people in arenas that may not have been accessible heretofore. It provides us with templates by which we can hone our moral voices: transgress in cyberspace and the moral voice of the community will let you know it! Through conversation around the cybernetic cracker barrel, we might stand a better chance of coming to democratic judgment than we might otherwise, being restricted to a communities based solely upon geography and work. If we have elected to join a community that fosters nurturing and caring, a support group may exist that can lend a virtual hand in times of crisis and turmoil. No matter where one lives, one is almost assured of "meeting" others who have shared interests and – yes – values.

Scime recognizes the potential of online groups to transmit one's moral voice and shared values, but he ends with the caveat that "we should resist the temptation to accept this new vision of community uncritically. The social sciences have not yet

advanced to the point where we can say 'this is good for the human condition, this is valuable, this is what makes us human' with absolute certainty" (1994:10). Thus, the need for more research is evident.

The importance of Usenet as an online social space is recognized by others in the field. These researchers have recently contributed to a greater understanding of the empirical reality of online social networks. Marc Smith, for instance, has also elucidated one of the primary regions of cyberspace groups, Usenet. According to Smith (1999), Usenet is "huge, global, anarchic, and rapidly growing. It is also mostly invisible." The structure of the various forums (called newsgroups) that exist on Usenet is diffuse yet massive. In 1999, Smith estimated that Usenet contains over 79,000 groups worldwide within which, on an average day, 20,000 people post as many as 300,000 messages. Although a significant majority of people post from the United States (Smith puts the figure at 40.6 percent), Usenet still has the greatest geographic range of cyberspace messaging systems, with 59 percent of posts coming from over twenty other regions worldwide. This number does not include "lurkers," or those individuals who access Usenet in order to simply read the posts but do not contribute to discussions. While measurement of the total population of Usenet participants and readers is very difficult, Smith estimates that there could easily be more than twenty million people reading Usenet at least once a year.

Of course, the existence of even this quantity of people using Usenet to exchange messages does not necessarily constitute a community. Thus, following up on Rheingold's (1993) initial attempts at describing the qualities of online

groups, other researchers have attempted ethnographic investigations into the existence of community online. Many of these researchers have focused on the marginalized social groups familiar to some traditional community studies: gay and lesbian groups (Correll 1995), racial and ethnic groups (Burkhalter 1999), or groups who organize around popular media and entertainment culture, like Nancy Baym's (1998) ethnographic account of rec.arts.tv.soaps (or r.a.t.s.), a Usenet newsgroup devoted to soap opera fandom, or the many accounts of online role playing game groups called Multi-User Domains/Dungeons (MUDs) (Bruckman 1992, Dibbell 1993, Turkle 1995), or disadvantaged offline communities using online means to build a power base (Mele 1999, Castells 1997, Jordan 1999). All of these researchers explore online culture from an analytical perspective informed by sociology. For example, Turkle (1995) and Donath (1999) explore the concept of identity online; Baym (1998) explores issues of the appropriation of community norms, relationships and behavior online; Dibbell (1993) and Correll (1995) explore gender roles and sexual mores online; Mele (1999), Castells (1997), and Jordan (1999) explore online politicization; and Burkhalter (1999) explores the social construction of race and ethnicity in an environment that allows for no physical cues for such construction.

What is common to all of these researchers is their method: all use qualitative measures to investigate their subject. This occurs for two reasons: first, the qualitative measure is often more effective in examining new social phenomena due to the descriptive nature of such studies. Second, the qualitative method is tied to ethnography – the scientific study of culture – and, whether community exists or

not, there is certainly a phenomenon that is being investigated in this research (this point is elaborated upon in chapter 3).

In light of the question "does the web make us more or less social?," researchers have found varying results. This indicates that the wrong question is being asked. Both sides likely have some truth. Research emerging in the mid-tolate 1990s introduced a number of sociological studies following earlier nonscientific investigations into the topic of online community. Steve Jones (1999) is an influential name in the growing field, publishing a number of readers on "cybersociety," computer-mediated communication and community. Jones discusses how we "form new hierarchies and reorganize existing ones, particularly those formed in interactive text media" and notes Rheingold's (1993) assertion that computermediated-communities will "grow into much larger networks over the next twenty years," yet he "does not question or examine how that growth will be accompanied by structuring and hierarchies created within networks." In other words, new forms of community might be emerging from the shift to a network society. In a Kuhnian paradigm shift, this use of the network metaphor is beginning to supplant the more normative concept of community in academic circles today.

Networked Individualism and Online Community

Manuel Castells (2001) argues that "networking" is the most salient characteristic of social relations today. Like Etzioni, Castells recognizes that "now, the dominant trend in the evolution of social relationships in our societies is the rise of individualism, in all its manifestations." As a response to this recognition,

Castells seeks to add a third category to the traditional sociological discrepancy between primary and secondary groups (Cooley 1909): "tertiary groups, or what Wellman calls 'personalized communities,' embodied in me-centered networks" are not merely related to the development of recent technologies; rather they are deeply rooted in twentieth century social changes, from the relationship between capital and labor to the disintegration of the traditional nuclear family to the crisis of political legitimacy, as the growing distance between citizens and state fosters individual withdrawal from the public sphere. "The new pattern of sociability," says Castells, "is characterized by networked individualism" (2001: 129).

Network theory is often centered upon cultural, economic and political institutions which have increasingly organized worldwide societies around a network model. The perspective is not new; for example, Simmel's Conflict and the Web of Group Affiliations (1955) is written in this vein, as is Wiener's The Human Use of Human Beings: Cybernetics and Society (1954). Nonetheless, these were not popularly cited in the early work of structural network analysts. Recognizing the institutional relationships of networks was an important step for social network analysis to take.

With the very recent expansion of information and communication technologies, there is a renewed interest in this type of analysis. This interest has helped network analysis to bring a theoretical connection to its analytical approach. As Castells' notes in *The Rise of the Network Society*:

Networks constitute the new social morphology of our societies, and the diffusion of networking logic substantially modifies the operation and outcomes in processes of production, experience, power, and culture. While the networking form of social organization has existed in other times and spaces, the new information technology

paradigm provides the material basis for its pervasive expansion throughout the entire social structure (Castells 1996:469).

This change in the character of society is recognized by earlier social theorists, such as Arendt (1958) and Mills (1959), but becomes more meaningful in today's world, Castells says.

The relationship of this "morphology" to its impact on individuals is addressed by cultural network analysts. Specific to this interest is the construction and maintenance of identity. Castells explains that "elements of an interpretive framework to explain the rising power of identity must be found at a broad level, in relationship to macroprocesses of institutional change, to a large extent connected to the emergence of a new global system....We should keep in mind that the search for identity is as powerful as techno-economic change in charting the new history" (1996:24,4). This type of analysis that integrates culture and the individual helps to more clearly define the theoretical proposition of bridging the macro-micro gap often ignored in sociological analysis and the idea of the networked individual is a good example of this type of bridge. Identifying the meaning of the relationship between macro-processes of institutions and organizations and the individual construction of identity in a society that is becoming intensely interconnected is the direction in which network analysts, as well as other sociologists, are going. Giddens' (1992) ideas about "structuration," Mulgan's (1997) ideas of "connexity," Habermas' (1987) ideas about "communicative action," Blackmore's (1999) ideas about "memes," and Gergen's (1999) ideas of the "saturated self" are all related to cultural network analysis in that they recognize that the individual and community play equal roles in the construction of society.

Network analysts have been quick to take on the online community phenomenon. It is largely this fortunate historic event that has brought network analysis out of "juvenility" and into maturity (Alba, in Everett 1987). While Castells has provided a forceful argument for the rise of social networks, perhaps the most prolific of the social network analysts researching the Internet today is Barry Wellman. In the 1980s, Wellman produced a number of important network studies bearing out Claude Fischer's earlier groundbreaking work in *To Dwell among Friends* (Fischer 1982) that community, while certainly affected by urban-industrial times, is also "liberated" by increasingly non-local ties. One example is his study of neighborhoods in East York (Toronto), Canada, in which he demonstrated with network data that "rather than fitting one alternative, most networks fit both" and that "the kinds of support provided are related more to characteristics of the relationship than to characteristics of the network members themselves" (Wellman 1990).

Looking at the network features of online communities was the next logical step for Wellman. Having published over thirty papers, books and reports on the subject, his contributions to online community studies are remarkable, especially given the relatively short period of time that the phenomenon has taken to emerge.

Based on his body of research, Wellman concludes that the nature of social groups is changing, from social groups traditionally centered around close ties and isolated hubs, to social networks of more loosely affiliated people with "weak ties" which privilege the individual as the basic unit of analysis. The Internet, as a social technology, has not singly caused this to occur, but people have embraced the

Internet as a superior communicative medium, particularly recognizing the "social affordances of the Internet for networked individualism" (Wellman et al, 2003). In the April 2003 issue of *JCMC* (the *Journal of Computer-Mediated Communications*), Wellman defines networked individualism as "the move from densely-knit and tightly-bounded groups to sparsely-knit and loosely-bounded networks. This move to networked societies has profound implications for how people mobilize.... Citizenship is affected by the ways in which Internet use is in a positive feedback loop with the turn away from solidary, local, hierarchical groups and towards fragmented, partial, heavily-communicating social networks" (Wellman 2003:3).

When Internet commentators like Geoffrey Mulgan and David Weinberger give their books such titles as *Connexity: How to Live in a Connected World* (1997) and *Small Pieces, Loosely Joined* (2002) (a succinct, titular description of networked individualism), there is clearly a recognition of the potential for change the Internet has exhibited with respect to our social lives in only one short decade. While the future is impossible to foresee clearly, cyberspace and the Internet clearly will play a role in forthcoming social changes.

One of the implications of the rise of network societies is greater intercommunication among people who are not as intimately connected with one another on a day-to-day, face-to-face basis. Networked individualism means a replacement of "place-to-place" with "people -to-people" communication. Rather than suffer from the "death of place" reaped by modern changes, the networked individual is seen to gain from the seemingly odd coincidence of thin networks and deep communication, a coincidence which is being embraced and which may mark a reconfiguring of the balance between individual and community in the twenty-first century.

A new politics of community is what is being discussed here. The dynamic between heterogeneity and homogeneity is what Castells recognizes in discussing the politics of the Internet: "Societies change through conflict and are managed by politics...The political process use[s], and will increasingly use, the Internet as well, making it a privileged tool for acting, informing, recruiting, organizing, dominating and counter-dominating. Cyberspace becomes a contested terrain" (Castells 2001: 137). It is the nature of contest within cyberspace that is the focus of this research into online community.

In investigating contested space online, the current research will continue the tradition of the empirical study of social networks in online settings, and will follow a cultural network approach, examining the content of the ties that people make with one another in a networked setting. This content is the cultural content of symbol, meaning, and myth, and thus will entail a methodology suited to examining culture online. Also, traditional social network analysis generally avoids the political aspects of social networks. The current research will avoid this aversion and link the similar ideas of networked individualism and the political theory of communitarianism to online community.

There are clear connections between the concepts of networked individualism and communitarianism. Both theories recognize the validity and primacy of the individual and the community – it is recognized that looking for

community either "lost" or "found" is less realistic an objective than looking at the relative balance of individuality or commonality within social groups. Etzioni (1993) recognizes that one way in which people have increasingly become individuated is through polarization of debate. Identity is linked to community through issues. One's stand on issues important to the community identify one. In a contest, issues become polarized into opposite points of view, and only two identity claims are legitimated by the community. Thus communities become more homogeneous, less tolerant of difference, and they may suffer as a result.

Computer-mediated communication offers the chance for people to avoid such homogeneity by reorganizing their community through networks that are established in the new media of the Internet. The question of this research is if the "new pattern of sociability" that Castells, Wellman, and others see in the emerging networked individualism of CMC can contain the kind of communitarian values that Etzioni and others describe.

With his computer-scientist son, Oren Etzioni, Amitai Etzioni (for brevity's sake, I will refer to their collaboration under the common name Etzioni) has endeavored to discover the similarities and differences between 'virtual' and 'real' community, and outlines a plan for investigating communitarianism online. First, Etzioni establishes a definition of the dependent variable – community – in relation to the long debate over what it means. According to Etzioni, community has two attributes – first, "a web (or network) of affect-laden relationships that encompasses a number of individuals," what Etzioni calls *bonding*, and the second attribute, a "commitment to a set of shared values, mores, meanings, and a shared historical

identity," or *culture* (1999:1). These are continuous variables which lie along two dimensions, allowing for four types of community to be expressed, as shown in Figure 2.1.

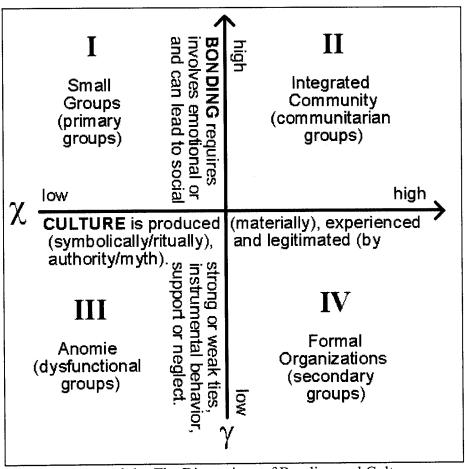


Figure 2.1 – The Dimensions of Bonding and Culture

Using these attributes of community, Etzioni goes on to describe seven specific characteristics of community-building in relationship to computer-mediated communications. It is these characteristics that I will discuss and operationalize in the next chapter in order to answer the following research questions.

Research Questions

The synthesis of the theories of networked individualism, informed by Wellman and Castells, and the political theory of communitarianism (of which Etzioni is a chief proponent) provides for a clear orientation to grounded research in the area of online community.

In his treatment of networked individualism, Wellman (2003) offers some discrete questions that arise from the theory.

First, "what kinds of people will seek to participate, in terms of demographic characteristics and social variety?" Due to the homogeneous nature of online communities centered around particular shared interests, it is likely that a particular online community will be composed of similar kinds of people. The introduction to Internet culture in chapter 4 will demonstrate the typical concentration of demographic characteristics in CMC and the research will examine the particular case to see if and how that homogeneity is enacted online. Who are these people in online groups?

Second, "what sorts of information will individuals seek and obtain?" Again, the primary shared interest that governs the entry point for discussion and interaction is what initially determines the type of information sought and obtained. But beyond this, as a community develops and grows, it is expected that the "positive feedback loop" discussed by Wellman and Castells should produce more than idle and informational discussion of specific technical, social or political information. The variety of the symbolic communication going on in a particular

discussion group can be an indicator of its communal strength. What is the purpose of forming and joining an online group?

Third, Wellman asks, "what is the structure of interpersonal relations and communities that seek participation in civic matters?" This seems to be the most sociologically interesting question, and the one that will be most thoroughly investigated using Etzioni's qualitative attributes of online community. It is expected that the structure will be similar to offline structures, with variable degrees of freedom based on the nature of the attribute and how it serves to create community. The way in which the online "territory" is contested within online communities will be a key question of the study. What is the structure of the online group, and how does it effect the life and value of the group experience?

In short, this research will investigate the qualities of community online. The research will focus upon the relationships built online, the culture and the bonding of the participants of an online discussion group, and the contested space of meaning which is symbolically negotiated through the media of cyberspace.

Finally, I propose to specifically address the question, "Can online community affect the balance between individual and community in the direction of communitarian social formations that may produce a demonstrable public good?"

Chapter 3 Investigating Communitarianism in Usenet

CMC seems to be a language mode which shares some of the advantages which can characterize oral and written forms of data collection. It could be argued that qualitative researchers would benefit from data which can access meaning through both a level of interpersonal involvement traditionally associated with oral interaction and the elaboration and expansion of thought associated with writing. – Chris Mann and Fiona Stewart (2000), Internet Communication and Qualitative Research

Culture and Bonding: Core Elements of Community

The hypotheses in this research come from the main theoretical questions raised at the end of chapter 2 regarding the movement of community toward networked individualism and its potential to encourage the emergence of communitarian social and political values within online settings.

The predicament of measurement is always taxing, particularly in the social sciences when the action, behavior and attitude of agents with freedom of choice are being measured. Nonetheless, it is possible to gauge the "zeitgeist" of a community, to measure and describe its culture, values, beliefs, norms and boundaries. The popularity of such research, in fact, has been shown repeatedly within the sociological literature in ethnographies describing the culture and social structure of "problem populations," such as the addicted in Williams' (1989) *Cocaine Kids* or the culture of individualism in Bellah et al's (1985) *Habits of the Heart*.

To reach the goal of this dissertation, measurement of the extent to which communitarian values may be created, in whole or part, in an online group setting must be made. This measurement must recognize the definition of the variables in question, establish a method of measuring the variables, and analyze the effectiveness of a CMC group to follow the tenets of communitarianism.

So, what are the variables relating to communitarianism that need be evaluated in the online setting? Etzioni (1999) provides seven variables of online groups that could affect the presence of communitarian values in such groups.

In suggesting measures of the traits of community as they exist in an online setting, Etzioni explains the traditional community in terms of the continuous variables of the *culture* and *bonding* of groups. He then discusses the attendant subvariables of culture and bonding.

Culture is a product of the social interaction that takes place within communities. Castells' definition of culture is "symbolic communication between humans, and the relationship between humans and nature, on the basis of production (with its complement, consumption), experience, and power, crystallize over history in specific territories, thus generating cultures and collective identities" (1996: 15). Anthropologist James Liszka defines cultures similarly: "Culture is an integrated whole; what integrates it is that meaning which gets expressed through the semiotically organized properties of its aspects – through the semiotically organized properties of produced goods, ritualized actions, and narratives – which, in turn, give expression to one another" (1989: 168).

Note the similarity between Castells' "production, experience and power" and Liszka's "produced goods, ritualized actions, and narratives." Each speaks of culture that is produced (materially), experienced (symbolically/ritually), and which expresses relationships of legitimacy (of authority, in Castells version, and of myth in Liszka's). These aspects of culture are what must be analyzed in the social setting of the online group: what is the product of online community? Does this product

contribute to the public good? How is the social experience of the group organized symbolically? And what legitimates the authority that group members might claim?

Bonding is perhaps less tangible but is equally important as culture in the development of community. Like the term "community" itself, "bonding" has equally ideological, virtuous implications. However, in the network sense, a bond is not necessarily defined only by good, moral or ethical behavior. A social bond can be a strong tie or a weak tie; it can involve emotional or instrumental behavior; it can lend to symbiotic social support of individuals or can be parasitic. "Virtual communities," Rheingold suggests, "are social aggregations that emerge from the Net when enough people carry on public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace." These personal relationships, positive and negative, require bonding.

Culture and bonding are necessary for community-building, and thus for the exchange of communitarian values. There are specific ways in which CMC might promote community building, specific characteristics which can define the culture and bonding of an online group and which facilitate the production of community and create personal relationships online. These characteristics of culture and bonding will become the main variables I will gauge in a discourse analysis of the interaction of a particular online group.

Measuring Online Community: The Variables

In their brief exploratory paper, Etzioni and Etzioni (1999) identify five prerequisites to the viability of community. These prerequisites are:

- a. Access and Boundary Definition
- b. Encompassing Interpersonal Knowledge
- c. Broadcasting and Feedback
- d. Civility and Cooling-off Mechanisms
- e. Community Memory

These are all facets of face-to-face (f2f) community that offer some variability in the degree to which community exists within any social group. According to Etzioni, each variable has its own importance to the viability of communitarian values and goals in social groups.

Etzioni (1999:2) defines *access* as "the ability to communicate, not in the sense of articulating a message but in the sense of being able to reach others. (Access is a prerequisite for communication, but not tantamount to it.) To form and sustain communities, members require access to one another."

Online communications seem to be superior to face-to-face communications in terms of access, because CMC enables people to communicate regularly without significant economic or other costs and without being in close proximity either spatially or temporally. "These communications evolve across both geographic borders and time zones, and they encompass individuals who are home-bound because of illness, age, handicap, or lack of social skills. They provide safety for people who seek to communicate but fear leaving home, a major consideration in many cities. And they can encompass a very large number of individuals" (Etzioni 1999:3).

Despite the seeming superiority of CMC to f2f in community access issues, there are still significant ways in which large groups can be left out of CMC communities. Research on the digital divide is relevant here (NTIA 2000, James

2003). While this work will not investigate this digital divide *per se*, it is important to recognize the way in which boundaries are defined by the group and how that definition affects access to the group discussion. What are the mechanisms of boundary formation and what are the sanctions that are applied to permit or deny access beyond these socially constructed barriers? In other words, I will be examining the digital divide *within* online groups rather than *between* them.

The second variable which contributes significantly to the bonding of an online community is *interpersonal knowledge*. "Bonding, one of the two core elements of community," says Etzioni, "requires a high level of encompassing (versus specific) knowledge of the others with whom one bonds" (1999:3). Etzioni draws an understanding of this variable from Parsons' idea presented in *The Social System* (1954).

Etzioni mentions three facets of interpersonal knowledge: identification, authenticity, and accountability. First, a group member must have a specific, long-term identifier – a name and face in traditional community, or more common to cyberspace, a pseudonym and "avatar" (a graphic representation of the self online). Second, one's claims to identity traits need to be provable in order for them to be trusted. This is remarkably difficult in online settings such as Usenet and must be examined carefully to see how authenticity is backed up, if and when it is. Third, accountability allows one to gauge the responsibility that other members of the group can be expected to uphold. Where a person agrees to create a charter for the newsgroup, for instance, and does not, the accountability factor of that person diminishes.

Etzioni claims that in its current form CMC is remarkably inferior to f2f groups in creating encompassing interpersonal knowledge, but he does not dismiss the possibility that infrastructural changes to media technology can mediate the problems of CMC in this category. For instance, he notes the construction of online groups of professionals which require use of actual names, e-mail addresses, and background on their areas of research. Having pictures of members aligned with text messages could also facilitate the kind of interpersonal knowledge gained in an online setting that enables community to form.

A third variable important to measuring community Etzioni calls *interactive* broadcasting. Broadcasting can be contrasted with point-to-point casting, the kind of communication typically done with a telephone, as opposed to the kinds of large-scale internet discussion forums and chat rooms. The importance of the media through which one communicates was made evident in the 1960s by McLuhan's (1999; orig. 1964) famous catch-phrase, "the medium is the message."

The basic purpose of broadcasting messages is "to form and sustain shared bonds and values" (Etzioni 1999:3). This is done not just through one-to-one conversations, but within formal organizations, larger groups designed to solidify the values of a culture (for instance, political organizations) or to maximize its efficiency (for example, bureaucratic organizations) using a combined effort focused toward a common goal. This goal is linked to the public good.

Broadcasting also entails feedback, the ability of individuals to address the group regarding the definition of the values, goals, or process of the group as a

whole. For community to be created, feedback needs to be communal, available to all members of the group.

The combination of broadcasting and communal feedback is what Etzioni refers to as interactive broadcasting. CMC offers excellent opportunities for broadcasting - the discussion forums of Usenet, for example, are specifically designed for members to address the entire forum. The meaning of the forum itself is contained in this broadcasting capability. One potential drawback to Usenet though is that feedback is available only through the same mechanism as broadcast - it is not generally instantaneous and therefore members may not have complete knowledge about how others react to the same broadcast. Some CMC sites, particularly the recent PHP (a recursive acronym, PHP means Hypertext Preprocessor) developed web sites, have introduced polling and comment features to allow for more specific and instantaneous feedback, but there is no such formal mechanism in Usenet. However, the practice of threading comments related to an original message (or post) by date and time can allow for a general level of continuity and understanding of feedback by group members to a particular topic or issue. Also, it is not uncommon to see informal, unscientific polls on Usenet sites, in an effort for members to gauge the general opinion on a topic of interest within the group.

Civility is another of the variables that Etzioni outlines as important to community development. "Community dialogues, a major source of sharing culture, seem to function most effectively when delay loops are built into the communication systems, and seem to function most poorly when they take place in

real time" (1999:8). This is another way in which the asynchronous communication of Usenet can be seen as theoretically superior to real-time CMC forums. The removal of communication from "real time" provides a buffer period during which responses may be more well thought out. "Effective cooling-off mechanisms provide delay loops, time intervals between receiving a message and sending a response, and use this lapsed time for dialogues that cross (and mute) previous divisions" (1999:8). The nature of the medium of Usenet, a forum that depends upon writing one's thoughts out, rather than immediately responding, should provide for more effective community dialogues. However, much attention has been brought to the practice of *flaming* in previous online community studies. Flaming is the practice of posting messages to a discussion board that are deliberately hostile and insulting. Such messages are called *flames*, and are often posted in response to flame bait. Offering flame bait to a discussion group in order to intentionally elicit a flame in response is called *trolling*, a term taken not from fantasy literature (which is often a common cultural reference of technophiles), but rather from the sport of fishing, where one drops a line in the water behind ones boat in the hopes of coming across a "sucker." A noun form of the term has emerged as well: those practicing trolling online are called *trolls*.

Both flaming and trolling are, on the surface, conspicuously anti-social behavior, seemingly intended to incite discord rather than galvanize community. Either of these behaviors in face-to-face relationships would likely bring forth a verbal or even physical sanction against the perpetrator. However, physical

sanctions rarely exist in situations of CMC because of anonymity and proximity factors.²

The degree to which civility plays an important part in community formation and sustenance will become a major issue in the discussion of CMC community largely because of the factor of sanctions. It is important to recognize how civility and incivility are instantiated within online groups, as well as how they help to define the social boundaries of the group.

Finally, Etzioni argues that *communal memory* helps to enhance the culture and bonding of communities. "The communal sharing of culture never starts from a *tabula rasa*. The process of sharing value draws on prior sharing of history, communal identity, experiences and rituals. Hence the need for communal memory" (1999: 9).

CMC provides for very powerful retrieval systems in the recollection of communal memory. The text search mechanisms available in chat rooms and Usenet, for example, are a central part of the computer software used in nearly all manifestations of CMC. It is a relatively simple task to log real-time chat sessions, although the session may be lost forever if no member performs such log activity.³ Usenet, on the other hand, currently provides near perfect replication of posts from thousands of forums dating back to 1981. The potential for community memory to be recalled from any moment in the past is staggering compared to f2f groups. Beyond the capability of simply recalling old messages, community memory also provides common references, stories and events that provide for its members a sense of uniqueness and connectedness.

Studying Culture in Usenet: The Method of Cyberethnography

The choice of setting in analyzing the potential for communitarian social behavior to emerge online is important. Past researchers have focused on the Usenet network of discussion groups as the focus of their research, and for good reason. Why Usenet? Why not chat, or e-mail, or WWW pages, or some other social manifestation on the net? There are at least four good reasons to choose Usenet as the most appropriate computer-communications medium to study.

First, the Usenet network of discussion forums provides potentially sufficient size, breadth and depth for community life to develop. As a network of over 70,000 groups (Smith 1999), the network itself clearly offers access opportunities to a huge span of people (although issues of dominant national and cultural interests may pervade this span, as we will see), giving individual groups the opportunity, at least, to survive within a mass of competing "neighborhood" groups. As the National Telecommunications and Information Administration (NTIA 2002) has reported, Usenet is one of the most used services on the Internet, second only to e-mail. The groups themselves are of sufficiently diverse topical nature to suggest a breadth of discussion unmatched on the Internet. Furthermore, Usenet has depth: dating back to 1979, it is long-lived, a survivor among the relatively short history of the Internet.

A second reason to investigate Usenet is that many previous studies have focused on Usenet, providing plentiful material to reflect upon in doing the current analysis. This serves the scientific value of replication, and the method proposed here closely mirrors those used in previous studies (Correll 1995, Tepper 1997,

Baym 1995 and 1998, Hakken 2000, *et al*). This method, called "cyberethnography," is particularly *apropos* to the field; it is a method that can uncover the meanings being exchanged within the symbolic realm of Usenet. While quantitative measures are certainly helpful in revealing certain aspects of the culture, as addressed in the previous point, they are not sufficient to reveal the complex meanings exchanged within the symbolic infrastructure of the network. Text messages, like oral ones, can be counted, but the meaning held within them must be interpreted, thus an ethnographic approach is appropriate.⁴

Third, because of the nature of the data, Usenet is an ethnographic methodologists dream. Pre-transcribed data is hard to come by and to have such breadth of data that is immediately and thoroughly searchable is, in fact, overwhelming. The details of how to research a discussion forum with an eight year history and nearly a half-million messages are complex, but suffice it to say, there is plentiful data to analyze. A clear benefit of such pre-transcribed data is that it allows one to focus more on analysis than collection, enhancing the understanding of the phenomenon.

Where some have used the nature of the data as a critique, suggesting that real community could not possibly emerge from mere text messages, I challenge such a belief, recognizing that there are agents behind the messages who willfully choose to contribute to the dialog which they find meaningful (and thereby help to construct the furthering of meaning within the forum). Another benefit of Usenet as a data source is that there is a close approximation in the research process to this

"willful agent behavior," thus a greater validity in the measure of what is actually occurring within Usenet forums.

Fourth, ethical issues are mitigated using Usenet discussion groups as a source of data. The collection of data in CMC offers new challenges to the ethnographic researcher, yet many of the strategies used to protect subjects in traditional research can be brought to bear in cyberethnography. The procedure for protecting the confidentiality of group members will be to use pseudonyms for the Usenet group itself and for individual members of the group. In many cases this will amount to using pseudonyms for pseudonyms which the participants themselves have created with the online group, creating what amounts to a "double-level" of protection against personal identifiability.⁵

Next, a brief description of the "arena" of online social action is needed. What is Usenet? The structure of Usenet can be divided in two ways, technical and social, which somewhat resemble the telephone system and the conversations that take place within it (Smith 1999). The technical infrastructure is decentralized: no single group or organization has control over the planning or activity of Usenet. Messages are posted to a participants "host server" which are then distributed, or "fed," to the roughly 300,000 other computers in the network.

Today, the hierarchy of Usenet is organized into the ten major topical groups which are abbreviated, shown in Figure 3.1.

Each topical group has a large number of subgroups, separated by the dot, and each subgroup typically has several sub-subgroups at a third level of the

hierarchy. This hierarchical structure makes it easy to find groups regarding very specific topics. Thus, for example, "tech.problems.year-2000" indicates that the

fo about Usenet News	humanities.	Fine art, literature, philosophy
usiness products, services, reviews	soc.	Social issues, culture
ames, hobbies, sports	misc.	Employment, health, and more
ardware, software, consumer info	talk.	Current issues and debates
a	mes, hobbies, sports	isiness products, services, reviews soc. imes, hobbies, sports misc.

Figure 3.1 – The Usenet Hierarchy

Source: Google Groups website, available at http://www.google.com/grphp?hl=en&tab=wg&ie=UTF-8&oe=UTF-8&q=

topic is about technical issues having to do with computers, not just anything about computers, but computer *problems*, and even more specifically, about the *year 2000* (Y2k) computer software problem. While the most popular and well-recognized headings compose the major topical groups, there are another 875 top heading categories (as of February 2004), ranging from the mundane to the inexplicable. We will return to a discussion of the specific newsgroup under examination in the next section. Now, however, it is necessary to elaborate the method of investigation, cyberethnography.

The general method involved will need to enter the world of computermediated communications in a Usenet newsgroup and understand it as a sociocultural space. This will be done by searching the text messages left by newsgroup members using key words and phrases that can identify patterns and themes of social behavior and interaction within a CMC network. It will be the equivalent of the anthropological mission of visiting a cultural "site" and recording all aspects of the communication the inhabitants exchange in order to understand the culture better.

Cyberethnography is not exclusively qualitative in its approach, however. In order to arrive at the most complete understanding of the structure and content of online discussions, a single method cannot suffice. Denzin (in Feagin, Orum and Sjoberg 1991:19) suggests a diversity of strategies, or a "triangulation of sources," in social research. In fact, cyberethnography can be thought of as a conglomeration of approaches, including historical content analysis (to connect online and offline cultures, which in reality are convergent), frequency statistics (to establish baselines for relative participation within discussions), the case study (to emphasize the uniqueness of a particular forum), and discourse/narrative analysis (to analyze the significance the discussion has to its members).

"Life on the screen" is a life of continual broadcast and feedback. It is a "virtual" second life within which one can constitute oneself in any way imaginable (Turkle 1995:228). Yet, in circumstances of extended communications, people do tend to behave "naturally" online [Hodkinson, in Mann and Stewart 2000:89], to exhibit themselves honestly, without too many changes to their "real life" identity (indicating that online life is as real as their face-to-face identity is). It will be useful to examine the interpersonal behavior that creates the shared identities of individual members of the discussion group. Recognizing the sheer quantity of communication that members broadcast is a first step to understanding the pull and sway of identity within the group. Recognizing how positions of authority and leadership develop and the levels of civility online that establish a particular "netiquette" will be more

important to observe. Also, the common social "artifacts" that are left behind through years of communication – shared stories, references, phrases, memories, or what cultural sociologists might call the "meme pool" of the group – can evoke a community memory which further enhances the bonding and culture of the group in a positive feedback loop. Figure 3.2 shows the relationship between theoretical constructs and the five continuous variables which will be examined.

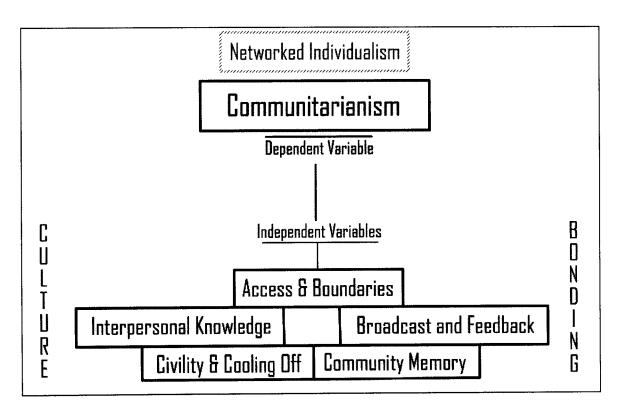


Figure 3.2 – The Variables of Community

What Case to Study?

The particular case chosen for this research is the Usenet group tech.problems.year-2000, or tpy2k for short (this acronym was informally chosen by and used within the group itself, as is the case with many Usenet groups – see Baym

1995, for example). *Tpy2k* began in November 1996 as a small group of computer programmers who decided it would be useful to have a Usenet forum dedicated to sharing solutions and knowledge regarding the year 2000 computer bug, a technical issue that, in 1996, had not yet taken the popular imagination by storm.

A message from February 2004 concerning the removal of the newsgroup from Usenet summarizes the history of the group this way:

The newsgroup "tech.problems.year-2000" ("tpy2k" in this article) was created in 1996 in order to discuss the "Year 2000 problem". This was the problem, thought to be widespread at the time, of the "Year 2000 bug" in software. The "Year 2000 bug" or "Y2K bug" was a generic term for any fault in software that would cause inappropriate software behaviour on or around Jan. 1, 2000. It was thought that many software systems might have such faults because many software systems stored dates (e.g. 20 Sept. 1987) with only two digits for the year (e.g. 20-09-87), a strategy that would no longer work as soon as the year 2000 arrived.

The first posts archived on Google Groups from tpy2k appear to be from 6 Nov 1996. Over the next few years, until 1 Jan 2000, many software systems were revised or replaced due to the threat posed by the Y2K bug. During that period of time, tpy2k was a forum in which people were able to express their thoughts and opinions on this important topic. Now, over four years since 1 Jan 2000, the newsgroup is no longer necessary to the same degree, and some would say it is almost completely unnecessary.

In the first years of the newsgroup's existence, discussion about the Y2K problem evolved into sometimes-vehement debate between the so-called "doomsayers" or "doomers", characterized as having an overly-pessimistic attitude to what might happen, and the "Pollyannas" or "pollies", characterized as having an overly-optimistic attitude. Some of the discussion on the newsgroup today appears to be a continuing flame war between the "doomer" and "polly" camps.

The debate between these "Doomer" and "Polly" camps encompassed not only what the technical results of the Y2k bug might be, but also often digressed into its social, political and economic implications. They went beyond the mandate of the Usenet *tech* hierarchy and entered into critical debate of the relationship of computers to society in general. In many instances, they themselves were discussing the efficacy of community, the community of programmers that it was perceived was needed to mediate the egregious software problem of the Y2k bug and the

community response to the potential catastrophe the problem posed. In its most self-reflexive moments, it was recognized that the concept of community itself was very important to the mission and values of the participants, and within this concept was organized many of the similarities and differences that ultimately defined the newsgroup.

In describing the newsgroup, it is useful to create a narrative or story. The most coherent way to understand the group is perhaps chronologically, reviewing the main events in the groups history and reflecting on the particular variables that Etzioni outlines in the relation to those events. Following is an outline of the significant events of the life of the tpy2k newsgroup:

Significant Events in the tpy2k Newsgroup

- 1996: Origins of the newsgroup as a technical information network;
- 1997: The emergence of conflict: instances of Doomer/Polly dichotomy;
- Sept. 1998: Split off of tech.problems.year-2000.tech (tpy2k-t) [see Charter Appendix A];
- 1998-1999: The battle for validity further entrenchment into Doomer/Polly camps;
- January 1, 2000: The Disconfirmation;
- January 1, 2000 March 1, 2004: The end *is* near posts and ripostes after the date rollover.

In an effort to bring some semblance of order to the study, each stage of the life of the newsgroup has been related to the five variables of community. Issues of access and boundary, and the creation of interpersonal knowledge are discussed in relation to the early years of the newsgroup, as the creation and growth of the group

reflect aspects of these issues. Where boundary formation was defined (in terms of the mandate of the group), the split off of the *tech* subgroup in 1998 pointed to clear strategies participants used for handling differences in the shared interests and values of the participants. Where members came to know what to expect from other members, these values were increasingly shared and interpersonal knowledge was gained. The emergence of a group culture and group bonding is evident in the first two years of the newsgroup discussions.

Interactive broadcasting and civility were analyzed using messages from the middle years of the group, where the creation of the two opposing camps, the Doomers and Pollyannas, reflects the salient issues surrounding broadcast, feedback, flaming and trolling. In acknowledging their allegiance to one or the other camp, members made knowledge claims which, collectively, were broadcast to all, reinforcing the boundaries of the two camps. The broadcast and feedback of knowledge claims related to the Doomer and Pollyanna split became an important aspect of group behavior to investigate, one which facilitated the understanding of the meaningfulness of the group to its members and which support the argument that communitarian aspects of online community exist. However, it must also be suggested that a lack of civility related to the Doomer and Pollyanna split supports the opposite argument.

In the final years of the group, after the year 2000 date rollover, participation waned and the definition of the group wavered. Nonetheless, the interpersonal bonding that occurred in earlier periods and the community memory that had been

inculcated through years of discussion may have had a role in the maintenance of the group in the first years of the new millennium.

In charting the life of the group, the relative levels of each variable in Etzioni's schema were tracked and monitored to see where the group might stand in its effort to become a meaningful, valued community to its members. The research strategy I used to track the thematic elements of posts which provide evidence for each of the five variables was driven by the search engines made publicly available in hypertext format on the World Wide Web in 1997 by a service called Deja News, which was purchased by Google in February 2001. Today, the collected messages of Usenet newsgroups ranging back to 1981 are available using the same interface that most people today use to search the web – the Google search engine.⁶

The specific dataset used included the collected messages from the Usenet group *tech.problems.year-2000* dating from November 6, 1996, the day the group was formed, through April 1, 2004. The data collection technique will involved using the Google web search engine, as well as a subset of messages saved in Netscape Messenger newsreader format, to analyze the nearly half-million (445,593 as of April 1, 2004) messages that were composed in the newsgroup.

The tracking of specific messages as they relate to the themes defined by the variables was done using a qualitative data analysis program called *The Brain. The Brain* allows for a non-linear, multi-nodal network of concepts to be arranged in a graphic interface. So, if the content of a message applies to more than one variable category, for example, interpersonal broadcasting *and* civility, it can be connected to both themes and understood in the analysis as contributing to an understanding of

both variables. *The Brain* is the qualitative equivalent of statistical path analysis. It offers the opportunity for a deeper understanding of the data, and thus a more refined analysis. Also, for the quantitative analysis relating to the newsgroup data – aggregate participation analysis, for example, or frequency of broadcast and feedback, a "Usenet social accounting engine" called *Netscan* (developed for the Microsoft Corporation by sociologist Marc Smith) can be used. *Netscan* tracks the messages being exchanged through Usenet using algorithms which delineate the frequency of messaging for groups as well as for individual users. It is publicly available on the World Wide Web at http://netscan.research.microsoft.com. Figures 3.3 and 3.4 show the relationship between the variables and how they are thematized in *The Brain* and in *Netscan*.

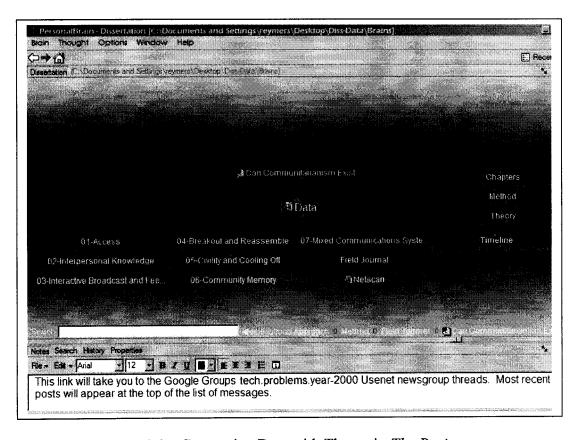


Figure 3.3 – Connecting Data with Theory in The Brain

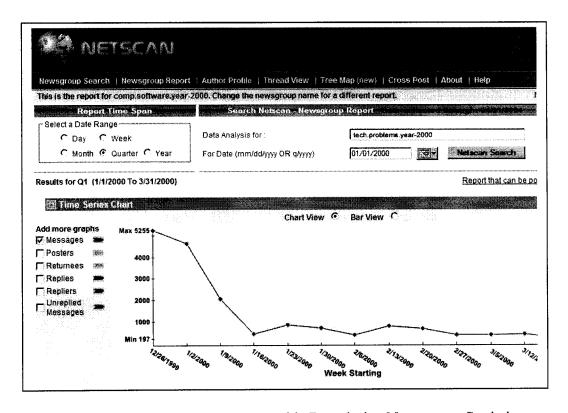


Figure 3.4 – Using Netscan to Provide Descriptive Newsgroup Statistics

It might be argued that the research strategy of cyberethnography can provide a "cognitive" understanding, but cannot allow a researcher to truly understand the *zeitgeist* of group membership, the "communal past" of which Etzioni speaks in regard to community memory. Pacagnella, for instance, has stated that "as in [face-to-face] interaction, there is a dynamic dimension to conversational turn-taking in CMC. The time taken typing, and the delays between turn-taking (which can be a few seconds in synchronous CMC or several days [or more] in asynchronous options), can shape the mood of the interaction. This information is often lost in the analysis" (in Mann and Stewart: 87).

In order to mitigate this problem of retrieving only the "cognitive" aspects of the data, prior to the availability of the Google search engine for tracking posts, I acted in a non-participant "membership" capacity (what in CMC culture would be called a *lurker*) for a one year period between 1999 and 2000. This offered the chance to get to know the access methods before access was made available on the WWW, to pace the messaging, to feel the rhythm of the feedback, and to get to know the spirit of the group culture in a way that differs from the mere "cognitive" level of doing message searches after the fact. It might also be argued that the persuasive, informal, and sometimes insulting language used within the group discussions can be indicators of this "zeitgeist" as well. Nonetheless, it will be important not to make inferences regarding meaning where no clear meaning exists.

In brief, the *tpy2k* Usenet newsgroup makes a good case for the study of communitarianism online because it is (a) an example of a widely used type of group forum, where participants communicate asynchronously around (b) a shared interest that polarizes the group, offering a unique opportunity to see the clear construction of community norms, boundaries, statuses and roles. These basic concepts, as related to Etzioni's theory (that communitarianism online will be evidenced by the independent variables involved), provides the intellectual order (Hakken 2000:3) by which the online behavior of members of *tpy2k* can be understood sociologically.

Operationalizing the Variables

It is next important to operationalize the five variables Etzioni provides. The operationalization will take into account the ethnographic approach to the research

and will connect an understanding of the sociology of community with the independent variables involved in this specific case.

a. Access and Boundary

In CMC, access depends upon (1) possession (whether temporary or permanent) of a personal computer (or similar internet-capable device – WebTV, for example), and (2) having a physical connection (using a modem) to the Internet. These factors are mitigated by the cost of the computer, and the cost of an Internet Service Provider (ISP), which can vary widely based on the speed of connection (note that the costs can be minimized or avoided by using a free service provided by ones workplace, libraries, universities or internet cafes). For text-based online groups, such as Usenet, a fast connection speed is not very important – for GUI (Graphical User Interface) groups, speed does become more important. A third mitigating factor is the training that is involved to garner the technical knowledge necessary to understand how to access forums online, in other words, how to use newsreaders or a WWW portal for Usenet. This knowledge requirement is also diminishing over time as interfaces (GUI's) are created that are easier and more intuitive for people new to using computers (or "newbies").

One problem with CMC studies is that the data cannot easily confirm people who do *not* have access. The topic and location of the group itself (in Usenet) lends to technically savvy individuals, creating a self-selected core group of experts who typically find access issues less troubling than the layman. Questions of access arise in the group dialogue when it is threatened individually or as a group or otherwise – access is therefore tied to group boundaries identity. Also the location of access – at

work, at home, at a library – can tie an individual's off-line identity to their on-line identity. The intersection of off-line status, identity, and access will be an important thematic category to explore, for it points out the conceptual inseparability of "real" from "virtual" community.

b. Interpersonal Knowledge

Interpersonal knowledge helps to create bonds between people and helps to share a culture, the two important attributes of community. Knowledge of others in a community setting can take many forms. For example, one might come to know aspects of a group members' specific identity, such as age, sex, race or physical attributes such as hair color, height or weight. One might come to know another's stance on political issues or religious beliefs. Most importantly, encompassing knowledge might be defined as the shared interests and/or values that help to create the bonds necessary for community to exist.

An important aspect of any identity claim made through CMC is authentication. Users must be able to trust (Putnam 2000) that the shared information regarding identity and other knowledge claims is at least crudely correct. While it is more difficult to assess traditional social descriptors (such as bodily descriptors) online, it is not wholly impossible to discern someone who is falsifying information about oneself that could not be falsified in a f2f group. Just as non-verbal cues exist in f2f groups regarding the veracity of information (shifty eyes being a common example), verbal cues exist in CMC along the same lines. Reports exist of users being able to root out imposters, with varying degrees of success. Of course, the danger exists of incorrectly "exposing" a person who is authentically

describing oneself; this problem leads to the third aspect of interpersonal knowledge, accountability. Accountability is the idea that members of a group are responsible for their contributions to the group.

Measurement of the degree to which interpersonal knowledge is attained by community members can involve both quantitative and qualitative research. A quantitative analysis of group involvement might demonstrate the number of messages contributed to tpy2k by screen name over given periods of time. Mere consistency of presence is an initial indicator that translates to more probable development of interpersonal knowledge for any given member.

A qualitative analysis can more accurately pin down the nature of the interpersonal knowledge shared by members of the group and their feelings, ideas, beliefs, and values related to the topic of the group. This "archaeology" of the messages exchanged uncovers how the members feel about one another and how they express those feelings using the medium of CMC. This type of analysis can shed light on the fundamentals of online interpersonal knowledge: identity, trust and accountability.

c. Interactive Broadcasting and Feedback

In f2f communities, broadcasting a message might be achieved through the means of leaflets or flyers announcing a town hall meeting; it might be in the form of a sermon that is talked about after the service by the congregation; it might be a bulletin board post that allows for multiple responses. Gossip or rumor might also constitute a limited form of broadcasting. In CMC, broadcasting and feedback are "built-in" to the communication system. The popular computer term BBS, or

"bulletin board system," derives specifically from this desire for interactive broadcasting, which in turn derives from the lack of physicality in CMC. Because of this, computer-mediated communications systems perform this community-organizing function better than face-to-face communication systems.

Usenet is an interactive broadcast medium *par excellence*. All messages sent are not only available to current community members, but are archived for the perusal of new community members who wish to gain an understanding of the interpersonal knowledge of the community (or for sociologists interested in a more detached perspective). Likewise, feedback is shared by nearly all; the "threading" logic of newsgroups provides an excellent feedback mechanism for Usenet communities. Examining how threads are created, the perceived importance of some threads over others, and how the use of broadcast and feedback created the schism in the newsgroup between the Doomers and the Pollys will be useful in gauging this variable.

The broadcast and feedback of groups members exemplifies the interaction component of group behavior. "Links can be seen as conduit or pipe or pathway (a physical channel), or the interaction (causes and effects) between nodes.... The conduit represents the potential of interaction. The interaction, however, is what brings the system to life" (Davis 2003). It is the "life of the system" that will be researched in this project in order to answer the questions addressed at the end of chapter two. The life of the sociocultural system of online community, its *spirit* or *raison d'etre* is held within the interactions themselves, not the conduits or the links. The interactions in this case take the form of written statements of meaning

broadcast to members of the community. Those statements involve claims to authenticity, legitimacy, and truth in relation to the issue around which the group has gathered. This has implications for how the issue is handled in real life. Studying the meaningful-causal system (Sorokin 1964) created by the interactions within a CMC setting can uncover the empirical sociocultural system of online community. As anthropologist Clifford Geertz has said, "man is an animal suspended in webs of significance he himself has spun" (in Mann and Stewart, 2000:87).

d. Civility and Cooling-off Mechanisms

The culture of a community involves the production and ritualization of a set of shared values and norms. Civil behavior is defined in relation to these values and norms. Maintaining civility is a major issue in many Usenet newsgroups and other CMC forums. It was certainly an issue within tpy2k.

The point is often made that CMC communities are less civil than f2f communities. But, to clarify the necessity of this research, it must be asked, "Do CMC communities *need* to have the same level of civility that f2f groups must possess?" This relates to social sanctions such as punishment and ostracization.

Civility is a clear sub-topic of the tpy2k newsgroup. The polarization of the issue of Y2k itself stirred deep passions in the newsgroup members – it gave the newsgroup its purposefulness. Compared to f2f community, what can be construed as a fairly high level of conflict existed in tpy2k. It seems from a preliminary analysis that members were aware of this conflict and willing to live with it; in fact, they seemed to feed off of the Doomer/Polly polarization, finding solace in the

personal affiliation with their own camps' belief system. The nature of civility online as it relates to the established norms, or the *netiquette*, of the newsgroup, is an important indicator of the quality of the community.

The "cooling-off" mechanism is clearly present in Usenet, but limited. Each member had the choice of either shooting off a quick, irate response to a comment after hardly a thought, or composing an eloquent response over the course of hours or even days, including reference material and citations. Generally (but not always), longer responses indicate a greater level of civility, as they allow for explanation of opinions where they differ from the original opinion in a thread topic. Shorter quips typically (but not always) indicate quicker, off-the-cuff responses meant to demean or flame.

Flaming and trolling in tpy2k become a clear issue related to civility. The sheer amount of flaming and trolling can be an initial indicator of the level of civility. In fact, it is a well known subcultural fact about Usenet that flaming is quite common, and, in some cases, encouraged. In a way, this counters the logic of community building, as Smith suggests here:

Common sense would suggest that none of the groups created through network interaction media should succeed. Nearly anonymous people from around the world with no prior introduction independently request or contribute time and expertise and freely give the result away to anyone interested without payment or coercion. Such a fanciful social organization would seem doomed to failure (Smith 1999:200).

The sheer number of Usenet discussion groups is contraindicated by the chaotic foundation upon which Usenet sits. The characteristics that seemingly would dissociate people – anonymity, the lack of chronological or spatial references, flaming, for example – are the very phenomena that, paradoxically,

entice a communal response. Clearly, the definition of what it means to be civil in the space of Usenet is far more resilient than is the civility generally recognized in offline situations.

e. Community Memory

The communal impetus for *tpy2k* began as programmers recognized the possibly nefarious effect of their programs at the turn of the millennium. While the Y2k bug did not strike the general public's awareness until roughly late 1998, it was clearly on the minds of those in the computer field in 1996 (the origin year of *tpy2k*) and earlier. It could be argued that the mass media attention that Y2k received in the 1998-2000 period proved to be a difficulty for the long-standing members of the newsgroup, as *newbies* (new contributors to group discussion) and others less committed to the group over the full course of its life infiltrated the newsgroup and challenged the meaning and purpose of the group.

Community memory helped sustain the more committed members of *tpy2k* through this onslaught, which can be measured using quantitative statistics of number of messages and number of posters during the 1998-2000 period. Stories shared within the earlier growth of the group provided identifiers with which long-term members could stake a claim to "legitimate" membership, as opposed to newbie-dom. The newbies also provided a way for the long-term members of the group to reiterate the meaning and purpose of the group (often from the perspective of the camp to which they belonged), solidifying it for themselves and also creating new debates and differences.

Etzioni's Conclusions

Amitai and Oren Etzioni regard online groups as potential candidates for meeting the criteria of communitarian social groups, *real* communities as they might put it. "Far from finding that CMC systems cannot meet the needs of 'real' communities, we find that there are no conceptual reasons or technical ones, that CMC based communities, especially given additional technical development, could not become full fledged communities."

The next chapter will set the stage, describing the milieu of tpy2k, and briefly discuss the history and culture of the intersecting cultures of the Internet and Y2k. In chapter 5, the issues of access and boundaries will be addressed and the accompanying development of a social structure, statuses and roles will be sought in the group over its first years of existence. This will entail first framing the origin of the group within the external cultures of the Internet and the issue of the year 2000 computer problem. Examining the emergence of the tpy2k newsgroup as an initially technical group, and observing the transition of the newsgroup into a socio-political arena, will shed light not only on how communities are born, but how they change when their mission is compromised. The negotiation of meaning in this early context of the group sets the stage for deeper divisions to come.

In chapter 6, aspects of the growing interpersonal knowledge and the interactive broadcasting of the group will be examined. The way in which feedback in the threads of newsgroup discussion are implicated in the sustenance of tpy2k will be investigated, as will the split in the newsgroup between the Doomers and Pollys.

Chapter 7 will describe civility within the group, particularly in relation to the common Usenet phenomena of flaming and trolling. Next, reaction to the year 2000 date rollover and the post-Y2k newsgroup will describe the way in which group solidarity is attempted in light of a deprivation of the basic reason for its existence, through the use of "memorializing strategies." A close look will be taken at the way in which the continuation of the group is rationalized by its members. And in chapter 8 an analysis and statement on the state of communitarianism online will conclude the dissertation.

Chapter 4 The Intersecting Cultures of the Internet and Y2k

In our own day the approaching end of the twentieth century has encouraged fears, first of nuclear winter, then of global warming; but on 1 January 2000, a year before the third millennium begins, we shall learn whether civilization is about to collapse through the failure of computers to recognize the change in thousand and hundred. — The Oxford Companion to the Year, 1999

Before engaging in an analysis of the variables, a brief foray into the encompassing cultures of the Internet and Y2k during the period of the study will be necessary, in order to situate the *tpy2k* newsgroup in the larger context of social forces that helped to shape the shared interests and values of the newsgroup. As Castells (2001:36) says, "Technological systems are socially produced. Social production is culturally informed. The Internet is no exception. The culture of the producers of the Internet shaped the medium."

Internet Culture

No summary of the development of the Internet can adequately convey its complexity as a cultural arena. However, understanding the basics of its history and cultural background are important to understanding the details of any online community.

The Internet emerged as a result of the combination of the military activity of ARPANET in 1969 and the adoption of this technology in the 1970s by business and universities worldwide who wished to employ network technology to enhance the abilities of businessmen and scientists to communicate, manipulate and analyze data relevant to their productivity and purpose. Castells (2001) gives a thorough history of the Internet in his book *The Internet Galaxy*:

The origins of the Internet are to be found in ARPANET, a computer network set up by the Advanced Research Projects Agency (ARPA) in September 1969. ARPA was formed in 1958 by the Defense Department of the United States with the task of mobilizing research resources, particularly from the university world.... In the summer of 1980 Usenet News reached the computer science department of the University of California, Berkeley, where there was a brilliant group of graduate students (including Mark Horton and Bill Joy) working on adaptations and applications of UNIX. As Berkeley was an ARPANET node, this group of students developed a program to bridge the two networks. From then on, Usenet became linked to ARPANET, the two traditions gradually merged, and various computer networks became able to communicate with each other, often sharing the same backbone (courtesy of a university). These networks eventually came together as the Internet (2001:10, 13).

Usenet, or Unix⁷ Users Network, is a direct descendant of these early communicative networks; it is nearly analogous to the Internet itself. Hauben attributes the origins of Usenet prior to Berkeley to the work of two students at Duke University in North Carolina, Tom Truscott and Jim Ellis, and describes it this way:

After having worked in Bell Labs for Ken Thompson where, as in Truscott's words "I was in Unix heaven the whole time, returning to Duke in the fall meant the end of that...." That fall, another Duke graduate student, Jim Ellis, installed the latest Unix (V7) edition on a Duke Computer Science computer. It broke many old programs, including a public domain 'items' program that had provided a local bulletin board. ...

Truscott attributes the creation of Usenet to the confluence of these events in Fall 1979. He describes a long rambling conversation he and Ellis had one night considering these circumstances. The idea for Usenet developed during their discussion (Hauben 1997:5).

The early development of Usenet was also a response to the second-class status that was imposed on the university nodes by Defense Department controlled ARPANET nodes. "The early history of the development of Usenet...retained the control-resistant nature of Usenet. For many of its early developers, it was evident that Usenet opened a new possibility for the fabrication of anarchic, regulation-resistant, and decentralized forms of human association. This recognition became much more consolidated when they emphasized the differences of operational

principles between Usenet and the ARPANET mailing lists" (Hangwoo Lee, 2003, personal communication). This aspect of struggle against control in the creation of Usenet is important to remember in light of the abrasive nature of the posts sent by the members of tpy2k: liberty and freedom are part of the culture of Usenet, sometimes to the point of advocating anarchy.

The development of the Usenet throughout the 1980s shows a direct relationship to popular and technical culture alike. The Google Groups archive is a list of pop culture connections and technical achievements that mirrors the interests of those technically proficient and connected enough to use these networks to communicate. The archive provides a review of "firsts" in the history of Usenet forums. Some selections from this list are:

11 May 1981 Oldest Usenet article in the Google Groups Archive

May 1981 First mention of Microsoft

Aug 1981 First review of the IBM-PC

Mar 1982 First mention of MTV

Apr 1982 First mention of Sun Microsystems

Jun 1982 First mention of Star Wars Episode 6

Jul 1982 First mention of a compact disc

Aug 1982 First mention of Apple's Lisa and Macintosh products

Dec 1982 Announcement of first cell phone deployment in Chicago

Dec 1982 First thread about AIDS

Feb 1983 First mention of Michael Jordan

Feb 1983 First mention of a Fax machine

Jul 1983 First mention of Madonna

Nov 1983 First mention of Microsoft Windows

Jul 1984 First mention of Bill Clinton

Jan 1985 First discussion of the Y2k problem

(2004, at http://www.google.com/googlegroups/archive_announce_20.html)

The list continues on into the 1990s, but the last event listed here is noteworthy. An understanding of the Y2k problem had been stewing in the culture of computing for years, long before 1985, in fact, obtaining an underground status as an "unknown quantity," a deeply embedded problem, if one at all. The nature of the knowledge, or lack thereof, about the outcomes of the Y2k problem is, and

always has been, deeply embedded in Internet culture due to its technical nature. Yet it also has a mythic quality, partly due to its coincidental partnering with the Christian millennium. The "myth of Y2k" was linked to the technological uncertainty inherent in complex systems. This is the "mystery quotient" that made the Y2k problem so appealing to debate in *tpy2k*. That first Usenet thread mentioned above was posted in 1985 and includes 36 messages (which were contributed by none of the regular participants in the *tpy2k* newsgroup which emerged eleven years later). Nonetheless, the first post in the thread indicates the basic nature of the problem as it was understood then and in 1996:

From: Gerald Bocce

Subject: Computer bugs in the year 2000 Newsgroups: net.bugs, net.flame, net.puzzle

Date: 1985-01-18 20:43:17 PST

I have a friend that raised an interesting question that I immediately tried to prove wrong. He is a programmer and has this notion that when we reach the year 2000, computers will not accept the new date. Will the computers assume that it is 1900, or will it even cause a problem? I violently opposed this because it seemed so meaningless. Computers have entered into existence during this century, and has software, specifically accounting software, been prepared for this turnover? If this really comes to pass and my friend is correct, what will happen? Is it anything to be concerned about? I haven't given it much thought, but this programmer has. I thought he was joking but he has even lost sleep over this. When I say 'friend,' I'm NOT referring to myself, if it seemed that way.

"I've never really written anything like that before" Gerald P. Bocce

The worried tone of the message is a precursor to the reservations about technology that the symbol "Y2k" came to represent a decade later in *tpy2k*. However, the reservations in the message above are twofold – there is a concern (or at least a curiosity) about the potentially negative consequences of mass computer failure, but

there is also an impression left that the author is trying to seem *rational*, particularly in the claim at the end of the message to *not* being concerned with the problem, but merely curious about it.

The background themes of rationality, security, hope and fear, and technological determinism pervade tpy2k and are endemic of community issues in general. Many of the thirty-six replies to the message above relate anecdotes depicting first hand experiences of Y2k or other date-related failures in computer systems at banks, universities and other businesses. It is a guess as to whether the original questioner was comforted or disturbed by the replies, for s/he never added to the thread.

Who populated these early Internet networks such as Usenet? Castells (2001) believes that there are four intersecting cultural types of Internet users, which he calls the techno-meritocratic culture, the hacker culture, the virtual communitarian culture, and the entrepreneurial culture. "Together," he says, "they contribute to an ideology of freedom that is widespread in the Internet world" (2001:37). Techno-meritocratic culture incorporates a strong degree of logic in the ethos of their culture. A deep understanding of language and its logical properties is necessary within this culture for the purposes of creating computer programs. The programs stand on their own as achievements which demonstrate the knowledge and creativity of the programmer – GIGO, or "garbage in, garbage out," is a familiar phrase to the computer programmer.

The hacker culture builds upon the techno-meritocratic culture by fostering the values of "open source code." These values are laid out in the *Open Source*

Initiative web page (www.opensource.org): "The basic idea behind open source is very simple: When programmers can read, redistribute, and modify the source code for a piece of software, the software evolves. People improve it, people adapt it, people fix bugs. And this can happen at a speed that, if one is used to the slow pace of conventional software development, seems astonishing." This clearly opens the gate to the development of virtual communitarianism.

Castells describes virtual communitarian culture as dependent upon hacker culture. "Without hacker culture, communitarian networks in the Internet would be no different from many other alternative communes." However, Internet networks vary significantly from other alternative communes, particularly due to the feature of anonymity and physical distance. Similarly, Castells continues, "without the hacker culture, and communitarian values, the entrepreneurial culture cannot be characterized as specific to the Internet" (2001:37). These statements show Castells' most succinct expectations to date that communitarianism exists online.

The intertwining of these four distinct cultures which created tpy2k is the most salient feature of the newsgroup. The intertwining of these cultures fed the broader ideologies that effected members' positions on the Y2k issue. Specifically, the techno-meritocratic and hacker cultures produced both the Y2k problem and its solutions; the virtual communitarian culture influenced the discourse surrounding individualist or communitarian responses of the doomer camp; and the entrepreneurial culture strove to throw information technology resources at the Y2k problem to ensure that it did not effect the critical infrastructure. There is a joke among programmers that Y2k was intentionally created by "old head" computer

programmers to ensure themselves future work in Y2k remediation, though some have taken this attempt at humor more seriously than others.⁸

The freedom of Internet culture Castells' describes is widespread and is a founding concept of not only programmers, but other virtual citizens. John Perry Barlow is a well-known figure in cyberspace politics, advocating through the Electronic Frontier Foundation and on the popular WELL message board in San Francisco that Rheingold (1993) made famous. As the Internet began to burgeon into the "revolutionary" phenomenon it was touted to be in the mid 1990s, Barlow reacted to the threat of government enforcement of Internet content (specifically the Telecommunications Act of 1996) with *A Declaration of the Independence of Cyberspace*⁹.

The insistence on the citizenry of Cyberspace (note the capital C, turning the generalized cyberspace into a proper noun) as unique from the countries bearing the physical location of the bodies that the communicators use to type messages is one of the clear values of Internet culture. Cyberspace is its own entity, *sui generis*, representing the values of global free speech in a status-free environment (i.e., representing an ideal class stratification system – one is judged only on the basis of one's ideas). As John Gilmore, creator of the *alt*.* hierarchy in Usenet, has said "the Net interprets censorship as damage and routes around it" (cited in Rheingold 1993:7).

Virtual communities thrived on this basic value of freedom. Tamed with the cooperative nature of the hacker/open source culture, it fed the growth of early groups composed mostly of computer programmers and the "information elite."

However, as the means for communicating became more accessible to laymen, particularly after the introduction of hyper-text markup language (HTML) and the World Wide Web in 1991, virtual communities expanded in number, size, and scope. "Values and interests of all kinds sprung from computer networks. Empirically speaking, there is no such thing as a unified Internet communal culture. Most observers, from Howard Rheingold to Steve Jones, emphasize the extreme diversity of virtual communities" (Castells 2001:54).

However, Castells argues that virtual communities do possess two core values: (1) the horizontal, free communication that was just described, and (2) a self-organizing, interactive capacity for anyone to find the network that most suitably fits their own interests. This is a chief characteristic of the "networked individualism" described in chapter 2. Castells concludes that, "while the communitarian source of the Internet culture is highly diverse in its content, it does specify the Internet as a technological medium for horizontal communication, and as a new form of free speech. It also lays the foundation for self-directed networking as a tool for organization, collective action, and the construction of meaning."

The combination of the Internet cultures that Castells describes creates the milieu of the "geek," often a self-assigned and honored appellation within the subculture, despite the strong stereotypical meanings outside of it. Many of the tpy2k participants refer to themselves as "geeks" so a generalized description of the geek status will assist in the understanding of these participants.

Chmielewski and Wellman (2000) describe the "species" of programmer they call "Geekus Unixus" using a tongue-in-cheek taxonomic approach, in an

article based on data collected about Internet users for *National Geographic* magazine's millennium celebration.

Chmielewski and Wellman note that Unix users are by far the minority, with 1 percent of computer users using the Unix operating system, whereas 89 percent use Windows and 10 percent use the Apple Macintosh computer. The humorous guide includes a "Field Identification of *Geekus Unixus*," describing them as predominately male (70 percent), Caucasian (87 percent), single (52 percent), seasoned Internet veterans (86 percent have used the Internet for over 2 years - "scientists have found members of *Geekus Unixus* preserved in amber along with hardware dating back to the ARPANET years"), well-educated (36 percent are graduate program degree earners), well-employed (91 percent), and technocratic (nearly all Unix users have technical or professional jobs).

Also noted in the article are the "Behavioral Patterns of *Geekus Unixus*", showing intense Internet usage (44 percent use the Internet daily), avoid Microsoft products (no user surveyed used Microsoft's Internet Explorer to navigate the web, with 99 percent choosing Netscape), communicate frequently (35 percent e-mail daily to friends living closer than 30 miles, dropping to 18 percent for those farther than 30 miles), is rarely seen off-line (18 percent of Unix users say they "often" participate in offline recreation), and has "a somewhat greater sense of community online than they do in the 'real world'."

Chmielewski and Wellman's article includes a final section on "Encountering *Geekus Unixus* in the Wild", in which he ends the piece with the following statement: "If you happen to encounter a *Geekus Unixus*, don't be

alarmed. But choose your approach carefully: *Geekus Unixus* has been known to behave erratically when hearing the cry of 'Y2k'!" (2000:3).

Y2k Culture

To understand the motives of the actors in tpy2k, it is vital to understand the nature of the Y2k computer problem¹¹ and the references to "Y2k" in technical, eschatological, and popular cultures of the computerized societies. The intersection of these three cultures clearly informs the debates of the tpy2k newsgroup and a brief review of each of these aspects of Y2k will follow.

In the 1950s, the early computer theoretician and technician Admiral Grace Murray Hopper founded the term "computer bug" when she found a moth lodged in the relay of the Harvard Mark II computer, a forerunner of the famous ENIAC computer. This was a potent symbolic moment having a resonant meaning in the technical culture of computers, a moment where the physical and immaterial, the hardware and software, collided with disastrous results. Also important was Hopper's assistance in creating COBOL, or COmmon Business Oriented Language. The "Windows" of its day, early COBOL relied on Hollerith cards, more commonly known as "IBM cards" or simply "punch cards." The amount of data available on the cards was quite limited and that led to the practice of eliminating the first two digits of the year in date calculations to save space. This practice was carried on into the solid state years after punch cards (used primarily with early vacuum tube powered computers like ENIAC) were replaced with magnetic tape and electronic

data memory storage in transistor-based circuitry (like the familiar RAM "chips" used in contemporary computers – but at prices that might astonish people today).

Why was the century-dropping practice not changed decades before the year 2000 actually arrived? It was expected to be fixed by the programmers who created the space-saving process, those who recognized its inherent flaw, but believed it would be repaired long before it would cause any trouble. To answer the question, we come back to the Department of Defense, where an important decision was made in 1967. Robert Sam Anson describes the difference of opinion between programmers and D.O.D. officials:

In 1960 [IBM programmer Robert] Bemer joined with 47 other industry and government specialists to come up with universally accepted computer standards. The wrangling, however, stretched out for years-too many years for the White House, which, in 1967, ordered the National Bureau of Standards to settle the matter. In so doing, the bureau was to gather input from various federal agencies, some of which were using two-digit years, others four. As a practical matter, the only opinion that counted was that of the Department of Defense, the largest computer operator on earth. For bigger-bang-for-the-buck reasons, it was unshakable on the subject of year dates: no 19s. "They wouldn't listen to anything else," says Harry White, a D.O.D. computer-code specialist and Bemer ally. "They were more occupied with ... Vietnam" (Anson 1999).

The decision had been made and it was at that point in 1967 that the Y2k "threat" was truly created in the minds of many programmers.

The Media and Y2k

Attention to the computer bug brewed for years, mostly silently due to the non-immediacy of the problem, throughout the 1970s and 1980s. On February 13, 1984, editor Paul Gillin made the first printed reference to the Y2k problem in *Computerworld* magazine. On September 6, 1993, Peter de Jager made printed warnings of potential catastrophic dangers of the Y2k bug, also in *Computerworld*

magazine (note in the next chapter the frequent references to *Computerworld* magazine made by the members of *tpy2k*). Between 1967 and 1995, no references from magazine or journal headlines, lead paragraphs, or terms are returned by the Lexis-Nexis news search engine regarding the terms "year 2000 bug", "year 2000 computer", "year 2000" and "computer", or "Y2k." Table 4.1 shows the references to both "Y2k" generally and the terms "Y2k" and "computer":

Year	References to "Y2k"	References to "Y2k" and "computer"
1967-1995	0	0
1996	3	2
1997	127	56
1998	970	478
1999	2926	1131
2000	883	307
2001	242	79
2002	99	40

Table 4.1 - References to the Terms "Y2k" and "computer" in Periodicals, 1967-2002

(Source: Lexis-Nexis)

This data set shows that "Y2k," in both general and computer references in periodicals, did not become a factor in the wider culture until 1997, when attention to the matter started to reach beyond the technical weeklies and was drawn by periodicals such as *New Scientist*, *U.S. News & World Report*, and *Business Today*. A similar trend is found in references to "Y2k" alone and with the term "computer" in major newspapers, shown by Table 4.2.

Nearly a quarter (twenty-two percent) of the "Y2k" references in 1999 occurred in the last half December 1999. References to "Y2k" in 2000 took place primarily in January, which accounted for 58 percent of the total posts in 2000.

Year	References to "Y2k"	References to "Y2k" and "computer"
1967-1995	0	0
1996	9	7
1997	102	79
1998	1479	1433
1999	10985	5357
2000	3622	1327
2001	346	122
2002	116	43

Table 4.2 – References to the terms "Y2k" and "computer" in Major Newspapers, 1967-2002
(Source: Lexis-Nexis)

Clearly, "Y2k culture" was inculcated in the years between 1997-2000 within most industrial societies, particularly the U.S., in part by the media attention that it drew.

For a number of years computer technicians like Bemer and White, and others such as Gillin, de Jager, and Ed Yourdon (1986, 1989, 1998) warned of the dire consequences of a computer meltdown. This metaphor of a "computer time-bomb," an imminent, if preventable, threat waiting to "explode," eventually led to books such as Reeve and McGhee's (1996) *The Millennium Bomb* and Zetlin's (1998) *The Computer Time Bomb*. After publishing a number of programming specific books in the 1970s and 1980s, Yourdon turned his attention in 1998 to Y2k, publishing *Time Bomb 2000: What the Year 2000 Computer Crisis Means To You*. Michael S. Hyatt, self-described as a "leading authority on the Y2k problem [who] has testified before Congress on the issue, and has appeared on countless radio and television programs about the Millennium Bug" (1998a) also got in on the action with a series of media he brought out between March 15, 1998 and April 1, 1999, including *The Y2k Personal Survival Guide* (1998a, published March 15), *The*

Millennium Bug: How to Survive the Coming Chaos (1998b, published May 12), Y2k: The Day The World Shut Down (1998c, a novel published November 13, 1998 with George E. Grant), and Y2k: What Every Christian Should Know (1999, audiotape format).¹⁴

On the Internet, newsgroups emerged to discuss the topic. Online forums other than tpy2k were involved in their own discussions of the Y2k problem, but none were as active as tpy2k. These forums included web-based groups like those accessible through www.timebomb2000.com (Ed Yourdon's Y2k web page) and www.year2000.com (Peter de Jager's Y2k web page), and other Usenet newsgroups such as alt.talk.year2000, alt.survival.year2000, alt.y2k.end-of-the-world, uk.tech.y2k, alt.future.millennium, and microsoft.public.year2000. Many other small, informal groups also existed, with far less access and participation due to their relative lack of visibility or because they were intended only for a small, geographically local audience. Curiously, the Y2k-oriented Usenet newsgroups mentioned above were cross-posted to less frequently than tpy2k's closest "network neighbor," misc.survivalism.

Until 1997, the culture of Y2k was more or less restricted to computer programmers who composed the techno-meritocratic and hacker cultures that Castells (2001) observes, or to the eschatologically-minded. A latent sense of the date change certainly formed a cultural undercurrent (few had not thought of the year 2000 as a marker for our selves and our society). After 1997, Y2k, in all of its manifestations, surfaced in the popular imagination of citizens in the United States and worldwide.

Religion and Y2k

The popularity of Y2k extended from the programmers to the media to religious figures drawing attention to the year 2000. With the year 2000, according to some, would come the Millennium, a religiously charged symbolic moment within Christianity harkening the return of Christ and the coming Apocalypse. The significance of the year 2000 is linked to the New Testament's Book of Revelations, which describes a vision of the apostle John, a prophecy of a holy battle between the armies of the Faithful and True against the Beast and a false prophet. At the conclusion of the battle, won by the followers of Jesus, those who perished would rise again with Christ and live and reign for a thousand years (the strictest sense of the Millennium). This prophecy has led to many millennial movements through the ages, starting with the Montanists in A.D. 156 and continuing through the present.

In this light, it is clear that the connection between the year 2000 computer bug and the millennium (even though many did not consider January 1, 2000 to be the introductory date of the third calendrical millennium)¹⁸ is purely numerological, yet powerful nonetheless. There was significant overlap of Y2k and millennial cultures, and a consequent mix of the secular and the religious, science and superstition, led to some unorthodox beliefs. Hyatt's last work mentioned above suggests the connection between Y2k and religion, but it was even more obvious in evangelical circles, both off and online. This religious emphasis seeped into the talk about Y2k taking place in tpy2k, and was ever present as a background factor.

Survivalism and Y2k

Survivalism is associated with disaster preparation and response efforts made by an individual or a family when a calamity is perceived to be imminent. Gary North preached survivalism and provided numerous scenarios by which society would collapse as a result of the Y2k computer bug.

The issue of survivalism is at the heart of y2k. This issue cannot be avoided; it can only be deferred.

Virtually all people will defer it. The vast majority of those who read my REMNANT REVIEW newsletter, my ICE newsletters, and receive my various monthly audiotapes will defer it. They will define their situation as being somehow different. They will not write down on paper the reasons why they believe this, for their only reason is that it is inconvenient to move. They will refuse to move until they cannot move. Now, if they won't move, after a year and a half of weekly warnings, why would the average person move, who thinks "they're taking care of it"? He won't. He will get trapped. He will be upset that nobody warned him -- as if being warned about y2k would change most people's behavior.

Do I really believe that people would rather risk near-certain disaster or death rather than be inconvenienced? I do. I'd have you ask a million Armenians who died in the Turkish slaughter in 1916, or the Jews who thought Hitler could be dealt with in 1933, or the 100,000 ethnic Chinese who were murdered in Indonesia in 1965, but they're not around to ask.

Ed Yourdon confronted the issue of survivalism; then he moved out of New York City and went to Taos, New Mexico. He wrote his reasons in TIME BOMB 2000, which is now on the NEW YORK TIMES best-seller list for paperback business books. But he will not be joined by many programmers. Nevertheless, the press will keep writing about him. The press is fascinated with survivalism... (at http://www.garynorth.com/y2k/detail_.cfm/1977, originally posted 1999, retrieved 2004).

A notable Y2k pundit, Gary North and his web pages figured prominently in the tpy2k newsgroup as a source of information. But many were also very skeptical of his doomsaying.

No one opposes Gary North because he is providing y2k "information". It is y2k information that disproves Gary North. Most of the documents he links to undermine the 'comments' that precede them. It is because Gary doesn't let the facts speak for themselves. He comprehensively distorts them. If the facts speak for themselves, then why the 'spin'? Why such clear tactics of dishonesty and chicanery? Why has this all appeared before time-and-time again in the well documented track-record of false alarms, hatred of the U.S. system of government and Western democracy, survivalism, sociopathy? (Thibodeau 1999).

Despite such criticism, a central tenet of the Doomer dogma in tpy2k was preparedness for survival in the event of immediate, or even long-term, societal collapse. The messages of preparedness and survival combined not only with evangelical outlooks on Y2k, but with the secular as well. As previously mentioned, the tpy2k newsgroup was very closely affiliated with the newsgroup misc.survivalism (also known by the acronym ms); the data shows ms to be the closest newsgroup neighbor to tpy2k (meaning that the greatest number of shared messages between newsgroups was with ms). Clearly, survivalist ideas had a significant role to play in the Y2k phenomenon being discussed online.

Business and Y2k

The business world was certainly not immune to the Y2k phenomenon – in fact, it could be argued that the business world had the greatest *connectedness* to the problem, for the Y2k problem was to be found primarily in the computers running business applications, particularly those written in the COBOL computer language. And the problem was very costly to the business sector.

At the end of 1998, *Business Week* ran an article putting the cost of fixing the Y2k bug at one trillion dollars globally. Businesses began spending more and more money on their information technology departments to allow them to properly fix the problem.

In the third quarter, the Securities & Exchange Commission for the first time urged companies to disclose what it will cost them to head off the bug. The disturbing news: Many now plan to spend, on average, about 26% more than they thought just months ago. AT&T, for example, had said in early 1997 that it might shell out \$300 million. Now, it says it could spend \$900 million before Jan. 1, 2000--some \$186 million of that in this year's fourth quarter alone. Chase Manhattan Corp. says it will spend \$363 million, up 21% from its \$300 million second-quarter estimate. And Aetna Inc. is blaming fatter-than-expected Y2k bills--\$195 million instead of

the \$139 million forecasted last summer--for a 6.1% drop in third-quarter profits. Even states are feeling sticker shock: Illinois officials say fixing bugs in the state bureaucracy will cost \$114.4 million--up 65% from 1997 estimates (*Business Week*, December 14, 1998).

The article also mentions Edward Yardeni, a prominent chief economist for Deutsche Bank Securities, who estimated the likelihood of a global recession as a result of the Y2k computer problem at 70-30 odds (he reversed the estimate in May 2000). Japanese economist Makoto Nomura stated in April 1999 that "we should be most concerned with the macroeconomic impact in terms of swings in demand. Furthermore, I think that there should be more concern about the situation in the United States, where the computer-dependence rate is higher and where enormous expenditures are having to be made to respond to the Y2k challenge."

The estimated cost did not reach the trillion dollar figure foretold by *Business Week*, but it was estimated at \$600 billion at the end of 1999, according to Peter de Jager of the Gartner Group (up significantly from the \$75 billion estimate he gave in 1993). Union Pacific Corporation budgeted \$46 million and Nabisco Incorporated \$42 million. The largest banks¹⁹ and investment companies spent more than ten times those amounts. The rate at which businesses were repairing code and the resources being put into the fixes was evidence used to support both Pollyanna and Doomer arguments in the *tpy2k* newsgroup.

Politics and Y2k

Government representatives began to take Y2k very seriously, particularly after the greater cultural awareness of the computer problem was gained in the late 1990s. For example, Victor Porlier, former Chief of Information Systems for the

U.S. State Department Agency for International Development, published a book in 1999 titled Y2K: An Action Plan for January 1, 2000. On the congressional front, in April 1998 the U.S. Senate created the Special Committee on the Year 2000 Technology Problem, led by Senator Bob Bennett (R-Utah). The committee was responsible for putting political pressure on the industries and federal bureaucracies where Y2k compliance was lowest. This was done, for example, by introducing the possibility of market regulation. On June 8, 1998, for instance, Bennett (who was also Chairman of the Senate Banking Subcommittee on Financial Services and Technology) pressured the Security and Exchange Commission to tighten their grip on the disclosure of individual businesses' Y2k compliance, which led to the description above regarding third quarter 1998 compliance figures (Special Committee press release, 1998).

In March 1999, Senator Bennett and Senator Chris Dodd warned that while banking and telecommunications industries had been adequately preparing, the health-care industry and the business infrastructure in other nations still held a "high risk for Y2k failures." Preparedness was a clear imperative for Bennett and Dodd: "We are vulnerable to Y2k because of the interconnectedness of our information systems in every economic sector," said Bennett. "The Y2k threat is real and heightened by the ubiquity of microchips, and our dependence on just-in-time delivery for everything from groceries to medicine. In the United States, we are relatively well-prepared, but there will be inconveniences for some and more negative effects for others. The key is to prepare now to avoid catastrophe in the new millennium" (Special Committee press release, 1999).

In light of earlier warnings from industry and political representatives, in February 1998, President Clinton established the Year 2000 Conversion Council, appointing John Koskinen to its leadership position. Koskinen had formerly (1994-1997) been the Office of Management and Budget's Deputy Director for Management, and had developed connections to top federal agencies in that position. Having the appeal of authority, Koskinen was frequently used as a source of evidence in the *tpy2k* discussions. However, because he was a top information management official in the Clinton administration, his opinions were well guarded. The gloomy scenarios drawn by Senators Bennett and Dodd were typically not discussed by Koskinen.

The survivalist attitude towards the political establishment's take on Y2k was predictable. For example, some survivalists fear that FEMA, the Federal Emergency Management Agency, has plans to declare martial law in the event of a disaster, which will ultimately lead to a new totalitarian society. "In certain ways survivalism reflects the severe downside of the millennial myth. Like the nihilism of punk, the survivalist philosophy speaks of mass destruction and mass death. It is not interested in reforming the system...The process evolves from a secularization of otherworldly apocalyptic elements into a self-salvationist credo based in this world. Salvation will come to those individuals and groups who have honed the 'survival of the fittest' instinct and ideology" (Lamy 1996:86). In this sense, the mistrust of government on the part of survivalists, and the insistence on self-salvation, represents a fundamental mistrust of social relationships, particularly systemic relationships, such as those that might be found in a community. Communitarianism

and survivalism (a special brand of the libertarian perspective) are polar opposites. The extent to which survivalism enters the political discussions in tpy2k will help to measure the degree to which the newsgroup facilitates a communitarian ethic.

Y2k in Academia

Academia was another social arena not outside the reach of Y2k. A number of social scientists and historians were involved in researching the Y2k phenomenon in its many variations prior to the turn of the century. Even the well-established and respected Oxford University got in on the Y2k speculation in their Oxford Companion to the Year, published in 1999, as the introductory quote to this chapter points out.

Another example of a deeper analysis of the hype surrounding the Y2k computer bug was that done by cultural contagion theorist Aaron Lynch. In the subtitle of his August 1998 web article, Lynch asks the question "Is Your *Mental* Software Year 2000 Compliant?", and goes on to argue that "Thought contagions are beliefs that program for their own copying in humans much as computer viruses do in computers. Their self-spreading effect explains the techno-apocalypse ideas swirling around the Y2k bug, including secular hell-doomsday ideas, logic-resistant strains of myth, and embedded rumors. Knowing this can help everyone, and prevent the panicked departure of programmers and other key personnel just when we need them most" (Lynch 1998).

Richard Landes, a professor of history and director of Boston University's Center for Millennial Studies, has also examined the connection between

millennialism and the Y2k computer bug. Landes' ideas regarding "owls" and "roosters" surfaced in the tpy2k forum on June 22, 1998, when newsgroup member Lucy Ripaghan re-posted an article printed a day before in the San Jose Mercury News, which included this information from Landes:

Landes has been tracking the Year 2000 and other millennial predictions for years. "This is what we call secular apocalypse," Landes says. "It has two elements that make it different from religious apocalypse. At least at the rhetorical level it appeals entirely to scientific projections and deals with material phenomena. On the other hand, unlike religious apocalypse, there is no redemption -- there is no heaven and hell."

Landes says it is inevitable that the level of rhetoric and alarm, which has already risen, will continue to escalate. Different people are predisposed to react to the same predictions in different ways, he says. He defines the most alarmist voices as "roosters," and those on the opposite end, who think everything will be taken care of as "owls."

"The position of the owl, its preference, is not to talk about it," Landes says. "The only thing that brings them out is when the rooster starts winning the battle of public discourse."

Discussion about the Year 2000 are becoming more mainstream, and that is a sign that roosters are winning, he says. One thing roosters and owls agree on is that as the clock ticks, there will be plenty of opportunities to get some reality checks.

The positions of rooster and owl that Landes describes are clearly analogous to the Doomer and Pollyanna camps that became the basic framework for belief within *tpy2k*. Online and offline life meet in the following 1999 post as a newsgroup member indicated he was a friend of Landes:

From: Curt Ovachart

Subject: Re: Richard Landes is no Polly! Newsgroups: tech.problems.year2000

Date: 1999/05/26

Landes is my friend and I've had several conversations with him about Y2k. I've attempted to calm him down on this issue but have had little success. He has organized some panel discussions at Boston Univ. and did include people from the "polly" side in effort to give balance.

In the first panel discussion (3/3/98), he included Zvegintzov on my recommendation. Later, Richard told me something like, "all he said was stuff like, 'that's ridiculous.'"

He is also on record specifically stating that he does not agree with me on the Y2k computer issue.

--Curt Ovachart

Conclusion

Every one of these elements of Y2k and Internet culture, from COBOL programming to survivalism, from business, political, and academic perspectives to religious ones, entered into the discussions of members of tpy2k at some point. The combined convictions of computer programmers, evangelicals, survivalists, business people, politicians, and academicians, pushed the Y2k phenomenon into mainstream culture in 1998. It was this complex of factors that combined to contribute to the overarching zeitgeist of the moment before the year 2000 transition, the period of the late 1990s where the Internet "revolution" drove a massive spike into the stock market and the economy, a period of increasing religiosity in America (Strozier 2002), and a period of continued U.S. political ambiguity. The feelings of the continued capacity of computers to revolutionize society (and feed a "never-ending" upward-spiraling business cycle) contributed to the fear and panic that was expressed at its possible demise. Equally responsible was the millennial myth that was influencing opinions on the effects of the Y2k computer bug. But one thing is certain: there was significant enough attention to the date rollover on January 1, 2000, on many different fronts and for many different reasons, that societies worldwide took notice.

Tpy2k was a clear example of the notice that was taken of the millennium primarily from the perspective of a technical group sharing the culture of the Internet, but with input from others unfamiliar with technical aspects as well. Tpy2k

can be thought of as a microcosm of the clash of modern rationality, with its Pollyanna "silver-bullet" approach to technological problems, and the cultures of endism and their various religious and secular versions of doom and gloom prognostication. As a reflection of the society itself, the communication within tpy2k is both technological and religious, both technical and moral, and it is this combination of influences which make this social space fertile ground from which community might sprout. Signs of the variables of community will be searched for in the data to be presented in the remainder of this study, which will examine how conflict emerged and how it was managed by the members of the newsgroup. Was common ground sought? Can two approaches to the future so widely varied come to coexist communally online? Can this social phenomenon justifiably be called "communitarian?"

Chapter 5 The Symbolic Construction of *tpy2k*: Issues of Access and Boundary

Q: Is this group gonna relate to software and solving the Y2k problem...new software to solve that problem...or something more obscure?

A: Probably both. The newsgroup has only been online for a few days, and we are already having platform wars. I think that one way to utilize this newsgroup would be for everyone to work together to solve the problem. There has to be people out there that are already working on the problem. Lets hear about some actual experiences.

- tpy2k newsgroup posts, November 6-8, 1996

The Emergence of tpy2k: The Creation of the Newsgroup and Early Access

According to Etzioni, access is simply the ability to communicate. In this sense, access to the *tpy2k* forum was achieved through accumulating the hardware and the technical ability it takes to connect to the Internet and set up news reading software. It is no mere coincidence that the increase in Usenet communication is linked to both the falling prices of hardware and the availability of user-friendly software used to read the Usenet forums. During the much touted Internet revolution, Netscape Messenger, Microsoft Internet Explorer and Eudora, the most used web browsers and mail programs, had integrated a newsreader into their e-mail clients. People from the technical-meritocratic and hacker cultures slowly started intermingling with those in other social arenas, and particularly after 1995 when the Deja News web page brought the Usenet to the WWW, traffic to the newsgroup spiked. Deja News, and subsequently Google, opened access to those who did not want to invest in the time and effort it took to understand and implement newsreader software in their e-mail client (or otherwise). At the end of 1996, shortly after the

Usenet web browser interface was introduced, the first instances of access led to the emergence of the newsgroup *tpy2k*.

The *tech.problems.year-2000* newsgroup was established on November 6, 1996 with one of the first messages in the Google database showing an early participant mentioning that the newsgroup had just been created "today." This was a response to a message asking for more information in the form of a FAQ, or list of Frequently Asked Questions:

From: Albert Epstein

Subject: Re: Is there an FAQ for this NewsGroup?

Newsgroups: tech.problems.year2000

Date: 1996/11/06

Tito C. Morales Jr. wrote:

: Is there an FAQ for this newsgroup?

I suspect not yet, the group just started today...

I'm looking forward to one !

Regards,

Albert J. Epstein

Interest sprouts early, a good sign for a newsgroup in its infancy. In a reply to Epstein, Hiller indicates willingness to maintain a FAQ:

From: Dick Hiller

Subject: Re: Is there an FAQ for this NewsGroup?

Newsgroups: tech.problems.year2000

Date: 1996/11/07

I am willing to maintain one!

- Dick Hiller

Another reply to Tito Morales' query points out one participants' interpretation of the purpose of the newsgroup:

From: Michelle White

Subject: Re: Is there an FAQ for this NewsGroup?

Newsgroups: tech.problems.year2000

Date: 1996/11/06

I am sure it $[a\,FAQ]$ will be posted... it was voted in a week or so ago. the main focus is the issues related to the year 2000, and the fact that there are many computer software systems which are written to handle only a two digit year. So, in essence, lots of software will stop working.

BTW - do not try this.... One experience is to change the time on your computer to be 11:58 PM on the 31st of December, 1999. Turn it off, and wait a few minutes. Then try to power it up... most computers can not even boot!

I presonaly experienced my first problem with the year 2000 in software in 1969 when I was working for a bank. A mortgage was written with a 30 year term, and the final payment was due 1/1/00.. thus no payment was EVER due! when the software was written, the largest record size was 256 characters. So, storing the century was a total luxury! and not necessary in the '60s. We all swore we would retire before 1999, but I, for one, will not make it!

There will be billions of dollars spent to revamp software to handle the millenium. This newsgroup will focus on issues like these, methods to work around the limitations built into software, share experiences.

I am sure there will be an official posting shortly, but that is primarily the focus!

Michelle

These early instances of access to the newsgroup suggest a trend toward interest sharing and participation investment statements. Morales wonders whether there is a FAQ; Epstein looks forward to one; Hiller is willing to write one; White is "sure it will be posted" and goes on to share a Y2k experience and lay out her definition of the purpose of the social space that is *tpy2k*.

Access within the newsgroup to other areas of the Internet was typically achieved through posting web links within the messages to bring awareness to new issues and solutions or to support a claim. Google was frequently referenced (603 messages referenced "Google", according to Google) in the newsgroup as a source

of information, and hypertext links to news and journal articles, reports, websites and other sources of information kept open the access to the other areas of the Internet (particularly the World Wide Web).

Access was not necessarily restricted to those who could afford the latest computer and broadband internet access. The poor were represented on the newsgroup along with the wealthy, as this post points out:

From: Waterbody

Subject: Re: Y2K: Boon to Useless Eaters Newsgroups: tech.problems.year2000

Date: 1999/03/25

You know it is possible to own an old computer and be poor at the same time. If one needs an internet account for ones work should one eliminate that in order to buy \$10.00 a month more worth of beans? I work hard and don't make enough. I own a computer which no one would buy. I use an internet account to help me bring in what cash I can earn. Some months are better than others. Some months I need no aid and get none. Some months I do. It is always easy to judge others when you have never faced their challenges.

Another aspect of access to the newsgroup involves placing members in relation to each other geographically, and recognizing the cultural differences that widely disparate geographical populations might bring to an online forum. Social relations invariably take on geographical expressions (Wolch and Dear 1989) and within those expressions the shared meanings can be found. The construction of the empirical world follows.

In the case of cyberspace, the connection between space and meaning is even more pronounced, by the fact that the geographical area can be spread around the world, accessible through monitors located in homes, businesses, schools and many other institutions. Variance in locales of users can be demonstrated by

searching the newsgroup messages for geographical claims, using, for instance, the search term "I'm from":

- ... heard that French have a naughty reputation). I'm from New York, I'll trade insults with anybody. Thank you ... Jul 17, 1997
- \dots bus and a gasoline tanker? \dots I'm from the trucking industry. If the anti-lock system \dots Mar 21, 1998
- \dots emergency. Then again, I'm from Britain, so I'm more familiar with terrorism and the IRA and how they have been impossible to iradicate. \dots Apr 7, 1998
- ... Just out of curiosity, what it the tornado rate in the area of Western North Carolina/East Tennessee/Southwest Virginia? Well, I'm from Alabama and we ... May 1, 1998

All of the single-family farms are gone. Not true where I'm from. My family has a dairy farm; we only milk about 80 cows, and we ... - Oct 29, 1998

Hi there!!! I'm from Holland and working in the IT business. People are beginning to wonder not just what is going to happen, but ... - Nov 4, 1998

... thanks for the correction. Guess I don't know much about Maryland -- I'm from Alaska! I am not at all surprised that you call ... - Dec 23, 1998

... I'm from the Netherlands - y2k things go reasonably well (except for some hospitals) ... - Oct 15, 1999

from Google Groups search engine, search term = "I'm from" Nov 6, 1996 – Nov 6, 1999 (160 unique posts returned)

The inclusion of rural and urban dwellers and of many different nationalities with variable cultural backgrounds indicates that access is open to many categories of people, geographically, occupationally, and otherwise. This is largely due to the inclusion of the newsgroup in one of the "Big 8" Usenet hierarchies (tech, humanities, misc, news, rec, sci, soc, and talk). In his description of how to create a newsgroup, Bell (2002) notes that "if the topic is of broad international interest, then the logical place is an 'international' hierarchy such as one of the so-called 'Big 8'." Of course, the language itself is a barrier to access for those without the sufficient skills to contribute messages in English. But beyond the culture and

values that are inculcated in the place-based relationships of their physical communities, place really has little meaning for the group identity of tpy2k.

The Creation of Boundaries

When physical space is meaningless, the invisible boundaries developed through group behavior are more easily recognized. These boundaries are created by the sense of purpose and social boundaries were reinforced by norms and roles that the participants filled within the newsgroup setting. This is how communities without proximity are symbolically constructed. Their maintenance relies particularly upon the existence of the variables investigated in this dissertation.

In online settings, access itself (or the ability to communicate) may be affected by boundaries that are created by the shared purpose expressed by a majority of users. In other words, hardware and software issues may not be the only barriers in the ability to communicate. In order to understand the issue of access more fully, we must go beyond Etzioni's definition and consider how group norms and boundaries affected access. In particular, it will become important to recognize that *self-selection barriers* exist, based on the interest one has in the groups' purpose, and *other-selection barriers* exist, based on the perceived quality of the contributions made to the discussion – in outright cases of continued off-topic posting or of flaming, a poster may be filtered, or *killfiled*. The "killfile" is a useful sanction which can be understood through its analogy to face-to-face life: if one is simply ignored in cyberspace, it is the equivalent of death. It has often been said that attention is the currency of the Internet.²⁰

Killfiling was mentioned infrequently in the first six months, likely because there was insufficient knowledge about trends in off-topic messaging or other "aberrant" behavior and because the purpose of the group was still being constructed through the shared discussions that were communicated via message threads. Only ten instances of the use of the word "killfile" can be found in the first year of newsgroup posts (prior to Nov 6, 1997). Four out of the ten messages refer to one specific messenger, who went by the name Pseudonymous, and his transgressions will be discussed in greater detail in chapter 6. The 393 killfile references in the following year (Nov 6, 1997 to November 6, 1998) indicates a social arena with an emerging pattern of flaming and trolling. Earlier in the newsgroup's history, however, other-selection access barriers were mitigated by the technical topical nature of the newsgroup, its relatively small size, and the yet unknown aspect of individual members' identities. Here is sample of Mike August's killfile (which includes a total of ten names) that he shared publicly:

```
Here's my current killfile for t.p.y2k:
    These filters were exported from MT-NewsWatcher
    Version:
                3.0
                Monday, December 4, 2000
    Date:
GROUP=tech.problems.year-2000
KEPT=kFalse
STRING=Thomas Murray
HEADER=from
MATCH=kContainsTheString
IGNORECASE=kTrue
SCORE=0
LABEL=33
STRING=MrMidgit
HEADER=from
MATCH=kContainsTheString
IGNORECASE=kTrue
```

SCORE=0 LABEL=33 # STRING=El Doogers HEADER=from MATCH=kContainsTheString IGNORECASE=kTrue SCORE=0 LABEL=33...

Boundaries were set by the newsgroup norms that were first dictated by Usenet culture in general, and later became unique to tpy2k in particular. In cases of early norm violations, particularly the norm of staying on topic, warnings were issued and conflict regarding what constitutes on and off-topic posts ensued. In their own defense, some offenders attempted to change the newsgroup's purpose itself and established online "coups," of a sort. Of course, this kind of newsgroup coup entails a certain degree of freedom to effect the purpose of the group. In a moderated newsgroup, the moderator is the ultimate authority regarding the content that is posted to the newsgroup servers. But tpy2k was an unmoderated newsgroup.

Unmoderated newsgroups begin with an interested party who submits a Request for Discussion (RFD) application, or charter, to Usenet newsgroup system administrators (referred to as "net.gods"), who are reached at the news.group Usenet location. After a period of discussion of no less than 21 days, there is then a vote on the RFD, which must obtain at least 100 votes, and of which two-thirds must be valid "yes" votes. In some cases, the regulations are not as strict – "alt.*" hierarchy newsgroups, for instance, have much looser requirements for newsgroup creation. If the vote is regarded as a pass, an announcement is made at the news.announce.newsgroups location introducing the new newsgroup to the hierarchy (Lee 2003). In an unmoderated newsgroup, beyond the initial setup work,

which can be rather onerous, there is no need for maintenance of the structure or content of the forum; however, with this freedom from the responsibility for maintenance comes the potential for changes to occur in the normative structure of the newsgroup as defined by the charter as well as by netiquette in general. This is what occurred within tpy2k.

The message below, from the second day of posting on *tpy2k*, is a sample of items in the original charter created by Fred Beerston and Edward Florida, and a member of the Usenet Voluntary Votetakers (UVV), Ford Haaken:

From: FGB (Fred Beerston)

Subject: Charter for This Newsgroup Newsgroups: tech.problems.year2000

Date: 1996/11/07

In response to questions posted asking "What is it about?":

below is the original charter for this newsgroup.

Newsgroups line:

tech.problems.year2000 Year 2000 compliance: projects and issues.

Proponent: Fred Beerston Proponent: Edward Florida Votetaker: Ford Haaken

...

CHARTER: tech.problems.year2000

This newsgroup will be open to all aspects of the year 2000 century conversion, including:

- * Project-management issues...
- * Technical discussions...
- * Software tools...
- * Announcements...
- * Legal and corporate-level year 2000 software issues...

Language shall not be restricted to English.

All posts shall be directly related to the subject of year 2000 compliance. Topics of a political, philosophical or religious nature shall not be posted in tech.problems.year2000.

END CHARTER.

(Note that the entire contents of the charter can be viewed in Appendix A).

Curiously, Beerston submitted only twenty-six total messages to the newsgroup, mostly in the first year and during the year 2000 rollover (only one message was posted between January 7, 1997 and December 22, 1999). He was not heard from again on the newsgroup after Feb 13, 2000. Florida posted only 12 total messages, many of them simply consisting of "refresher posts" of the original charter, and the last message, posted on April 12, 1998 was a final plea to stay on topic and "to hold some of the rhetorical content down, and perhaps use email to communicate personal comments to someone." Nonetheless there were plenty of people interested enough and with sufficient access to post significantly more messages than Beerston and Florida during the following years of the newsgroups existence. Some of these heavy messengers became icons of the newsgroup, pundits who truly represented the camps which were to emerge in 1998.

As interest accumulated, rules and expectations on behavior, as well as boundaries within the social space of the newsgroup emerged. With this concurrence comes a necessary addition to Etzioni's concept of access: access is no longer just the ability to communicate, but can be altered by the social boundaries created by the communication itself. Whether boundaries are physical or purely social, they still can restrict or open access to the newsgroup. In terms of the newsgroups' willingness to accept message posts as legitimate or reject them as the work of spammers or flamers, access is then defined not only as the ability to communicate, but also as the *utility* of the communication at hand, whether or not it is purposive and thus meaningful. Where meaning ends and nonsense begins lies a boundary that is drawn by the participants of the community. Sometimes this

boundary drawing is quite explicit, as in White's case above. She explains exactly what the topic of the newsgroup is ("this newsgroup will focus on"), from her perspective, and thus set a boundary for the topical nature of the newsgroup. This boundary, accepted at first, would in the future be challenged.

The growth of a group identity, the sense of community that resulted from the stable and continued access within the newsgroup discussion by the same people, is indicated by the self-reference that "tpy2k'ers" began to use in mid-1997, as demonstrated in these sample post snippets:

... since I want a pack too. Unfortunately, odds are that I'm the only Finnish tpy2k'er at the moment... Cheers ... - May 24, 1997

 \dots teleworking. That means, of course, that you'll need to hire all of us in tpy2k - at well above the top rates being offered outside. \dots - Aug 12, 1997

 \dots we are preoccupied with food and drink in tpy2k :) I think you have it all wrong, \dots really we are preoccupied with drink and food \dots - Aug 15, 1997

... But while the folks on tpy2k have been cheering about this, and rightly so, at the same time people have been wondering why Y2K still seems to be such a low ... - Oct 4, 1997

... If you can read my reply, then that's you - subscribed! Welcome to tpy2k (tech.problems.year-2000) ... - Oct 17, 1997

... Send us a brochure of your product". "Get stuffed" say I (to myself so far - well, now in front of the assembled hordes in tpy2k) where the hell do I have the ... - Oct 24, 1997

... I'm not sure whether this applies to PL/1 or assembler. I'd do a search through my tpy2k history, but quite frankly I can't be bothered !!!! ... - Oct 28, 1997

from Google Groups search engine, search term = "tpy2k" Nov 6, 1996 – Nov 6, 1997 (44 unique posts returned)

This self-reference, using the acronym "tpy2k", began on May 24, 1997 and increased in relative frequency during the first year (including forty-four unique references through December 1997). Self-reference helps to clarify not only a common interest, but a common situation and purpose in posting to the newsgroup which led to a strong feeling of similarity within the newsgroup. The self-references

included allusions to group identity (being a "tpy2k'er"), perceived occupational similarities ("hire all of us in tpy2k"), newsgroup members' extra-topical offline habits ("preoccupied with food and drink here in tpy2k"), shared feelings ("folks on tpy2k have been cheering"), welcome messages to the newsgroup, the sentiment that the newsgroup is a "horde," and references to the "history" of the newsgroup, despite the fact that it had existed for less than a year when that message was written.

As Durkheim has suggested, group identity is fostered not only out of a sense of solidarity, but by violations of the norms of a community as well, expressions of difference that are often quelled. For example, unsolicited commercial messages (and occasionally non-commercial messages such as chain letters), or newsgroup *spam*, were an early target of criticism. The very day of the newsgroups origin brought this spam message:

From: Elizabeth L Bean Subject: FAST & EAST CASH REALLY!!!

Newsgroups: alt.cannabis.policy, tech.problems.year-2000, misc.activism.cannabis, news.admin.cascade, news.admin.meow, news.admin.net-abuse.meow, news.admin.net-scum, news.admin.netscum Date: 1996/11/06

Hello!

I've got some awesome news that I think you need to take two minutes to read if you have ever thought "How could I make some serious cash in a hurry???", or been in serious debt, ready to do almost anything to get the money needed to pay off those bill collectors. So grab a snack, a warm cup of coffee, or a glass of your favorite beverage, get comfortable and listen to this interesting, exciting find!...

The message goes on for six more long paragraphs describing a pyramid scheme and then includes a full page of instructions on how to make "fast and east [sic] cash really!!!" Responses ranged from comic to sarcastic to vengeful. Note also that the spam was cross-posted to a number of different newsgroups, typically a Usenet faux pax, unless the topic is truly broad enough to span more than one newsgroup. But in that case one takes the risk of veering off-topic.

The header of the following message from March 1997 shows the care which was initially placed into making it perfectly clear that a post was off topic. Note in particular the message subject and header; note also that there was no response to this off-topic post:

From: Jake Limperton

Subject: OFF-TOPIC! [was Re: Why year 2000 problem?

Newsgroups: comp.lang.c, tech.problems.year2000

Date: 1997/03/07

[OFF-TOPIC ALERT! APOLOGIES!]...

It was agreed by the majority of the newsgroup that "spam" and off-topic posting constituted a breach of newsgroup netiquette as these incidences of norm violation demonstrate. This fostered an increased sense of purpose in the newsgroup and a solidarity that centered around not only shared interests but shared values in reference to the content of the newsgroup messages and formalized norms of textual behavior.

However, the sense of solidarity developed in this first six months was short-lived. By the end of the first year of the newsgroups existence, posts began to veer wildly off-topic, particularly in relation to the original charter and formal meaning of the *tech* hierarchy of newsgroups. More topics regarding "what if?" scenarios

started breaching into the main stream of the newsgroup discussions. The rhythm between periods of on and off-topic posts varied, and in July of 1997 Quartz Limited explains his gratitude that things have "normalized" recently:

From: Quartz Limited

Subject: A refreshing turn in this newsgroup

Newsgroups: tech.problems.year-2000

Date: 1997/07/19

I'm pleased to see less of the "the world is going to hell come new years' eve so let's get rich quick right now!" discussion in this newsgroup and more objective discussion of software maintenance issues and how to tackle them.

We would all do well to squash such rumors of doom as they continue to arise, until Wall Street gives up on the notion of easy money and the backlash against the profiteers settles down.

What we have here is a technical problem -- perhaps pervasive, but certainly not unprecedented and not the end of the world. There are tools out there which can make a dramatic difference in how we can approach these problems and no one should expect "a million monkeys" instead. And furthermore, a measure or an estimate of the number of programs in the universe which handle dates in some form or fashion, isn't a reliable metric of how many programs might need fixing or adjustment. Nor is it a measure of how many of them were built the right way the first time. Many tens of thousands of them *were.*

I'm glad to see these attitudes beginning to come out again in public. I'm glad to see articles like the one recently published in ComputerWorld. A little breath of common sense, if you will.

We don't need the influence of the roll-the-dice stock speculator and short-term options traders. :-/

The newsgroup had been steered astray from its purely technical purpose for too long, according to Quartz, and it is a relief to him that the *legitimate* technical purpose of the newsgroup is back on track. In response to this post, Lincoln Alexander posts his own allegiance to the "doom" scenario, mentioning specifically the risk to financial markets. The ensuing reply from Quartz is revealing:

From: Quartz Limited

Subject: Re: A refreshing turn in this newsgroup

Newsgroups: tech.problems.year2000

Date: 1997/07/20

Lincoln Alexander wrote:

> Is there an example in history when so many interrelated systems

> will malfunction simultaneously...all-pervasive is the word to

> use.. The world won't end...it will keep truning and turning and

> turning...it's just that the current finance system won't be

> making it go around anymore.

> Happy Days,

> Lincoln

> Lincoln Alexander

I flatly do not agree with your opinion that the financial systems of the world will collapse, let alone when the time-of-day clock rolls over to a particular date. This date may be auspicious for us humans but I suspect you seriously overestimate the effect on a computer.

However, this is your opinion and I must respect your right to express it.

This message foreshadows the future of the newsgroup, a latent expression of the real division that comes to the foreground a year later, the division between the Doomers and the Pollyannas. In this post, the language is conciliatory and respectful, if contrary. There is still a modicum of netiquette in this post, and others, during the first year of the newsgroups genesis, as differing viewpoints began to clash more and more, and the boundaries set by the purpose of the newsgroup came into conflict. But their "e-den" would soon collapse under the weight of the knowledge battle regarding optimistic and pessimistic scenarios surrounding Y2k.

The First Rift: tpv2k and tpv2k-tech

By December of 1997, the debate over the purpose of the newsgroup and what was to be considered off topic became the subject of ridicule. Attempts to

administrate the purpose of the newsgroup were flouted, with far less respect than a few months earlier. As new members entered the newsgroup and started contributing regularly, control over the newsgroup's purpose began to be lost by those who first inhabited this social space, and the unmoderated nature of tpy2k began to show through. Responses to Tim Graham's post regarding yet another off topic thread demonstrate this trend:²¹

From: Tim Graham

Subject: S/N Ratio (was: Archer vs IRS)

Date: 1997/12/22

Not an uninteresting thread, but decidely off-topic. Could you boys take it outside please?
-- Tim Graham

From: Tim Hoodes

Subject: Re: S/N Ratio (was: Archer vs IRS)

Date: 1997/12/22

(looking around with shifty eyes, half-smoked butt hanging out of his lips, he whispers -)

Oh shit, the topic police! Run for it!

Tim Hoodes

From: Dr. Tom Proctor

Subject: Re: S/N Ratio (was: Archer vs IRS)

Date: 1997/12/22

> Not an uninteresting thread, but decidely off-topic. Could you > boys take it outside please?

> -- Tim Graham

Seconded. How about having a daughter group, maybe tech.problems.year2000.us, for US local IRS/Fed &c matters? Crosspost here by all means if the stuff is of true interest outside the States; but downloading bulk stuff, especially re-quoted, is a waste of time & money to most outside the USA.

Tom Proctor, Guildford, UK.

From: MrMidgit

Subject: Re: S/N Ratio (was: Archer vs IRS)

Date: 1997/12/22

Dr Tom Proctor wrote:

[snippage]

> but downloading bulk stuff, especially re-quoted, is a waste of > time & money to most outside the USA.

Dr Proctor, this is not the first time you've mentioned the financial burden imposed upon you by undesired UseNet postings. I was wondering...can you give us an approximate figure as the the amount you've calculated you've spent on said undesired UseNet postings from this group?? If you can supply appropriate, verifiable documentation for said figure I, for one, would strongly consider mailing a check (or even a cheque) to you for it just so you'd stop what appears to my uninformed eye to be petty niggling.

Give us a number, Dr Proctor, or learn to live with postings you don't enjoy... just like the rest of the UseNet users.

MM

Here is one of the first indications that the rift in the newsgroup between the hardcore technocrats who desired a forum about purely technical issues, and the virtual communitarians who wanted to discuss political, economic, social, cultural, religious, philosophical and communitarian issues surrounding the technical problems of 'Y2k'. The rationale that Proctor uses to suggest that a new newsgroup be formed to accommodate the latter discussions, due to the costs in time and money it takes to download the off-topic messages, is taken as aristocratic rather than pecuniary. MrMidgit argues that the cost Proctor suggests is negligible and does not truly impede access to the newsgroup. Rather, the new newsgroup suggestion is interpreted as an attempt to control the newsgroup discussion, an illegitimate attempt at moderating an unmoderated newsgroup. Also note that there is an international component to this discussion: Proctor, from the U.K., proposes a United States specific newsgroup to discuss IRS issues and so forth, because he sees

these as particular to a foreign culture and it is meaningless to him; MrMidgit mocks this by offering to send a "cheque". The relationship between MrMidgit and Proctor became very confrontational over the course of the newsgroups' history.

Over the next three months, more of the same conflicts regarding the purpose of the newsgroup seeded an effort to create a break-off newsgroup, *tpy2k-tech*. Proctor and others proposed a new, moderated newsgroup be created to avoid the emerging conflicts experienced in the current iteration of *tpy2k*. Because the signal-to-noise ratio of the newsgroup continued to become more fractional, new proposals were being circulated in March 1998 to split the newsgroup.

From: Maynard N. Winchester Subject: *PLEASE READ* Preliminary Proposal: Splitting tpy2k Newsgroups: tech.problems.year-2000 Date: 1998/03/02

I think the time has come to split this newsgroup. There are too many totally different discussions going on, and large groups of people are becoming disillusioned with both the volume and content of the group of late. (Note that I am not implying by this that I am innocent of causing any of the problems, I am certainly not. I just want to take a step forward and do something constructive to solve the problems now.)

I wondered if there is enough interest to work towards a possible split of the group. Off the top of my head, I'd recommend something like the following; there could be more groups than this but splitting groups up too fine makes it hard to define what fits where:

tech.problems.year2000.tech (moderated) - Technical discussions of y2k work and remediation ONLY. Moderated by someone with a technical background. No flame wars, no societal impact, no news clippings. Technical discussion only.

tech.problems.year2000.announce (moderated) - A low-volume group only for germaine announcements related to the field. This could include technical bulletins, announcements of seminars, meetings, or whatnot. Modeled after the *.announce groups in other hierarchies. Not for commercial announcements or silver bullet proclamations.

tech.problems.year2000.social - Social discussions, discussions of impact, preparedness, media reports, etc. Intentionally left unmoderated--there has to be a place for people to talk freely about what concerns them.

Note that the Usenet powers that be might (rightly) argue that the "social" group belongs not here, but rather under the "talk." or "soc." hierarchies. This is debatable and can be addressed.

Before anyone pooh-poohs the idea, remember this: if you think the volume and flame wars are bad now, just wait a few months! I would posit that we ain't seen nothin' yet. It's going to get much, much worse.

Note: I am not proposing myself as the leader of this effort, or to be a moderator of any kind. I am not the right person for the job. I have in the past however lead the creation effort for a newsgroup or two and would be willing to provide assistance, including a template for newsgroup charters.

Please, if possible, respond to the newsgroup and not by email. Thanks.

cheers, Maynard N. Winchester

The reply from Paul Simpson simplifies the split suggested by Winchester, yet still recognizes the advantages of a moderated newsgroup to control topic and content, the desired outcome for those clearly intent on restricting the newsgroup to technical communication only:

From: Paul Simpson

Subject: Re: ... Splitting tech.problems.year-2000

Newsgroups: tech.problems.year-2000

Date: 1998/03/04

Simple proposal:

1. tech.problems.year2000 (unmoderated) <- as it is
now</pre>

2. tech.problems.year2000.moderated (moderated)

No artificial division of subject matter. Just one moderated group where the discussions *should* be on topic and content-rich, and one unmoderated group which can be left to the Johnny-One-Notes.

Filtering/marking threads only works to a point, and we are well past that point in this NG. ["NG" stands for "NewsGroup"]

Paul Simpson

At the same time, others were still trying to maintain the integrity of the original *tpy2k*. In an attempt to instill the norms of the newsgroup as they were expressed in the original charter, Phyllis Martin (known also as "phymart") volunteers to re-post the charter regularly:

From: phymart (Phyllis Martin)
Subject: Of Charters and FAQs

Newsgroups: tech.problems.year2000

Date: 1998/03/29

I will volunteer to post the tpy2k charter regularly, can we have some discussion of how often I should do this?

I have built a list of "Helpful URLs for Y2k Beginners" -- this is what I give to family and friends to get them started. I'm willing to post this periodically, any objections or discussion?

Is anyone willing to write a *short* FAQ? Eric, I have the text of your leap-year FAQ, but it really is big, and doesn't address any other Y2k questions.

Dejanews reports 271 posts to tpy2k on Friday, 1998-03-27. The political tirades, Bill-Gates rants, personality-bashing, and irrelevant cross-postings are way out of hand. We've lost or are losing some of our best resources, and a great deal of whatever credibility we ever had, because of bickering/bashing/personal-agenda/off-charter posts filling up the ng.

This is NOT a bust by the topic cops, this is a member of a community who is unhappy with the state of that community. BTW, Ivana, I loved your jokes, I really needed a laugh B^> Four off-topic posts that relieve a little stress are not what I'm concerned about.

Flame at will!

Phyllis

The statement "this is a member of a community who is unhappy with the state of that community" speaks directly to the conflict that can emerge regarding the boundaries established within any community regarding the behavior of members of the community. When the behaviors do not serve the purpose of the newsgroup, offensive measures are taken as well as defensive measures. Martin goes on the

offensive with the charter and then defends her intentions by claiming that this is NOT a bust by the topic cops." At the end of her message she invited flames (knowing they would come regardless), to soften the critique of her attempt at control and recentralization. Decentralization was the goal of those adding off-topic posts and flame wars to the community, and in the perception of a growing minority within the newsgroup it needed to be stopped.

Eventually, the minority succeeded in seceding from the main newsgroup. The new, moderated newsgroup with a new charter made its appearance on October 14, 1998:

From: tpy2kt (tpy2kt@cin.org)

Subject: TPY2KT is open for business

Newsgroups: tech.problems.year2000.tech

Date: 1998/10/14

This is a moderated group for discussion of technical solutions to the Year 2000 computer crisis. It is not for discussion of political or religious issues.

Moderator's address: bazooka+y2k@cin.org Submissions: tpy2kt@cin.org

Newsgroups line: tech.problems.year2000.tech Remediation of Y2K, similar bugs. (Moderated)

Voting closed at 23:59:59 UTC, 29 Sep 1998.

Proponent: Barry Spring Votetaker: Hal Berrington

RATIONALE: tech.problems.year2000.tech

The newsgroup tech.problems.year2000 has, virtually since its inception, been overrun by predictions and speculation about what might or might not happen to the infrastructure and to society in general when/if remediation of the year-2000 problem fails. This speculation tends to generate on the order of 300 messages per day; clearly showing the need for such a group. However, the original purpose of the group is not being served well, and so this is technically a recommendation for a split. The new group would provide a forum for technical help for remediators of year-2000

problems, which is needed now more than ever. While it might be raised that these ng's will have limited life, there are a class of related problems that will continue to be discussed well into next century.

Our charter is available online at http://www.cin.com/~tpy2kt/ You are asked to read it before you submit an article. Thanks.

Now let's crank some code!

Stan Lawrence, Moderator

Not long after, those who complained that tpy2k was too eclectic were redirected to the tech subgroup – but, the tech subgroup was often dismissed as outdated and unnecessary, as in this post from Jan 3 1999:

From: george

Subject: Re: "NEWS" GROUPS??!! Newsgroups: tech.problems.year2000

Date: 1999/01/03

Jim Lapska wrote:

- > Any serious news groups out there??!! The only thing that THIS
- > group accomplishes is to call each other names and tell each
- > other how wrong the other one is. We all have serious issues to
- > address..... and the need to start addressing them is now
- > (without the un-proffesional antics that this group employs).

Mr. Lapska,

Sure, there's a moderated group tech.problems.year2000.tech where the nuts n' bolts of remediation still gets kicked around. It's mostly rehash, since most of the technique was sorted out a couple of years ago.

If you're just now starting to address the serious issues, (and is that a note of panic I detect in your tone?), you may find what is discussed here useful in about a year.

Or you can always ask a question and see what response you get.

As another poster often says, "Come for the signal, stay for the noise".

George

Because their attempt at secession was met with relative failure, most members of the tech sub-group continued to also post to the main *tpy2k* newsgroup.

Within the increasingly accepted off-topic posts, particularly those from doomsayers, came another interesting issue related to access. In the doom and gloom Y2k scenarios, access to the newsgroup (as well as many other services, depending on the severity of the pessimism) would be terminated as a result of the Y2k computer bug itself.

From: Tim Graham

Subject: Re: Why Sweat Archived Data? Newsgroups: tech.problems.year2000

Date: 1997/09/29

Ralph Duque wrote:
>> Are you Y2K compliant or not?
> I wonder just how many of us here in tpy2k are?

For that matter, is tpy2k Y2K compliant? Seems the underlying protocols have some century problems, and some (all?????) existing news servers are known noncompliant.

Will NG posts fall out of the ether 2000-01-01?

-- TimGraham

In another turn of self-reference, Tim Graham wonders how the growing community itself may be threatened by the very problem they have come together to address. The necessity of protecting the Internet culture inherent in the newsgroup's mandate may have contributed to the doom scenarios that spread rapidly throughout the end of 1997 on the newsgroup.

Roles in tpy2k

The roles developed in tpy2k were initially similar to those of other newsgroups. There were those new to newsgroups and netiquette, who were given the name *newbie*. There were the infrequent and *one-timer posters* who arrived and

disappeared without much notice. There were the *lurkers*, that unknown invisible population familiar with the newsgroup but not willing to participate. Although the term sounds nefarious, particularly if it is given its f2f meaning, lurking is actually promoted in Usenet netiquette as a means of becoming familiar with the newsgroup. Newbies with unoriginal questions or commentary will often be told to either go back to the archives to do some research on the newsgroup, or lurk for some time in order to get to know the boundaries, rules, and culture of the newsgroup.

Gatekeepers were also present in tpy2k. The gatekeeper role helped to maintain both the general Usenet rules and netiquette and the particular rules of the tpy2k group itself. The gatekeeper role can be seen in a very different light by different adherents. In the example above, Proctor was trying to act as a gatekeeper for the content-based purpose of the group. MrMidgit felt those rules to strict and wished to open the "gate" further to enhance the discussion within the newsgroup.

Harry Porasky acted as a gatekeeper for the group as well. An early entrant (he joined on the third day of newsgroup activity), he was a mainstay of the newsgroup throughout its history. He produced a biweekly report, the *Washington D.C. Y2K Newsletter (WDCY2K)*, which he also published in *tpy2k*, and aided the cause of the Doomers. William Joule nominated Porasky for "ringleader" of the newsgroup, but passed him up for Peter Mill in this passage from Joule's website:

... We're trying to find a ringmaster.

There's Harry Porasky, who must be terribly annoyed that Yourdon, North, Kappelman, and a host of other Y2K Gurus have thus far achieved more notoriety than he; should we not give him this tiny bit of Naugha-fame?

Nah, we need someone with a taste of foam about the mouth. ... (Joule, June 1999).

The different meanings that the gatekeeper role in the newsgroup took for different regular members pointed to a fundamental split in the group that was deeper than the split between the technical enthusiasts and those who were more forgiving of off-topic posting (or who wished to redefine what was on- and off-topic). Over time, the roles of Doomer and Pollyanna emerged in tpy2k.

The Emergent Roles of Doomers and Pollyannas

Entwined within the dynamic of the split of the newsgroup between *tpy2k* and *tpy2k-tech* is the reason behind much of the off-topic posting and flaming, the meaning that Y2k had for some who believed that the technical problem was insurmountable. Doomsaying began very early in the forum, in fact, but was restrained and always linked to the technical aspects of the problem. Two first-day messages speak to the "apocalyptic" attitudes of some contributors to the newsgroup:

From: Lance Looka

Subject: Re: Purpose?

Newsgroups: tech.problems.year2000

Date: 1996/11/06

Frank Larroquette wrote:

- > This is the most interesting question I have asked all our
- > "gadget guroos" around here and they all take the laid back
- > attitude. Kind of like death, it won't happen to them if they
- > keep their head in the sand. Serious work, I'm sure is going on
- > for fixing this but little talk. Has any one seen anything in
- > writing on anticipated fixes that common PC owners and users can
- > purchase. Three years is not all that much time.

Nothing yet that I have seen is avaiable. In fact, I just read an article on how federal government gurus are beginning to be tasked to find solutions. Oh well, so it's the end of the computer age. I just hope I have my dissertation finished by then, because i don't think I can do it on a typewriter.;)

lance

Doomsaying is hinted at in the subtext in these early messages – not a clear

focus of the post, but rather flippant comments being thrown in at the end of

technical conversations. The "kind of like death", "end of the computer age" and

"have my dissertation finished" comments are certainly tongue-in-cheek, but it is

precisely the sentiment expressed in these comments that helped to form the basic

outlook of the newsgroup from the very first day. It was this early doomsaying that

pervaded the year 2000 issue as a conceptual "bogeyman." This culture of endism

(E. Powell, personal communication, June 4, 1999) formed the purposive elements

upon which the newsgroup participants spent a great deal of energy and time

debating.

By September 1997, the rift had begun, and the divergence of opinion

regarding relatively gloomy versus relatively upbeat outcomes of Y2k became more

obvious. The arguments over the outcome inevitably rested on the evidence that

members could produce, and the quality or veracity of the evidence was often the

point of argument. Take, for example, this post from jesis@electron.com, the

subject heading of which suggests that doomsaying is unreasonably based on a lack

of evidence:

From: iesis@electron.com

Subject: Year 2000: Doom vs Reason

Newsgroups: tech.problems.year2000

Date: 1997/09/18

Let me begin this by saying that I understand the seriousness of the year 2000 problem in some systems. I hope that all institutions that are effected by this problem are tackling the issue. That said I have to ask why it appears that reason has left the table in the debate about year 2000? Some people are actually defending the idea that we will experience societal collapse on January 1, 1997 [sic, 2000]. The story about the successful man that gave up his lifestyle because of his belief in this impending

collapse is quite scary. Is hype the only way to ensure that the

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mainstream media will pick it up and run with it? According to one Reuters report I read, my car will stop running at midnight on January 1, 2000. I can separate the facts from the hype but what about the average individual? There seems to be a lot of hypothetical scenarios created by individuals that don't have first-hand knowledge of how a particular system processes time information...

I have concerns about ethics. I am already hearing people here talking about gouging clients who may be desperate for help becoming year 2000 compliant. Some of these consultants may be directly or indirectly responsible for the problem in the first place.

Once again I am not belittling the seriousness of the year 2000 problem. But I have to take issue with the way it is presented. Perhaps motivation by fear is the only way to jumpstart an institution's action on year 2000 compliancy. But to predict worldwide panic and collapse is quite an extreme position. I guess it is better to instill panic and get problem solved than to remain calm and have apathy take over.

Any other opinions?

The concerns that differentiated the group into two camps were very real: if the group members had not taken them seriously, group cohesion may have suffered as a result. Nonetheless, the development of a binary stance on the issue that did not take into account a "middle position," or any room for error, set the camps to the task of tearing down the opposition. Paradoxically, this tension is what provided the "glue" for the newsgroup over the course of the last years of the 1990s.

Doomsayers

Those who claimed that Y2k would lead to societal collapse argued fervently and vigorously that the evidence *did* exist for their point of view. An early adherent to the doom philosophy was Peter Mill, who over the years became an iconic figure in the newsgroup. After posting a message about the airline governance (FAA) readiness for Y2k, Mill received a reply from Harry Porasky

asking whether the FAA document was a joke. Mill responds here that his argument is based *precisely* on the evidence he has collected, and that it is not a joke. He sent thousands of future posts to the newsgroups over the next few years defending this claim that his evidence was verifiable.

From: govknow@breton.com

Subject: Re: OMB Report on FAA Newsgroups: tech.problems.year2000

Date: 1997/12/28

harry, I wish That this was a joke. It' so serious that it makes you laugh, you can't even cry. I don't make my comments merely because I am a pessimist or a cynic by nature. I make 'em on the EVIDENCE. Even people who think it will be real bad, are missing the boat. Its gonna be REeeeaaalllly Bad. You were laughin' about the spikey hairs, but one year from now youl'll call the people who dont't believe they're comin' 'denial heads'.

Peter Mill

The worry and fear of Y2k expressed in these early messages set the groundwork for an emergent role within the newsgroup is the doomsayer or "Doomer." In the reply to the previous message, Porasky introduces the first usage of the term "Doomer" in the newsgroup:

From: harry porasky

Subject: Re: OMB Report on FAA

Newsgroups: tech.problems.year2000

Date: 1997/12/26

Darn, I don't know what to make of this. For the new readers of t.p.y2k, Peter is our resident gloom and doomer and may even be Gary North's evil twin. My adversaries are the denial-heads, those who say that Y2K is not a problem, just hype from computer consultants. I'm t.p.y2k's optimist and tracker of geek-rates.

But I have a pragmatic, practical side. The best man at my wedding is a survivalist nut-case with a 100 acre farm, hideout about 60 miles away. I've discussed a couple projects for 1998 with him, making the farm more self sufficient, caching supplies out there, stock piling more diesel.

Up until a couple weeks ago, I thought we could still make it; that is, repair enough of the infrastructure to keep civilization running.

Every day, I see more bad news ...

I don't believe that there is enough time left to fix more than 10% of the systems in a large organization's inventory. I'm not sure that any organization will compete their remediation, testing, production cutover, and data conversion. Several organizations are on record as being close to completing remediation; they are still far from done.

Harry Porasky

Note first that Porasky provides an identity refresher for those who are unfamiliar with the identities within the newsgroup (this becomes important to the next chapter's discussion of interpersonal knowledge). But more than just explaining who people are, Porasky goes on to explain the roles that he and others play in the newsgroup. Mill is the "resident doomer"; he defines himself as "t.p.y2k's optimist" (though later he would be identified by others as a Doomer). These roles, established in the first year of the newsgroup, became solidified in the following years into a very rigid categorical role structure within which it was difficult to avoid being labeled. The labeling process led to expectations on attitudes and behaviors expressed online. Though expectations were not always fulfilled, it was brought to the attention of the newsgroup when they were not.

The opposite of the emerging Doomer role was the role of the 'denial heads', as Mill characterizes them, or what would come to be known as Pollyannas.

Pollyannas

The Pollyannas emerged from the newsgroup as that segment of the population that expressed the opposite belief of the doomsayers, that Y2k represented no dramatic or world-changing threat. Like "doomsayers," the name

originates with a pejorative meaning, an attempt to stigmatize those who were perceived as overly optimistic about the possible outcomes of Y2k.²² Early "Pollyannas," like the one who posted the message below, believed that doom scenarios were pure "fantasy" and that they did not constitute "real information" about Y2k. While Pollyannas were typically those members committed to the initial newsgroup purpose of technical support, they increasingly became equally as committed to posting off-topic, as a necessity of addressing what was perceived to be Doomer inconsistencies and unsupported/incorrect evidence for their specious claims. Protecting the integrity of their belief that Y2k was as far from an end-of-the-world scenario as could be, as far as computer problems went, became the primary purpose of their posting to the newsgroup, rather than addressing technical issues surrounding solutions to the computer bug.

From: Earl Sonshine

Subject: Re: Should I pull my money out now?

Newsgroups: tech.problems.year2000

Date: 1997/12/17

This newsgroup is fantasy land. I think it is fine if you keep it in perspective --- that it is fantasy. But it is absurd to suggest that there are going to be massive bank failures, a stock market crash, power outages, food shortages, etc.

Some systems are going to fail. But of those that do, most will be fixed within minutes, hours, or for noncritical systems, days. In a few cases, it will take longer. But this is no crisis—at least it won't be 2 years from now.

If this newsgroup is going to be useful, I think it needs to contain real information. This fantasy speculation about what may or may not happen as a result of this failure or that is just silly.

Earl

The first two posts to *tpy2k* introducing the term "Pollyanna" do not refer to other newsgroup members, but to the attitude of unreasonable optimism expressed

by newsgroup members such as Earl. The third reference on November 13, 1997, however, is a comment on a tongue-in-cheek reply to a Mill post, the reply to which suggests a ridiculous European Y2k scenario, the absurdity of which clearly is intended to mock Mill:

From: Jared Anton

Subject: Re: Domino Effect

Newsgroups: tech.problems.year2000

Date: 1997/11/13

Perry Knowlton wrote:

> I'm beginning to understand Peter's Apocalypse scenario. It

> could go like this:

>

> 1) A non-compliant power switching station in Brussells fails, > blacking out thousands of homes.

- > 2) Some Waloons in a blacked out neighborhood notice the lights
- > are on in a Fleming neighborhood two blocks away.
- > 3) Race riots erupt between Waloons and Flemings.
- > 4) Netherlands intervenes to protect the Flemings from the > Waloons.
- > 5) France intervenes to protect the Waloons from the Dutch.
- > 6) Global thermonuclear war kills 3 billion people.

Perry Knowlton,

You're SUCH a Pollyanna!

Jared Anton<G>23

Mill establishes the term Pollyanna even further later in November by adding it to the subject heading of this post:

From: govknow@breton.com

Subject: For the Pollyannas

Newsgroups: tech.problems.year2000

Date: 1997/11/17

http://www2.computerworld.com/home/cwlaunch.nsf/launch?ReadForm&/home/print9497.nsf/\$defaultview/85CB40BBAAE64759852565520058DB2A

Here is an author who was going to set about writing a story about how the y2k problem was not so bad. He had his agenda set before he even did any research. He wound up with egg on his face, and

admitted it. The highly touted Social Security Administration, the paradigm of y2k remediation is all but ruined. And they are the "BEST" of the government agencies. He did'nt get the term "pollyanna" from me. He just knows 'em when he sees 'em! Keep trusting the Federal government to hold together. BTW, your check is in the mail. (See above URL to a Nov 17 1997 article from Computer world). Peter Mill

Note Mill's reference to *Computer World* magazine to provide evidence for his claims, the magazine that Quartz Limited also used earlier to debunk the doom and gloom scenario. It is clear by late November 1997 that the term Pollyanna (or Polly for short) had been firmly established. The following post confirms the suspicion that its popularity largely derives from Mill's adoption of the term:

From: Bill Carrington Subject: Re: Ka-Boom

Newsgroups: tech.problems.year2000

Date: 1997/11/21

Perry Knowlton wrote:

> If the submarine reactors has melted down, there would have been an

> explosion, and a big mushroom shaped cloud would have risen up,
> carrying several kg of radioactive fallout to drop on the
surrounding

> countryside. Far from your Pollyanna refutation.

I'm sorry, Perry. Peter M. has trademarked 'Pollyanna' for his own use...

Bill Carrington, JJO Software, Inc.

Jokes were a common way to defuse the growing conflict between the Doomers and the Pollyannas. However, the seriousness with which members of the newsgroup took the issue was indisputable.

Casting aspersions became another method by which the conflict escalated.

Note how the roles of Doomer and Pollyanna are most often defined and attributed through a negative labeling process. The very definitions of the terms imply

deviance: Doomers are explained as deviant by Pollyannas and Pollyannas explained as deviant by Doomers.

Peter Mill was a major contributor to the negative labeling of the Pollyannas. In one message left later in the life of the newsgroup (April 23, 1999), he claims they are "intentionally dishonest" and that "the Pollyannas dissuade people from preparing by stifling their doubts. Not with real evidence, but on the basis of wishful thinking and happy faced pronouncements. The ingenuous [sic], lying, self-deceived pollyannas will have the blood of many many souls on their hands."

The roles of Doomer and Pollyanna in the newsgroup were created in the early period of its existence. They emerged partly out of the initial conflict of technical versus non-technical information regarding the Y2k problem; identity formation was clearly linked to the boundary violations of the newsgroup. and partly as a result of a fundamental difference of opinion regarding the ultimate outcome of the As the categories of Doomer and Pollyanna were created, the attachment of particular names and opinions was immediate. Soon after the first posts introduced the categories, people immediately categorized themselves and/or others into them. The next chapter, on interpersonal knowledge, will describe more fully the creation of online identity in the non-physical, socially constructed forum of *tpy2k*.

As shown in this chart of the number of posts contributed to the newsgroup from November 6, 1996 to December 31, 1998, early access to the newsgroup grew steadily through the first two years of its existence:

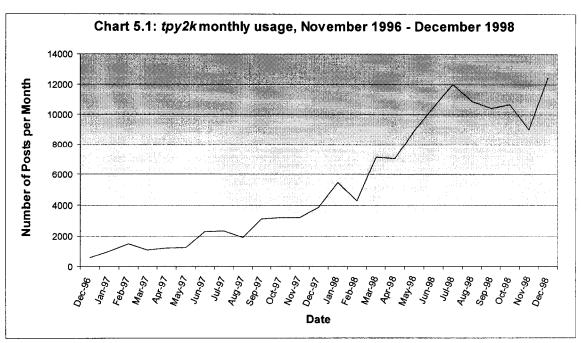


Chart 5.1 – tpy2k posts by month, November 1996-December 1998 (Source: Deja News collated statistics, 2000)

The first year's access to the *tpy2k* newsgroup and the creation of boundaries during this early growth also led to a serious rift in the online community. The growing culture of the newsgroup changed significantly in its first year as the borders and content of the newsgroup were debated. Rather than see the conflict as fundamentally detrimental to the newsgroup, it should be recognized that the newsgroup grew in membership and messages during its first year. Despite the conflict that emerged, the strength of the newsgroup did not seem to fail. Though a commonality of opinion did not emerge, this was a promising start for a newsgroup desiring to share common resources in an online setting to produce the communitarian goal of a tangible public good – remediation of the Y2k computer bug. The first obstacle in *tpy2k*'s path to becoming a communitarian online group had been passed.

Chapter 6

The Growth of Interpersonal Knowledge in tpy2k

Interpersonal Knowledge

In response to Alex Claynar, Maynard N. Winchester wrote:

- > The difficulty is that you don't even understand my take on the seriousness of the
- > Y2k problem. Don't buy into the Mill lie that everyone who thinks he is full of
- > crap half the time doesn't take Y2k seriously. If you really want to know more,
- > we can take this offline.

Watch it Alex. It sounds like he wants to 'know' you. Like in the biblical sense.

- Peter Mill (April 8, 1998)

As more and more people accessed the online realm of tpy2k and began to post ideas, suggestions, rhetoric, questions and other communicative impulses, the individuals who were accessing the forum daily (if not hourly) began to come to know one another as more than just another pseudonym. They began to share minds, to come to expect certain textual behavior from one another, and to understand what made each other "tick." They established relationships based on interpersonal knowledge. According to Etzioni this aspect of interpersonal knowledge is important to the construction of community, and this is what will be examined in the first half of this chapter.

"Bonding, one of the two core elements of community, requires a high level of encompassing (versus specific) knowledge of the others with whom one bonds," says Etzioni. "Accordingly, one would expect a group of individuals who meet for the first time – for instance, at a scientific meeting – to share only technical communications (like their findings and methods), to bond much less than a similar

group of scientists who also share personal feelings, formative experiences and life histories."

This dynamic between the technical versus personal nature of tpy2k was exactly what split the newsgroup in two in October 1998. Those who broke off from the main newsgroup were technically oriented only, and, in terms of the amount of participation and the nature of that participation, it could be argued that the opportunities for community formation paled in comparison to the main newsgroup, who shared "personal feelings, formative experiences and life histories" with each other (not to mention their deepest hopes and fears regarding technological civilization). Quantitatively, tpy2k-tech never came close to matching the number of posts of tpy2k, as Table 6.1 demonstrates:

Month	Posts to tpy2k	Posts to tpy2k-tech
Oct 1998	10689	66
Nov 1998	9034	220
Dec 1998	12469	149
Jan 1999	16217	115
Feb 1999	12601	127
Mar 1999	12778	62
Apr 1999	6014	64
May 1999	8067	23
Jun 1999	8492	42
Jul 1999	9378	11
Aug 1999	10366	12
Sep 1999	9428	15
Oct 1999	8061	50
Nov 1999	8925	10
Dec 1999	12049	37
Jan 2000	11022	34
Feb 2000	2650	11
Mar 2000	1420	2
Apr 2000	1609	1

Table 6.1 Number of posts by month October 1998-April 2000, tpy2k vs. tpy2k-tech

The number of posts is an indicator of the number of participants in each newsgroup, as the latter statistic is impracticable to retrieve. Relatively low posting figures and less participation alone, however, do not indicate the absence of community. Looking at the messages in *tpy2k-tech*, however, there is a coldness, a lack of empathy that one would expect when conversation is policed by a moderator and restricted to technical topics only.

For example, only 34 messages with the word "personal" appear in the entire history of *tpy2k-tech* (as archived on the Google Groups server); about 10,900 references exist for the *tpy2k* newsgroup. The word "feelings" appears only once in *tpy2k-tech* and 950 times in *tpy2k*. A review of the context of the words in the *tpy2k-tech* messages is revealing as well:

Personal Observations on the Focus 2000 Y2K Tool from Nexgen (AS ... It is my intention to post a series of articles describing my company's experience with the Focus 2000 Y2K tool from Nexgen. This ... - Oct 15, 1998

[META] Newsgroup charter

... A personal note from the moderator: Something can be off-topic here and still be important. That's why there are more than 32,000 OTHER newsgroups. ... - Nov 11, 1998

Microsoft Product Analyzer "review"

... I am crossposting to alert others that might be interested. Here's a bit of my personal insight into the Product Analyzer report -- and its failings. ... - Apr 3, 1999

Re: Y2k test

... I think that my "feelings" on this matter and the far greater importance of software / data testing are stated in the sidebar articles on my Glossary or Dates ... - Jun 25, 1999

from Google Groups search engine, search terms = "personal", "feelings" Nov 6, 1996 - Apr 1, 2004

"Personal" appears over half of the time in the context of *personal computer* or another technical reference; few messages refer to personal experience. In the last

message above, the member who dared post the word "feelings" found it necessary to put quotes around it for de-emphasis.

As opposed to the *tpy2k-tech* newsgroup, *tpy2k* came to know one another on more than the basis of their technical knowledge. A fierce battleground for belief, the *tpy2k* participants left a trail of information behind in their personal messages that allowed for profiles of each member to be built. To be sure, the profiles typify the members' *online* personae, their cyber-identities. Nonetheless, within this forum, these identities can seem as real as voices and personalities familiar to us in the face-to-face world. Though the same cues do not exist, the reality of the presentation of *identity* and self is no less apt, although it may take a greater quantity of the more limited-cue information exchanged in cyberspace to demonstrate identity *authentically*. When that information is used to back up a claim or prove a point, *accountability* can be questioned. Identity, authenticity and accountability are all aspects of bonding that Etzioni outlines, and the presence of each will be observed in the newsgroup.

Identity

To gain knowledge of others in a community, first one needs to pay attention to the their identity. Knowing identity, says Etzioni (1999), means "to anchor various different items of knowledge about those involved with specific individuals and thus be able to compose broad and inclusive images of others."

In messages like the following, personal information flowed from the participants:

From: Parson Jim Croot

Subject: Re: TPY2k

Newsgroups: tech.problems.year-2000, uk.tech.y2k

Date: 1999/09/01

...I'm the usual American mongrel: German, English, French (French-Canadian on mom's side), Scottish, Irish, and god-knows-what-else (some in our family think we have Jewish, Swedish and American Indian blood in us, too). My maternal grandmother was born in London...

Parson Jim Croot

Here Croot gives a little piece of his personal genealogy and national identity to try to give others a greater understanding of himself. This was a clear motivation for writing on the part of many of the participants in the *tpy2k* newsgroup.

According to Castells, identities "become identities only when and if social actors internalize them, and construct their meaning around this internalization. To be sure, some self-definitions can also coincide with social roles....Yet, identities are stronger sources of meaning than roles, because of the process of self-construction and individuation that they involve" (1997: 7). The *tpy2k* actors constructed themselves and made themselves uniquely identifiable through a vast multitude of text messages.

The top ten participants to the newsgroup had accumulated over 58,000 messages in the years between the origin of the newsgroup on November 6, 1996, through April 1, 2004, with the majority coming before the year 2000 date rollover. Within these messages is communicated enormous amounts of information. Some of this information provides the clues needed to identify distinct characteristics of individuals. These informational clues go beyond clear evidential statements of self-description (for example, "I am a man who..." or "I am Christian"). They also are

built into patterns of syntax and grammar, in short a style of communication unique to each author. This might include identity markers, such as commonly used phrases. The content of the messages is also important: the categorization of the participant as a Doomer or a Pollyanna, particularly after mid-1998, will seat a person's identity in the minds of others. Due to the dearth of physical cues, it should also be remembered that the opportunities for the manipulation of identity are far more available online than offline.

The more opportunities one has to communicate one's identity online, the greater the likelihood that the identity and personal style that goes along with it will become known to others in the newsgroup. Table 6.2 shows the top ten participants in tpy2k by the number of messages sent.

	The Top Ten			
1	MrMidgit (El Doogers)	Sep 6 1997 - March 26 2004	17107	
2	Peter Mill (govknow@breton.com)	Oct 27 1997 - Dec 4 2000	6990	
3	J. Frank Freleng	Nov 29 1997 - Aug 11 2000	6019	
4	Marcus P. Sorenson (MPS)	Apr 1 1998 - Aug 11 2000	4826	
5	Harry Porasky	Nov 8 1996 - June 16 2001	4482	
6	Doug Dock	May 13 1998 - Jan 7 2004	4350	
7.	Mike August	Apr 15 1998 - Dec 18 2002	4054	
8	Michel Portier	Apr 25 1998 - Mar 30 2004	4029	
9	Manny Brooks	Mar 6 1998 - Jun 6 1999	3626	
10	Dan Westcreek	May 10 1997 - May 4 2003	3176	
	TOTAL		58659	
	(Gross Total = 445,593)	Top Ten = 13.2% of total posts		

Table 6.2
Top Ten Posters to tpy2k by volume, November 6, 1996-April 1, 2004

The sheer quantity of messages is meaningless, of course, if the messages do not convey some aspects of the individuals' personalities. Appendix C – *Personalities* – outlines the most garrulous personalities on *tpy2k*. This material will give the reader a sense of the amount and type of information that can be gained of

one another (and that can be gained about individuals using the cyberethnographic

method of reviewing posts in an online forum).

A review of the profiles of the top ten participants makes clear that they had

revealed themselves, constructing stable patterns of identity out of masses of

information. A large number of more transient participants in the newsgroup latched

on to the identities of the regulars as well. However, the "exemplary dualism"

(Anthony and Robbins 1995) of the newsgroup roles and statuses (Doomer and

Pollyanna) continued to function as a bellwether for meaningful membership and

dialogue.

The descriptions of participants could go on and on, and there were many

more regulars than just the top ten listed above. Appendix B lists the top 100

participants and their brief posting profiles.²⁴ While dozens more personas

contributed to the newsgroup than even these "top 100," this sample gives an

indication of the propensity that online settings have to convey the interpersonal

knowledge required for community building.

While the descriptions of each online persona reveal many aspects of these

individuals other than their interest in Y2k, they are not complete pictures. In fact,

many state that clear boundaries should exist in interpersonal knowledge in the

forum. For example, I.Sauros wants "no personal knowledge" of MS's "personal

habits":

From: I.Sauros

Subject: Re: Doomspeaking Pederasty

Newsgroups: tech.problems.year2000

Date: 1999/08/31

...the context was to suggest in a humorous way that MS's personal sexual proclivities are considerably more exotic and abnormal even

than pedophilia, if less of a public danger. The humorous intent

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As a result of the limitations of interpersonal knowledge respecting certain degrees of privacy, online identities have the tendency to become caricatures, rather than to be fully "fleshed out." (This is even more prevalent in multimedia CMC which offer "avatars" and preformed alternate identity traits — misleading cues that confuse and distract from the reality of the situation of a person typing at a keyboard). Blank spaces exist in the online individual's identity. Those blank spaces may be filled in by the observer, allowing for a personal interpretation of known facts to encompass the character built in the description of oneself in the newsgroup broadcast. For example, one might assume another's gender, race, income, age, occupation, etc., only to later be corrected. Because blank spaces in identity exist, skepticism emerges. One might ask, "is the individual typing on the other end really who they say they are?" This question relates to the second aspect of identity online, authenticity.

Authenticity

Etzioni describes authenticity as "trust that the communications from others are crudely correct, which often entails finding some way to authenticate some of the messages" (Etzioni 1999). Trust is also a major feature of Putnam's definition of social networks, a "feature of social organization, such as trust, norms and networks that can improve the efficiency of society by facilitating coordinated actions' (1993:167).

The word "trust," in many contexts, is used 4,760 times during the life of the newsgroup. Trust was most often discussed in terms of the Y2k crisis, as in the following post:

From: Nathan Stark

Subject: Is this problem exaggerated? Newsgroups: tech.problems.year2000

Date: 1996/12/16

Hi,

I've read the FAQ and heard all of the hype about year 2000. There are a few observations I've made:

...

5. Every time I hear a news report about how bad this is they are interviewing a consultant who is selling the service of fixing the problem. How much of that can I trust?...

Trust went beyond the Y2k issue, however, and entered the personal relationships of the newsgroup members. In the following posts, trust in one another was explicitly confirmed or denied:

From: Dick Umulmahey

Subject: Doomers, Unite! (Was: List of Doomers, Dec '99)

Newsgroups: tech.problems.year2000

Date: 1999/12/17

...

If you wish, we will exchange physical locations... I have been in this group for a long time-- I trust you....

From: eli@goblin.net

Subject: Re: OT: The Gay Agenda In Public Schools

Newsgroups: tech.problems.year2000

Date: 1999/09/10

loiyard wrote:

1 --- 1

You certainly can....

> It's amazing how you see right through me, while everyone else I > come into contact with is totally fooled. Can I trust you to

> keep this our little secret?

From: Curt Ovachart

Subject: Re: reap->sow... reap->sow... reap->sow... reap->sow...

Newsgroups: tech.problems.year2000

Date: 1999/02/12

Roland Mollin wrote:

> From that time, everything you have posted in tpy2k

> confirms that you are pompous and egotistical fool.

In your opinion.

> I'm not going to "drop" anything, Mr. Ovachart. I trust you

> about like the rain trusts the Saudi desert.

"....about like the rain trusts the Saudi desert...." This is deep, Rollie. Very deep. Maybe, soon, I will understand the meaning of

this. Maybe not.

-- Curt Ovachart

A lack of trust drove many of the basic investigations into the veracity of the

identities proposed in the messages. Without ways of verifying the authenticity of a

member's identity, of what use is the claim? This problem of verifiability was found

in many cases, focusing on issues such as member's respective ages to their gender

to the use of multiple pseudonyms by one individual.

For example, in a thread named 'What is the Average Age of the Y2k

NewsGroup?' first posted to on June 30, 1998, the initial conjecture was "about

twelve" (no doubt a satirical, tongue-in-cheek statement on the growth of flaming

and trolling in the newsgroup). But, in a brief burst of posts, some participants then

started giving what seemed to be their authentic ages: "Twenty-several;-)", "49, and

holding," "Approaching 30 - but from the other direction," "Old enough that my

voungest kid is getting married next week," "Old enough I can earn as much as I

want this year and still draw my SS \$ with no restrictions," "in a year and a half I'll

be about -40". This last is an attempt at Y2k humor: "-40" actually means 60 years

old, because at the date rollover infected computers will be reading his age as 1900

-1940, rather than 2000 - 1940.

In the interest of clarity one must ask, "what would be the purpose of

providing inauthentic ages, particularly when it can't be verified in any remotely

easy fashion?" If one wishes to be part of a community, a long-lasting member, it

must be certain that invention and maintenance of a distinctly separate online

personality would be difficult – it would take hard work to maintain the front. Most

people would seek to avoid the extra work it takes to present a conspicuously

different identification of themselves than they would present in a face-to-face

situation, where cues are evident (i.e. their "real" selves). 25 Though the reality of the

presentation is more malleable than face-to-face life (unless there is some reason to

doubt the authenticity of an individual's claim), it will usually go unchallenged and

become integrated into the mental picture an individual provides regarding who they

are.

Sometimes challenges emerge, however. Here, Peter Mill is caught making a

gender assumption:

From: Mynx Hamer

Subject: Re: Butthead Of The Week Award

Newsgroups: tech.problems.year2000

Date: 1998/07/19

BTW Peter Mill you draw conclusions way way too easily.

said I was a male.

Mynx

This elicits John Denegro's response:

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From: John Denegro

Subject: Re: Butthead Of The Week Award Newsgroups: tech.problems.year2000

Date: 1998/07/19

Oh, how wickedly fiendish of you, Mynx. - jd

In a later incident (September 1999), long after MrMidgit had become the top poster to the newsgroup and had clearly established his sex with the other regulars, Elnadir challenges his long-standing claim. After posting a financial inquiry with the mysterious subject heading "Miss Midget: Don't read this," MrMidgit replies thusly:

From: El Doogers (MrMidgit)

Subject: Re: Miss Midgit: Don't read this. Newsgroups: tech.problems.year2000

Date: 1999/09/24

Mike wrote:

>

> Elnadir wrote:

> >

> > Gold has moved up about \$15 per ounce this week. Don't buy any.

> > Wait til it hits \$315 and then buy it.

.

> What is it with this, "Miss" business? I don't buy it. No woman

> could be that emotionless and in her head. No way!

I have no idea what is going on, either, but I can't agree with you; I've not met all women so I cannot say that 'No woman could be that emotionless and in her head'. From the few folks that I've met I have found that some women are better 'men' than some men I know and some men are better 'women'... and I'll leave it to the Gentle Reader to make what s/he will of my use of quotation marks.

ММ

Elnadir then replied:

From: Elnadir

Subject: Re: Miss Midgit: Don't read this. Newsgroups: tech.problems.year2000

Date: 1999/09/25

Yeah, I don't know what going on either. I heard a rumour that you were a twin of some 9020102 lady star.

And then I have met some 'men' that seemed and acted like 'women'. Not that there's anythig wrong with that, other than to support your argument.

You may physically be a man, but your brain is really more like a woman. Calling you a lady may then be justified.

Of course, you could be a lady physically, and have a more male brain. Then maybe you are more male-like.

I guess none of it really matters. My interaction with you consists of: I make some assertions about y2k, stocks, and gold. And then you counter with some obtuse response.

I still like the idea that you are a turing machine better. It seems to fit. :)

Can AI be male or female? Hmmm... I wonder if they're working on that?

Of course, when authenticity is verified by another member, particularly a community member who does not share opinions or general outlook with the questioned party, authenticity can no longer be usefully debated. In the case of MrMidgit, it was ringmaster Peter Mill who confirmed his male status:

From: phymart (Phyllis Martin)

Subject: Re: MM comes out of the closet! Newsgroups: tech.problems.year2000

Date: 1999/09/26

Peter Mill wrote:

- > Well, I have had the unpleasant experience (brrrrr) of actually
- > having to view his physical presence. Let, me tell you, he might
- > just as well be a sodomite. I can't imagine any woman,
- > correction: 'sighted' woman, that would degrade herself in an
- > association.

Peter, it's probably lucky for all of us that you don't speak for anybody but yourself. My eyesight is just fine, I'm female, I've had the good fortune to meet MM twice, I thoroughly enjoyed both occasions, I felt not the slightest degree of degradation therefrom, and I can't imagine how MM's presence could cause you such distress....

To which MrMidgit responded:

Gosh, Ms Martin... I'd blush, were I able to remember how. You, however, have not, as Mr Mill has, expressed enjoyment at the prospect of a man dropping his pants in public... there might be a bit of difference between the personalities the two of you have and the various things the two of you think to be 'fun'.

Other instances of failures to authenticate claims to identity made online can be found when members are caught in a lie. For example, when Peter Mill challenges a member to prove "when exactly he said such a thing" as that he might enjoy seeing people "get what they deserve," Charles Edel straightens him out:

From: Charles Edel

Subject: Mill trapped in his own lies Newsgroups: tech.problems.year2000

Date: 1998/09/04

...

I want nothing less than a FULL apology from Peter Mill to the newsgroup. Normally I'd let this offense go, but after all the ridiculous ranting about how Clinton is a liar, I cannot stand by and allow Peter to pull the same stunt in this newsgroup.

Here's a paragraph from the "Pitbull of y2k" thread, uttered by Peter Mill himself, just this morning. He is speaking about whether or not he enjoys seeing people get what they deserve. See the thread if you need details.

"I do not enjoy any of it. I have never once said such a thing and it is a bald faced lie for you to assert such. For you to suggest so is not only dishonest, it makes you far more despicable than the 'merely' dishonest.

So I suggest that you post exactly where I said such a thing. You are a Liar and what is more you know it yet post they lie anyway."

Peter, did you or did you not say on Aug 21st,

"But the ones mentioned above deserve every measure of foul torment that they will receive for their ridiculous folly. And yes, I WHOLEHEARTEDLY laugh at them. Great belly laughs full of guffaw, scorn and derision. What will happen to them will not be an accident. It will be FULLY EARNED AND WELL DESERVED."

Answer the question. Do you deny that this is *word for word* what you said?

Everyone in this newsgroup now knows that you lied. Please be man enough to admit it.

An important aspect of CMC is the accuracy of its records. Whereas the authenticity of claims made in face-to-face relationships might depend on the inaccuracies of human memory (the infamous "witness effect" psychologists

frequently point out in courtrooms), the veracity of publicly available computer memory is undeniable. When beliefs and opinions can be easily checked and verified, this provides greater authenticity through accountability.

Accountability

Accountability, according to Etzioni, is the ability to "develop a sense that one is able to hold others accountable, that the members of the newsgroup are reasonably responsible." Responsibility for one's claims, about personal characteristics such as age or gender, or about one's beliefs or opinions regarding Y2k, was informally policed by the members of the newsgroup.

In 1997, Deja News introduced not only a web interface for Usenet News, but also "Author Profiles" intended to enhance the accountability factor, having a user-level controlled database of identity information. However, the tool did not last long, due to hackers, as David G.W. Brown describes here:

From: David G.W. Brown

Subject: Re: Off Topic: Deja News profiles are unreliable

Newsgroups: tech.problems.year2000

Date: 1998/01/09

...

Deja News profiles are not reliable. There was concern in another newsgroup--I think it was the one on childrens' books--that they have, in fact, been hacked. Someone posted a warning to "check your Deja News profiles" and several dozen people followed up reporting that their profiles appeared to have been falsified. I use the word "falsified" because they they were reported as having posted to a number of newsgroups that a) they said they had never posted to, b) dealt with subject matter that some people object to so strongly that they would be inclined to think poorly of anyone who even was reported as posting to such a group. I checked at the time and some of the people who complained did, indeed, have the Deja News profiles they complained of. Frankly, I was relieved to find out that I did not.

So, in addition to being irrelevant, uncivil, and _ad hominem_ on the face of it, I feel that it's very unpleasant for someone to

post stuff from Deja News profiles about someone else without having verified the information and gotten permission to post it.

I have no objections to someone shouting "Die, Pollyanna geek" at me, but I really don't want it generally known that I have sometimes posted to <gasp> rec.quotations unless _I_ choose to mention it.

Brown's objections to having his newsgroup activity tracked would likely go unheeded today, as *Netscan* and other software can easily achieve this purpose. But the main point here is that the hacker culture influenced the growing virtual communitarianism, taking away a resource that allowed for greater accountability.

Another instance that demonstrates the issue of accountability online took place in January 1999 when a new member of the newsgroup joined under the name "Gary Mill." Obviously using the same surname as Peter Mill, he immediately drew attention. This is what transpired:

From: Bob Pierce

Subject: Re: Curt Ovachart vs. disciples of Gary North

Newsgroups: tech.problems.year2000

Date: 1999/01/29

Gary Mill wrote:
<a bunch of snipped crapola>

An imposter! A cross between Gary North and Peter Mill in name only. Apparently this person doesn't have the courage to stand for his/her convictions under their real name. Probably Curt just trying to puff himself up some more.

Suffering from another brain fart, Curt?

Bob Pierce Proud Member Of The "Vast Right Wing Conspiracy"

From: Gary Mill

Subject: Re: Curt Ovachart vs. disciples of Gary North

Newsgroups: tech.problems.year2000

Date: 1999/01/29

Bob,
No, I am not an imposter.
I am Peter Mill's brother. :)

Gary Mill

From: covachart

Subject: Re: Curt Ovachart vs. disciples of Gary North

Newsgroups: tech.problems.year2000

Date: 1999/01/29

> Bob Pierce wrote:

> Probably Alan just trying to puff himself up some more.

No. Sorry to burst your mini-conspiracy theory.

```
> Gary Mill wrote:
> I am Peter Mill's brother. :)
```

Are your serious? Perhaps Peter would be around to confirm or deny this incredible statement.

Until we get some confirmation, I'll conditionally accept your dubious claim. Peter's bogus public meanderings must be a terrible source of embarassment for your family. I'm sorry we weren't able set him straight earlier.

--Curt Ovachart

From: Gary Mill

Subject: Re: Curt Ovachart vs. disciples of Gary North

Newsgroups: tech.problems.year2000

Date: 1999/01/29

Curt,

Nice to hear from you again after conversation the other day.

In fact the situation is so embarassing that the Hinckly family, the Kazinski family, Jim Jones relatives and the Mill family are now starting a support group. Kind of like "Alanon". We are about to have our first support group meeting, so it *Won't be lon Now*:)

Gary Mill

Finally, Peter Mill steps in to confirm that the person in question is indeed his

brother:

From: govknow@breton.com

Subject: Re: Curt Ovachart vs. disciples of Gary North

Newsgroups: tech.problems.year2000

Date: 1999/01/29

Gary is indeed my youngest brother. Pollyannas come in all forms. My entire family is on the butthead side of the fence. Y2k is a very devicive issue. I have no regrets at all about my understanding of the evidence. The EVIDENCE alone.

They refuse to contemplate the issues just like any other Pollyanna. This is nothing new. But, you will notice, that they will not address the facts, issues or evidence, as usual.

Gary will NOT address the facts, except to demy them out of hand. He will not rebut the evidence in any way, shape or form. Pay close attention.

In this case accountability was upheld. Although there is a chance that Gary Mill is not who he claims to be, or could even in fact be Peter Mill himself posting under a different name, the likelihood is reduced given his Pollyanna stance on the issue. It is more likely that Peter or another member would create a convenient ally rather than a false enemy.

Ultimately, accountability can be difficult to assess, and that makes the enforcement of the particular rules, values, and norms relating to accountability (for instance, honesty, veracity, authenticity) more difficult than in face-to-face settings.

Communitarian theory states that accountability is the responsibility a member has to support the community's values and norms. One's cultural capital within a group is reduced when one does not appear to uphold shared norms, and the value of the group itself becomes compromised. It is upstanding citizens that are known to uphold shared norms, including norms that regulate outward expressions of racism and sexism, for example. In the following posts, which appeared relatively early in the newsgroups history (February 1997), identity and accountability intermingle as the anonymous member "Pseudonymous" expresses his opinion that women do not belong in the computing field.

It began in a fairly innocuous thread about team management solutions for Y2k remediation projects, in a thread titled "End of the Century Solutions – CONSOLIDATION!". At one point in the eighth paragraph of that thread,

Pseudonymous mentions that the economic woes of decreasing relative wages and concentration of wealth into the hands of corporate giants was "all brought on by low performance standards resulting from government enforced equality (and especially female management. Let's not forget to blame female management! I love the way females attack work; everything is a tea party to them, but all that they end up producing are mud pies, and very few mud pies, at that!)." This garnered Pseudonymous the replies that begin the following message, in which he outlines his sexist perspective:

From: Pseudonymous Subject: I Am Not a Misogynist. I Do Not Hate Women. Newsgroups: alt.feminism, alt.mens-rights, alt.computer.consultants, alt.folklore.computers, tech.problems.year2000

Date: 1997/02/12

- >> Derek wrote:
- >> More bull-shit from the Anonymous female-hater faggot
- > I think the word you are looking for is mysoginist.

I am not a misogynist. I do not hate women.

What I do hate is everything being out of place, and females really do not belong in the world of computers. It's hard to analyze, but females and computers are a very toxic mixture which brings out the very worst in women. And I am not just talking about women involved with programming! I am talking about women who use computers in just about every area of a typical organization.

Just because you witness females who *seem* to be dealing successfully with computers to some degree is no reason to jump to any conclusions that everything is just fine and dandy.

Again, I would like to stress that the situation is very hard to analyze, but I think that the problem can be traced to females' being virtually devoid of inventiveness which is almost exclusively the province of males (white males, that is! It's a fact; why mince words?) For supporting evidence, go to the U.S. patent office and investigate how many patents are held by women - and exclude those patents developed by corporate teams!

The subtle differences in the aptitude and mental styles between males and females are what place the female under stress and feelings of inadequacies when dealing with computers.

If you were to eliminate males altogether from the world of computers - mark my words - you would see things going retro in short order! You would start to see weeds growing around your mainframe computers in no time!

Behind every successful female computerphile, there is a male seeing-brain-dog (who, by the way, may not be full-time, who may not always be the same person, who may not be on site, who may not be readily apparent, and who may be used sparingly).

How was Pseudonymous held accountable for his blatantly misogynistic statements? The responses to the first e-mail (about female managers) entailed labeling Pseudonymous a "female-hater faggot," which itself got at least two replies charging homophobia ("Excuse me? Your homophobia is showing. Please take you IGNORANCE elsewhere and keep it out of my face!"). Also note that there was an addition to the newsgroup cross-post list (adding alt.feminism and alt.mens-rights) after the subject was changed from "End of the Century Solutions — CONSOLIDATION!" to "I Am Not a Misogynist. I Do Not Hate Women." This encouraged accountability in the wider social space of multiple "neighborhoods." By trying to clear his name in the thread, Pseudonymous showed a lack of understanding of the irreversible process of labeling and social identity construction.

One *tpy2k* newsgroup member suggested adding Pseudonymous to a kill-file. "I cannot take this seriously. If ever there was a punter whose name was destined for the kill-file, here it is. People, he's not worth polluting this very constructive discussion group with. I advise you do likewise lest we get distracted from the business at hand. Our energies are better invested in construction," says Jack. He invokes the power of the newsgroup to hold Pseudonymous accountable for his sexist remarks: if they *all* add him their kill-files, he becomes invisible to the

newsgroup, a ghost writer adding verbiage to the ether and an outcast ostracized from the community.

Pseudonymous was also accused of simply being a troll, for which the proper avenue of action is inattention. A cross-poster from *alt.tech.consultants*, a newsgroup that took the "topic law" somewhat more seriously than *tpy2k*, points out that the post is an obvious troll and that it is meant to draw out controversy.

From: Kevin Cranston

Subject: Re: I Am Not a Misogynist. I Do Not Hate Women.

Newsgroups: alt.feminism, alt.mens-rights, alt.computer.consultants,

alt.folklore.computers, tech.problems.year2000

Date: 1997/02/15

Actually, the origin of this whole thread is absurd. First some idiot trashes all women in an obvious attempt at trolling via an anonymous posting. After it is pointed out that his feelings are a text-book example of misogyny, he then feels the need to defend his ANONYMOUS name!

Trolling conflates accountability, as will be seen in greater detail in chapter 7.

Some, on the other hand, supported Pseudonymous's right to speak his mind: "I want to hear all opinions, including those you want to silence," Snoopy wrote to Jack. Rather than arguing over free speech, however, Jack engaged the 'off-topic' defense: "Fine by me just move them to alt.misc or edit your follow-up newsgroups. What's the point of having a newsgroup hierarchy if discussions about specific topics get waylaid by tossers who want to heap their woes on people who couldn't give a shit? Go to a different bar, we're trying to have a conversation here."

An interesting tactic to end the thread was used by Brian Pratt, who noted that Gus Bynder compared Pseudonymous to a Nazi, which immediately invoked the thread-terminating "Godwin's Law"²⁷.

From: Brian Pratt

Subject: Re: I Am Not a Misogynist. I Do Not Hate Women.

Newsgroups: alt.feminism, alt.mens-rights, alt.computer.consultants,

alt.folklore.computers, tech.problems.year2000

Date: 1997/02/13

Pseudonymous wrote:

>> I am not a misogynist. I do not hate women.

Gus Bynder wrote:

- > No you are a Nazi. You made that quite clear in past posts
- > regarding blacks, Jews, and foreigners of all kinds. Take it
- > from one who leaned that way in his youth it is curable by
- > maturity and experience with real people in a real world. Build
- > your own character and you will see that people unlike you are
- > not threatening, they add interest to life.

By Godwin's law, I thusly declare this thread *dead*.

Some saw the connection between ethics and morality, and brought their religion to bear on accountability. Gary Mill, for example, separated out those commanded by Scripture from those who claimed some pagan faith:

From: Gary Mill

Subject: Re: Gary Mill - are you really *his* brother??

Newsgroups: tech.problems.year2000

Date: 1999/01/29

If anyone makes false and misleading statements about themselves or their backround in this public group or to the press then they should be prepared to be exposed as deciever. Even Jesus exposed the hypocrisy and sinfulness of the Pharisees and Saducees (Matt 23) If anyone here professes to be a follower of Jesus Christ (which I do) or has in the past but conducts themselves in public like hateful and fiflthy mouthed rank pagan then they deserve condemnation according to the Bible. Even many ungodly pagans in and out of this group do not conduct themselves in a vile and discusting manner. One of the issues at hand is not perfection of speech or behavior but of a chosen path of bile, filthy words, hate etc.

If anyone in this group maintains or have claimed they are Christians (who are followers of Jesus Christ) then they need to obey the Lord commands in Scripture. On the other hand if anyone here has renounced their faith in Jesus Christ (and apostasized) or considers themselves now a pagan then it is a different accountability issue.

Sadly, some people here in the group behave not much differently from the demon possessed. Maybe several here are demon possessed. The paranoia, hatred and apocolyptic predictions espoused here are recognized by myself, friends, relatives, and unbiased third parties as psychotic. It is my opinion that insanity is caused by either demon possession, brain damage, drug induced or just life long habitual selfishness. It's anyone's guess as to the root cause.

As to my views on Y2K, they are similar to Curt Ovachart's. Curt Ovachart is an Unitarinan Universalist and I am conservative evangelical. Even though we come from different religious views he at least conducts himself rationally and in dignified manner. One would never suspect or accuse him of being a *universally disliked Christmas food gift.*

Gary Mill

The statements recorded in Usenet, reproducible verbatim as long as the news servers are active, provided for the best measure of accountability within the newsgroup. Here, Winchester stated that Peter Mill could be held accountable for his message posts:

From: Maynard N. Winchester Subject: Re: winchester Alert # 32: embedded chips Newsgroups: tech.problems.year2000 Date: 1998/03/06

...
Mill wrote:

> Watch your attributions. "I" did not write that.

Yes, you did. Or at least, it would appear to anyone reading your posting casually that you did.

> Negative. I can not be held accountable for the 'casual' reading > of others.

Yes, you can, you have been and you will be in the future. If you want to communicate in writing, then when you are quoting someone else you must make clear that you are quoting. You don't do this, and as a result you mislead people, and that's not their fault, it's yours. There isn't a print medium in existence where it is considered acceptable to quote someone without using quotations marks or some other obvious method of demonstrating who is talking.

If you want to communicate on Usenet, learn to use it properly. cheers,

*

Maynard N. Winchester

All print media have methods for controlling personal accountability for statements made in a public arena, including corrections columns and plagiarism sanctions. The same rules regarding plagiarism and citation common in educational institutions should be applied in Usenet posts, according to Winchester. When these rules are breached, accountability suffers, and without accountability the tenor of the community becomes less civil. Accusations of lying and providing misleading evidence to back up one's Doomer or Pollyanna perspective were rampant, and they led to a decreasingly civil atmosphere in the newsgroup, fostered by the increasingly interactive broadcast that the members shared.

Chapter 7 An Evolving Gulf in *tpy2k*

Interactive Broadcasting and the Growing Schism in tpy2k

Look, I'll be quite honest about my intent and objectives.

I intend to exchange survival information for money. My objectives are to train people via broadcast based training.

- Alan Maitland, President, NBCi.net, on tpy2k, August 16, 1998

Throughout 1998 and 1999 the self-described "biker-bar of tech forums" was a place where the individual members got to know one another multi-dimensionally. It also became primarily a newsgroup that was used to express statements about the potential consequences rather than the real causes of Y2k, as this continued to be the main focus of the newsgroup. These expressions included not only the presentation of opinions, backed up by evidence, but the presence of real, online selves, personalities that were as distinct and individuated as any in the physical world. Outside of the remarkable variety and difference represented within the newsgroup, however, was the categorization of selves (and others) into the two main ideological camps of Doomers and Pollyannas.

This self/other classification resulted from the premise for which all messages were sent and categorizations established: that Y2k was ultimately unknowable, a problem too complex for its creators to fathom. This Frankenstein-like quality of the Y2k problem could not be ignored. If easily presented data could have been produced absolutely proving that Y2k would pass uneventfully, it certainly would have been. However, the extent to which computers are part of the

modern infrastructure of everyday life in high-income societies belied the root of the Y2k problem: that computerization had infiltrated every aspect of our lives.

The response to the expansion of computer networks involved "dualized" perceptions of the enormously complex institution of computing in modern society. Some said it was ultimately doomed to failure, while others had enormous faith in the system. "There is a tendency for the major intellectual conflicts in human history to be binary," says Ernest Gellner (1992). "Great issues polarize mankind." While the conflict between the Doomers and the Pollyannas in *tpy2k* at the turn of the millennium may not be considered one of the "major intellectual conflicts in human history," it certainly powered the conflict seen in the newsgroup's broadcast and feedback for several years.

The newsgroup's interactive broadcast not only allowed members to share interpersonal knowledge; the participants shared stories, beliefs, ideas, hopes and fears. In short, they articulated the intersection of the Internet and Y2k cultures in their communication. A great deal of the communication involved the "myth of Y2k" (discussed in chapter 4). According to Levi-Strauss (1978), "Myth is a form of language, and language itself predisposes us to attempt to understand ourselves and our world by superimposing dialectics, dichotomies, or dualistic grids upon data that may in fact be entirely integrated."

Placing "dualistic grids upon data" is an evocative image, one that describes tpy2k perfectly. The "grids" that the members placed upon each other in the communication (which I would interpret sociologically to mean a matrix of statuses and roles) shaped the discourse and maintained a communication pattern in the

newsgroup characteristic of a positive feedback loop. In other words, the interactive broadcast of the newsgroup grew due its dualistic framework. With the creation of the two camps, an ideological enemy was ever-present in the newsgroup, a demon in need of exorcision. Nonetheless, just like in face-to-face reality, despite the dualistic framework the behavior of the members showed great variety in attitude, opinion, belief, values, and communicative style. While the Doomer and Pollyanna camps existed ideologically, the reality of the differences in the newsgroup was far more complex and varied. The language of the newsgroup members contradicted the way in which the great variety of belief and opinion was almost always interpreted dualistically. Tpy2k provides a classic case of Etzioni's "error of either/or" which he claimed disrupts community. In retrospect it was an obvious error, yet once initiated, the error was impossible to purge from the newsgroup. In fact, it seems to be an endemic part of the human condition: false dualism consistently reemerges with a different face, in a different manner and when it surfaces, it is self-reinforcing and self-reproducing, like an ideological virus.

"Underneath language," says Levi-Strauss (1978), "lies the binary nature of the brain itself. Right and left, good and evil, life and death – these are the inevitable dichotomies produced by the brain that has two lobes and controls two eyes, two hands. We are split creatures literally by nature, and we organize data like a simple digital machine. Our common sense is binary; the simplest and most efficient way to process experience seems to be by dividing it in half, and then to divide the halves in half, reformulating every question so that there are only two possible answers to it, yes or no."²⁸

In their interactive broadcast, the dualistic language of the Doomers and the Pollyannas stemmed from three sources: (1) the dichotomies of religion and the secular, (2) of "roosters" and "owls" (Landes 1998) (proclaiming complete collapse or a complete non-event), and (3) of the political attitudes of libertarianism and communitarianism espoused by newsgroup members. However, despite these seemingly impervious ideological and political divides, the broadcast and feedback that went on in the two years prior to 2000 created a rich tapestry of social interaction that shows how well integrated (rather than purely dualistic) the newsgroup empirically had become.

Religious Differences

The dualism of Y2k was expressed in religious terms early in the recognition of the growing schism. Ronald Brown writes of the "two religions of Y2k":

From: Ronald Brown

Subject: Re: "Year 2000: Techno-Ambush" Newsgroups: tech.problems.year2000

newsgroups, toon, problems.

Date: 1997/09/21

For the last couple of weeks, I have perceived that there are two religions represented in this forum and indeed in all forums I visit that address Y2K.

One religion I have named: "Y2K rollover will be a non-event" the other I call: "Y2K rollover will be a significant event"

By rollover, I'm referring probably to a 5 year period, because we are already beginning the rollover process. That is, one of the first things to bite us was POS terminals not accepting credit card expiration dates beyond YEAR 2000.

Humans tend to invent religions to deal with problems that are so vast and complicated and obscure that they defy understanding. Some of them are particularly attractive to those that are intellectually impaired or too lazy to do their homework so that they can understand what's really going on.

The most remarkable thing about my perception is that participants in this, and all, forums either subscribe to one religion or the other. There are an extremely small number that subscribe to neither religion.

Ah, but I perceive _two religions. That means that neither faith has their intellectual arms completely around the problem, so proof of the legitimacy of one vice the other is not so incontrovertible as we would like, at least not as quantified as we would like. Facts are accruing rapidly though. Soon we will know. Then I will change the name of my religion to "reality"....

With regard to religious connections, the most often cited connection was that between the Christian (Gregorian) calendar and the Year 2000 computer problem. Curt Ovachart, a self-proclaimed atheist and the main proponent behind the *Year 0 Campaign* (an effort made to replace the Gregorian calendar with a Unitarian calendar that does not recognize any single religion and resets the "clock" to 0 on January 1, 2000; see http://www.go2zero.com), offers the incendiary title "The Burn-off of Useless Religions Is Going to Be Glorious" in trying to bait people into a discussion of the relevance of Christianity to Y2k. In particular, the Pollyanna Ovachart offered the prediction that Y2k would have a deleterious effect on Christianity because so many Christians purported that Y2k might lead to "the end of the world as we know it." Within the 125 article message thread, Ovachart and Summers (both Pollyannas) grapple with the question of the effect that Y2k might have had on Christian belief:

From: covachart

Subject: Re: The Burn-off of Useless Religions Is Going to be Glorious Newsgroups: tech.problems.year2000, alt.politics.economics, misc.survivalism, alt.atheism

Date: 2000/01/07

Bob Summers wrote:

> Ever heard of Voltaire? He's often quoted as expecting the > demise of Christianity within 30 years.

But he didn't have Y2k and Gary North. He also didn't have the

Internet or mass communications.

Bob Summers wrote:

> I'd wish you luck in your efforts Cirt, but I wouldn't want to be > perceived as supporting a losing team.

harrruuuumphff. That's fine, Bob. Myself, I don't mind trying difficult things where I know there is a significant chance of failure. I tend to do what makes sense to me and let the chips fall where they may. Works for me, anyway. I've had to rub egg off my face more than once but I got over it and was better off for the experience.

Bob Summers wrote:

 $> \dots$ I think you lack understanding of human nature and it's need > for the spiritual realm. \dots

I think you underestimate me. BTW, Year Zero isn't about crushing spirituality--quite the opposite.

Not only that, the subject of this thread is also a bit misleading (an obvious parody, I hope you see). It's not about shutting down religions, but about putting them on a more level playing field (like I told the Christian Science Monitor).

Bob Summers wrote:

- > Since few, if any people, became Christians because of anything
- > Gary North said, I seriously doubt his demise will have your
- > desired effect.

Do you really think you know what my desired effect is?

- > I could be wrong, but I think you've done a good job of
- > expressing your animosity toward religion in general.

Still others offered their own self-acknowledged religious zealotry freely to the newsgroup. In the following message, sent several years before Ovachart's post above, Anton and Gentles iterated their own perspectives on the connection between religion and Y2k:

From: Jared Anton

Subject: Re: Survey 3Q-1997

Newsgroups: tech.problems.year2000

Date: 1997/09/26

Chet Bearston wrote:

> Y2K will serve as a catalyst, a spark set to another

> fuse, namely the mobilization of apocalyptic crazed religious

> sentiments.

> Spiritual hucksters and wanna-be prophets will multiply all over
> the world like fruit flies, fanning the flames of self-righteous
> holy terror to a fevered pitch. The ensuing ideological turf
> wars, propaganda barrages, and mad scrambles for a controlling
> interest the coming social order will deliver the fatal left
> hook..., taking us over the edge into the 8.0s and 9.0s.
> Chet Bearston

This will happen anyway (has already started). It's the close of the second millennium of Christianity - so every religious nutjob has something to predict.

Jared Anton

From: Robert 'Bart' Gentles Subject: Re: Survey 3Q-1997 Newsgroups: tech.problems.year2000

Date: 1997/09/26

I'm more worried about the athiestic nuts (commie types), who have killed more people in this century alone than have probably been killed in all religious wars and inquisitions since recorded history! (Stalin 20 million, Mao 50 million, Pol Pot 2 million, Kim???, etc).

We religious "fanatics" as you put it, don't have the power for a full take-over of the system... (even if we wanted it). The power is in the hands of the totally godless.

If everyone truly followed the words of Christ, there wouldn't be any wars after y2k, only people helping each other back up on their feet. "Do unto others as you would have them do unto you." But you are right about one thing, not all who claim His name are His.

Oh, yes.... they'll be false prophets, guaranteed, but you better beware of your current benevolent government, which is HOSTILE towards religion, and has low esteem for human life.

Yes, I'm a religious zealot, but I will never accept a theocracy Instituted by man.

Robert 'Bart' Gentles

The dichotomy present in the previous exchanges mirrored the secular-humanist/fundamentalist religious duality that has plagued human history. Rarely do people see the "third position" of synthesis, or of full doubt²⁹, a position of unverifiable predictions within an uncertain world.³⁰

In the newsgroup, those attempting to hold the third position of uncertainty were very vocal about having minimal preparation for Y2k (not a survivalist style bunker, but rather extra batteries, some bottled water, and a few spare cans of beans) "just in case," but they also warned against panic and admitted that the problems may be negligible. In these cases the hardcore Doomers often labeled them Pollyannas, and the hardcore Pollyannas often labeled them Doomers. One way to begin investigating the complexity of the social skein of tpy2k is to examine how the categories of Doomer and Pollyanna emerged.

Roosters and Owls

To examine this emergence, I will let the newsgroup members' interactive broadcasts explain these categories for themselves. The first reference to the term "doomer" comes from Harry Porasky, who made his first post to the newsgroup on November 8, 1996, two days after its initiation. As in the following post (also mentioned in the last chapter), throughout his tenure on the newsgroup Porasky buffers his doom prognostications with pragmatic statements recognizing that facts must be observed.

From: harry porasky

Subject: Re: OMB Report on FAA Newsgroups: tech.problems.year2000

Date: 1997/12/29

Peter Mill wrote:

> Peter Mill

> harry, I wish That this was a joke. It' so serious that it makes > you laugh, you can't even cry. I don't make my comments merely

> because I am a pessimist or a cynic by nature. I make 'em on the

> EVIDENCE. Even people who think it will be real bad, are missing

> the boat. Its gonna be REeeeaaalllly Bad. You were laughin' about

> the spikey hairs, but one year from now youl'll call the people

> who dont't believe they're comin' 'denial heads'.

...Every day, I see more bad news. When I see the numbers, MLOC, numbers of systems, I have a sense of the magnitude of the problem. I've seen mega projects, I know how they can spin out of control and I know how to get them back on track. I know how much work an IBM 9672 with all afterburners lit, can produce.

When I hear management, y2k directors, etc. say that they have the situation under control, I know that the converse is true. It's completely outs control and they're going down.

I don't believe that there is enough time left to fix more than 10% of the systems in a large organization's inventory. I'm not sure that any organization will compete their remediation, testing, production cutover, and data conversion. Several organizations are on record as being close to completing remediation; they are still far from done.

Harry Porasky

Later uses of the term "Doomer" were more concrete and referenced the term more clearly as a status category and proper noun. The following instance also recognized the basic change in the newsgroup from interest-oriented to contextually-interactive:

From: Daddio

Subject: Re: Use atl.talk.year2000 for the non-computer related stuff

Newsgroups: tech.problems.year2000

Date: 1998/08/20

> Shouldn't about 90% of this groups current threads be posted on > alt.talk.year2000 rather than here?

Yes and both your post and my response apply!! The fight between the Polly"s and the Doomer's is clogging my mailbox.

Daddio

This message, posted August 20, 1998, for the first time gave a name to the division that had been growing for nearly two years.

Descriptions of the category of "Pollyanna," or "Polly," emerged in a June 1999 message thread that began with a newbie question asking the origin of the term Pollyanna. The responses were numerous:

From: Luke Bandy Subject: Why Polly?

Newsgroups: tech.problems.year2000

Date: 1999/06/01

Been reading this ng for a week or so (been working on y2k problems for a lot longer). It's obvious to me what a Pollyanna is - (as opposed to a Doomer) but why "Pollyanna"?

Where does the name come from?

From: TBiker425

Subject: Re: Why Polly?

Newsgroups: tech.problems.year2000

Date: 1999/06/01
Pol*ly*an*na (noun)

[Pollyanna, heroine of the novel Pollyanna (1913) by Eleanor Porter died 1920 American fiction writer]

First appeared 1921

: a person characterized by irrepressible <even unrealistic> optimism and a tendency to find good in everything

-- Pollyanna (adjective)

-- Pol*ly*an*na*ish also Pol*ly*an*nish (adjective)

From: LM Baol

Subject: Re: Why Polly?

Newsgroups: tech.problems.year2000

Date: 1999/06/01

Children's story about a girl who has an ufailingly optimistic outlook, despite circumstances.

From: Eric Mantle

Subject: Re: Why Polly?

Newsgroups: tech.problems.year2000

Date: 1999/06/01

cockeyed optimist works too

The thread continues along these lines, with the various positive and negative associations of "Pollyanna" argued back and forth. As other newbies entered the newsgroup, they often recognized the descriptions of the two camps that had occurred previously or were occurring during their introduction to the

newsgroup, or were inspired by some newbies, and they desired further explanation.

The thread below, titled "Help me understand D. vs. P.," outlines one of these exchanges:

From: dedparrot@deja.com

Subject: Help me understand. D vs. P Newsgroups: tech.problems.year2000

Date: 1999/09/14

Firstly, I am not a computer expert, but I rely on them in my job (air traffic controller). I have been a lurker for quite a while now. I dont want this to degrade into flames, but could someone explain to me the following:

How can people of similar education, backround, experience, access to information, etc have such diametrically opposed opinions on what will happen come 1/1/00?

I have a tough time believing that there can be such a wide diversity of opinions from an occupation that typically is used to dealing in "black and white".

Thanks.

From: Eric Mantle

Subject: Re: Help me understand. D vs. P Newsgroups: tech.problems.year2000

Date: 1999/09/14

It's all based on how it will affect their lives. For instance those that have saved for things such as children's education etc. over the years have a lot to lose, so regardless of what they believe, or what they know, it is preferable to them broadcast the outcome they would prefer. They may be referred to as pollannuslifestyleuspreferrus.

em

From: Marcus P. Sorenson

Subject: Re: Help me understand, D vs. P Newsgroups: tech.problems.year2000

Date: 1999/09/14

- > How can people of similar education, backround, experience,
- > access to information, etc have such diametrically opposed
- > opinions on what will happen come 1/1/00??

This newsgroup has been hijacked by technical illiterates.

Go to http://www.deja.com and check any other newsgroup in the comp hierarchy. Use power search specifying keyword Y2k.

--mps

From: Josh Bader

Subject: Re: Help me understand. D vs. P Newsgroups: tech.problems.year2000

Date: 1999/09/14

One part of the answer is that those posting here come from many different backgrounds: we've got everything from COBOL codin' fools [a reference to MrMidgit] to pig farmers [a reference to Peter Mill] posting here.

-JB

From: Nansee

Subject: Re: Help me understand. D vs. P Newsgroups: tech.problems.year2000

Date: 1999/09/14

There are no pollys anymore. Only a group of people who feel it is their duty to be devils advocate for the Denialside (tm).

From: Mel T. Agid

Subject: Re: Help me understand, D vs. P Newsgroups: tech.problems.year2000

Date: 1999/09/14

Most people, even techies are misinformed.

It isn't even the computer problems that are the fear factor, as most will function as normal... People's panic is the fear I have. As long as people stay ignorant and go on as normal, this is going to blow over.

However, I think some computer programs will have glitches. I doubt that the world is going to stop because of a few crashes... If it did I think we would have all died of idiocity a long time ago.

Think about it: How many times does your computer crash? Did it cause you to go get a shotgun and protect your family? I don't think so.

The variety of responses in this thread underscores the fact that the underlying metaphor of the two camps could be interpreted in many ways. However, these finer variations and degrees of difference within the newsgroup disappeared as the basic dichotomy of Doomer and Pollyanna took over.

Some might ask, "What is the point of interactive broadcast, especially for Pollyannas – the 'non-believers' who are not promoting an active agenda of preparation for disaster? Where is the vested interest in broadcasting their point of view?" In a turn of wit, newsgroup member Y2KMary makes this point in answering Curt Ovachart's question regarding who has suffered as a result of Y2k:

From: Y2KMary

Subject: Re: Is Y2K the biggest problem ever?

Newsgroups: tech.problems.year2000

Date: 1999/11/18

> Name one person so far that has suffered due to
> the year 2000 computer problem.
>
> Can you name one?
>

Your children.

> --Curt Ovachart

All of the pollies children.

The amount of time and energy you've put into an issue you don't even believe is going to be a significant event. While your children grow older by the week. Imagine if you pollies had put the SAME amount of hours volunteering for the school they go to. Or spending that time teaching your children what really matters in life (er.. I guess you'd be teaching them how to spend hundreds of hours on issues that are totally insignificant)

Mary

Mary attempted here to delegitimize the Pollyanna point of view by arguing that they were wasting their time in the newsgroup. How did the Polly's respond to this avenue of attack? First, equal efforts toward delegitimizing the Doomer point of view were taken by some Pollyannas. Take for instance this characterization of the Doomer perspective:

From: Hobart L.B. Jones

Subject: Re: Editorial: "Motives - Doomsayers vs Pollyannas"

Newsgroups: tech.problems.year2000

Date: 1998/11/26

GWNY2K wrote:

> I tend to look at it this way. If the doomsayers are wrong, the

> worst result will be a lot more firewood in the garage and a

But you don't say _which_ doomsayers will be right. Should I listen to the Collapse Of Civilization doomsayers, or the Global Thermonuclear War doomsayers? What's the upper bound on the resources I should spend preparing for Y2K?

From: I.Sauros

Subject: Re: Editorial: "Motives - Doomsayers vs Pollyannas"

Newsgroups: tech.problems.year2000

Date: 1998/11/26

Obviously, the ones who are saying that the Sun will be going supernova shortly and the only way to escape it is to RUN FOR YOUR LIVES by getting out of the Solar System. (as for cases worse than this... I don't see where it makes a difference because the 'how to prepare' answer is the same anyway)

Sorry, couldn't resist.

But then I.Sauros goes on to purvey his own view of the proper doomer course:

... Personally, I think it would be reasonable to get 6 months extra of the non-perishable subset of foods one likes to eat, whatever it takes to stay warm and light up your place for that length of time *conveniently*, another 6-12 months of long-term storage beans / rice / supplementary items... and some non-hybrid seeds and at least minimal garden tools in case things are worse than most informed people expect... at least a solar battery charger and extra batteries... firearms and ammo and there are plenty of places to get lists of more good things to have...

In other words, a few K unless you decide to buy a vacation retreat so as to have a reasonable place to put these items seems within reason... and will get you through most natural and manmade disasters other than Y2K in comfort and safety and without a trip to disaster relief supply distribution points.

Let's hope we all get to dump most of the food we're planning to buy at food banks come 2001.

The schism between Doomers and Pollys was not as truly diametrically opposed as the myth of Y2k perpetrated. The either/or division between the two camps was clearly mediated by in-between positions, gradations outlined, for example, by I.Sauros above. The interactive broadcast of the newsgroup allowed for

> healthy supply of Campbell's soup in the pantry.

variations on the theme of "Doomer and Polly" to be extrapolated from the messages.

Another way of looking at the interactive broadcast that fostered the schism between the two camps is to look at the quantitative data. There is an almost equal number of posts from each faction. While posts from the Doomers were more numerous, neither side had a clear majority position in the newsgroup, by measure of the number of posts sent from those categorized into the two camps, as Table 7.1 shows. The relative numerical equality of messages sent by each camp shows that neither had a clear broadcast advantage in the forum, which would have qualitatively changed the content and nature of the newsgroup relationships. It should be mentioned that the "post count" is more than just a research tool used in this research – it was also one measure of commitment within the newsgroup itself.

	"DOOMERS"			"POLLYS"	
- 	Pseudonym and Rank	# posts		Pseudonym and Rank	# posts
1	Peter Mill (2)	6990	1	MrMidgit (1)	17107
2	J. Frank Freleng (3)	6019	2	Marcus P. Sorenson (4)	4826
3	Harry Porasky (5)	4482	3	Doug Dock (6)	4350
4	Mike August (7)	4054	4	Timothy Frey (14)	1878
5	Michel Portier (8)	4029	5	Richard T. MacNewsome (16)	1855
6	Manny Brooks (9)	3626	6	Bob Roberts (19)	1700
7	Dan Westcreek (10)	3176	7	Ulrike Katzav (24)	1457
8	Eli (11)	2793	8	Curt Ovachart (25)	1314
9	I.Sauros (12)	2610	9	Bob Summers (32)	1141
10	Eric Mantle (13)	2080	10	Alex Peerless (34)	1111
	Total	39859		Total	36739

Table 1.7
Sample of Doomer/Polly Rankings by Messages Sent between
November 6, 1996 and April 1, 2004

The following mid-1999 message demonstrates this fact:

From: Curt Ovachart

Subject: Doomsters abandoning t.p.y2k Newsgroups: tech.problems.year2000

Date: 1999/04/29

Is it just me, or are they thinning out?

I miss good ol' Manny Brooks. Sometimes he'd make 50 or more posts in one day. Last count, he'd made 2,451 posts to t.p.y2k. Last 3 weeks? ZIP.

Y2kMary, another "thousands posted" doomster is all but gone: 6 posts in the last 2 months. ...

In addition, Ingrid Ildree -- all but gone with 3 posts in the past 2 months - Marjoram -- all but gone with 4 posts in the past 2 months

Peter Mill looked like he might be fading but now he seems to be back as good as ever, thanks God. What else we got? steve harris, Jon Stevens, Bob Pierce, and a few others.

A scary thought: if Peter disappears, steve, Jon, and Bob will probably be gone too. Then what?

Let's all be nice to Peter.

--Curt Ovachart
"So many Doomers, so few comets" - BR

Another attempt at quantifying the abilities, perceptions, and opinions of the newsgroup members took place in the form of surveys. Surveys provided a convenient way to gauge the opinion of large numbers of newsgroup members in a simple, calculated way (avoiding the effort and time needed to write and read the more typical explicatory messages, presumably). The sharing of opinions and the elaboration of the variations on the Doomer/Polly schism led to evaluation within the newsgroup of the generalized opinion of its members. The method used to gauge the aggregate opinion of the newsgroup as a whole were quarterly surveys that members filled out. Here is the call for the first newsgroup survey, conducted in July 1997:

From: Frank Stephens

Subject: Perspective of Doom

Newsgroups: tech.problems.year2000

Date: 1997/07/22

Ouartz Limited wrote:

- > If you have spent the last thirty years of your life, say, making
- > systems go through far greater changes than this, then you might
- > indeed not have a perspective of doom about this change. Indeed
- > you probably already made it.

Perhaps we could take a vote on this. Better still, a *weighted* vote: state degree of "perspective of doom" and years in MIS/IT/DP/whatever it was called before then (a guy I knew at my last job had started in the Hollerith Department!).

Let's say...

5 = probable collapse of economy, start hoarding now

3 = bump in the road, 80-hour weeks for all 1999-2001

1 = it ain't gonna happen (a la Sundial).

Me: Severity [S] 4; Experience [E] 12.5 years

So, in general do S and E vary inversely (as Matt Quartz suggests) or directly (as I rather strongly suspect)? Over to you, chaps.

__

Frank Stephens

Stephens received 38 responses to his informal attempt at a survey. The average experience was 17.5 years. Only two stated they had less than 10 years experience. The average score, using the scale Stephens used above, was 3.96 out of 5. It appeared from this survey that the experienced computer professionals seemed to believe that Y2k would result in some fate between a "bump in the road" and "collapse of the economy." This gave early strength and momentum to the growing Doomer camp. Porasky recognized this in his reply:

From: harry porasky

Subject: Re: Perspective of Doom

Newsgroups: tech.problems.year2000

Date: 1997/07/28

Frank Stephens writes:

> And the two lowest scores were... a blithe Pollyannaish 3 (three

> solid years of death-march projects)! Which is interesting. I was

> staggered(and slightly alarmed) by the number of 5s and high 4s.

That surprised me too. I used to think I was pretty extreme on Y2K but I guess the survey results shows that others have seen the odd ways in which software fails.

I recall situations in which software problems lasted for weeks and months, where people sweat and scream to get a software problem fixed, then have to sweat and scream for weeks and months more to back the bad data out.

The next several years will be very bad... uh, I mean, terrific, it will be the biblical seven fat years, although it probably started a year or two ago. I've getting reports that contract rates are above \$100/hour.

Harry Porasky

Datawizard used this survey two months later to back up his perspective of doom:

From: Mail: Year2000 Datawizard

Subject: Re: Is year 2000 a serious threat?

Newsgroups: misc.survivalism, tech.problems.year2000

Date: 1997/09/02

P.G. Klamth wrote:

- > It would seem only some IT pros believe it will be a disaster
- > while others believe it won't. This is what is concerning me.
- > Many people in the field, all with seemingly credible backgrounds
- > and experiences who are not agreeing with each other.

I'm afraid you have gotten the wrong impression from the postings of those like Mike (who I do *not* believe is a real, working computer professional). Those of us who actually work with real, large scale systems are virtually unanimous in predicting a major disaster.

Recently, we had a survey of the t.p.y2k newsgroup, with each of us expressing our best opinion of the outcome on a scale of 1 to 5, with a 5 representing total collapse of the global economy. I include the results of that survey for your edification (below). As you will see, the average result was about 4 -- far more serious than the naysayers would accept. Since then, most of us who actually understand and work with the problem have upgraded our scores and I would estimate that the group average is now about 4.5 or higher on the Scale of Doom.

What the optimists don't seem to understand is the interdependency between *all* of the world's computer systems. A company can do everything exactly right, they can solve all of their own Y2K problems and they *still* won't survive. This is because some significant percentage of their vendors, customers and trading partners will *not* be able to fix their Y2K problems. In addition, the general loss of a significant percentage (even just 5%) of global economic activity will be enough to force some

companies out of business and to trigger a major recession or depression.

Now on to the survey results....

The survey results were used in the newsgroup itself as well as in at least one peripheral publication. The March 1998 online issue of Salon magazine featured pundit and Y2k author Ed Yourdon, who responded to the interview question, "Is the situation really as bad as you make it out in [your book] *Time Bomb 2000*?":

We took a pretty neutral position, relatively speaking. Personally, I think it's worse than what we laid out, writing last summer. Things have gotten worse in the last six months. If you see any of the informal surveys on any of the newsgroups — like tech.problems.year2000 — they're pretty pessimistic. The last one I saw asked for your assessment of how bad it could be on a scale of 1 to 5, where 1 is no big deal and 5 is, you know, the end of Western civilization. And they're usually in the range of 3 and a half to 4 (Rosenberg 1998).

Non-scientific statistics such as those created by Usenet newsgroup surveys may be good fodder for magazine articles; however, they are not necessarily reliable or valid. There are several reasons that the survey may have produced the results which supported the Doomer position with such strength. In fact, the newsgroup members themselves brought up some of the reasons why the surveys were not reliable measures of newsgroup opinion:

From: Buck Darma

Subject: Re: Perspective of Doom

Newsgroups: tech.problems.year2000

Date: 1997/07/23

This has been a fascinating little survey. It appears that the correlation between experience and predicted effect is weak. However, that may just reflect the readership of this group, where awareness is pretty high (I notice that the naysayers are not participating in this one.)

Darma recognizes the self-selection bias that the poll produced; he also points out the weak correlation between experience and predicted effect, where the aggregate average statistic of 3.96 on the "Scale of Doom" makes it appear otherwise.

The surveys were popular enough that they became a regular quarterly feature of the newsgroup through September 1999. The efficiency of interactively broadcast surveys enhanced personability within the newsgroup by revealing the interpersonal knowledge of its the members, as Marty Pagos points out:

From: Martin Pagos

Subject: Re: Perspective of Doom Newsgroups: tech.problems.year2000

Date: 1997/07/24

Jake Cowler wrote:
> FWIW, the average score was: 150.6 / 38 = 3.96

Thanks Jake.

This was a very interesting survey, indeed. It was nice to see some information about the folks posting in this newsgroup (years of experience and backgroud). Kind of takes the "invisibility" of the posters away just a wee bit.

Marty Pagos

Later quarterly in-group surveys saw greater participation rates and created new measures, known by the username of its creator (for example, the Stephens Scale, the Westcreek Scale, or the Datawizard Scale). The survey information was kept cumulatively, in order for comparisons to be drawn to prior periods, and in the final survey the cumulative results were made available by Ulysses Olson:

From: UFO (Ulysses F. Olson)
Subject: Survey 4Q-1999 Results
Newsgroups: tech.problems.year2000

Date: 1999/12/30

Thanks to all for your participation. This is the last survey I will be conducting. If anyone wants to continue, have at it.

UFO

Here are the current results;

Stephens -Non-G Overall Period Exper Geeks 2Q-1997 17.6 3.96 30-1997 19.7 4.20 5.75 4.30 40-1997 18.1 4.09 4.29 4.11 4.20 1Q-1998 19.7 4.18 4.29 4.93 2Q-1998 19.5 4.21 4.33 3Q-1998 19.6 4.23 4.77 4.36 4Q-1998 20.5 4.33 4.74 4.48 4.62 4.03 1Q-1999 19.7 3.86 4.93 3.79 21.6 3.50 20-1999 4.74 21.5 3.17 3.61 3Q-1999 4Q-1999 22.0 3.27 4.25 3.49 Westcreek -3.07 3.89 3.21 2Q-1998 3.33 3.39 3Q-1998 3.40 3.30 4Q-1998 3.17 3.53 10-1999 3.16 3.86 3.32 2Q-1999 3.18 4.28 3.48 3Q-1999 2.91 3.99 3.21 4Q-1999 2.86 3.90 3.09 Datawizard -.46 4Q-1998 .59 .51 .39 .60 . 44 10-1999 .35 .66 .42 20-1999 .26 .63 .36 30-1999 .50 .35 .31 40-1999

Note that in each scale, the evaluation of consequences of the Y2k computer problem decreased from late 1998 to the fourth quarter of 1999 (this was the same period when conflict and post frequency increased in the group). Also note that the "non-geek" category consistently made more dire forecasts for Y2k than the "geek" population, supporting some Pollyanna claims that the "programmers knew best."

Political Differences

The dichotomies in the newsgroup did not stop at the Doomer and Polly distinction. Rather, that distinction was impregnated with many different binary

meanings, including the Geeks/Non-Geeks distinction drawn in the surveys above. Also a noticeable subgroup distinction involved political philosophy and affiliation. On November 5, 1998, an interesting message was left by a newbie that wanted to discuss the issue of Y2k from a community perspective. Underlying the perspectives of Doomer and Polly were the political categories of libertarianism and socialism (and the attendant social-philosophical differences between "rugged individualists" and "communitarians"). The message sought to explain their Doomer or Polly positions in these terms.

From: GS South

Subject: Best case scenario

Newsgroups: alt.talk.year2000, alt.folklore.computers, alt.memetics,

sci.skeptic, tech.problems.year2000, uk.tech.y2k

Date: 1998/11/05

I'm new to these y2k related newsgroups, so excuse me if it has been addressed. About 90% of the posts that I've seen are about doom and gloom. I've read numerous posts presented by self severing, gun hoarding, egotistical, selfish, individualists. of these posts contain things which make me sick to my stomach. More than one has said that they would like to see others "die" (a way of "cleansing" is how I think one put it), would "kill", and will "protect their own". I thought I'd read more posts centering on reason and what can be done. I'm more about solutions. If one is not found, then I'm definitely planning on helping my fellow man during any catastrophe (even with the cost of my life. A much more noble way to die than shooting eachother over unproductive fears and hoarded goods.) I would like to read some intelligent articles which don't rely on scare tactics, end of the world prophecies, Being prepared is fine, urban legends and encourage running away. but helping others in the process is much better. Does anyone out there have some sane articles which pertain to the actual problem, solutions and giving your fellow man a break? I'd rather not read another militant website, that is riddled with pessimism and antisocial views. I'm not writing this to start some sort of flame war (which would further defeat the purpose) and I'm not trying to offend. I'd simply like to read articles which pertain to what is being done and what can be done for our community. Your help would be appreciated

South

The responses to South's message ranged from scathing to supportive. The first response was satirically derogatory.

From: Parson Jim Croot

Subject: Re: Best case scenario

Newsgroups: alt.talk.year2000, alt.folklore.computers, alt.memetics,

sci.skeptic, tech.problems.year2000, uk.tech.y2k

Date: 1998/11/05

Kum-ba-ya My Lord, Kum-ba-ya! We are the world, we are the children...

Come on now, EVERYbody sing... hold hands and sing while you're starving, freezing, and/or dehydrating! Hug and kiss each other! And if you have a little smidgen of peanut butter left in the bottom of the jar, be sure to scrape it out & HAND IT OVER to your fellow man. Love, peace, joy ... death.

Sounds good to me, you socialist moron.

Parson Jim Croot

South responded to this with a one-liner:

Uh, right. You obviously missed the point of my post. But, thanks for the worthless input.

This began the aforementioned flame war that South wanted to avoid. It also allowed for the interactive broadcast within the newsgroup on the topic of community and self in the one-hundred fifty-one messages of the thread³¹. A good deal of the broadcast diverged into very detailed sub-conversations about the interconnectedness of computer, utility, banking, and transportation infrastructures. But the underlying theme of community versus individual that was revealed in this thread was always an important part of the discussion during the life of the newsgroup.

Another case in which the community versus individual theme gained attention was found in this political discussion, where Lenny Utensil mentions the common theme of libertarianism in the newsgroup:

From: Lenny Utensil

Subject: Re: Troll: it's the fault of them undisciplined PC hacks...

Newsgroups: tech.problems.year2000

Date: 1998/04/27

•••

You know, I think I've notice a common theme on this newsgroup -- libertarianism.

I always considered myself a libertarian (in the true sense -- I'm not a right-wing reactionary -- more akin to Nozick's philosophy as laid out in "Anarchy, State and Utopia")

But if anything, Y2K has shaken my libertarian beliefs somewhat. Y2K was not the result of Government interference -- it was the result of chaotic free market forces and an unhealthy short-termist mentality that pervades business in general.

I don't know that Government intervention could have averted this disaster (even if they had foreseen it) but I must say that my optimism wrt free-enterprise is now greatly diminished.

Cheers,

Lenny

This post broke off into its own small thread, in which responses to this recognition of and hesitance to commit to libertarianism generally mimicked this response:

From: Han Platman

Subject: Re: Libertarians & Y2K (Was: Troll: it's the fault of them)

Newsgroups: tech.problems.year2000

Date: 1998/04/28

I suspect that after Jan 1, 2000, your libertarian beliefs will come screaming back to the forefront. A lot of people prefer security over freedom, and there will probably be plenty of insecure to go around.

Despite this show of libertarian support typically coming from the survivalist members of the Doomer camp, there were many other Doomers who maintained that the best possible course was community preparedness.³²

From: TFoster

Subject: Community Preparedness - Peter Mill Was Half Right

Newsgroups: tech.problems.year2000

Date: 1998/04/23
Peter Mill wrote:

```
> I do not need to wait until tommorrow night to know how your > meeting went. The chances are overwhelming that you will have > disappointing results. Very few people will respond at this > 'early' point in time. That is a fact of life. I really do hope > that you achieve success. I would not bet a plugged nickel on > it, though. But you will find out the hard way. > Peter Mill
```

My main purpose in holding meetings at my older child's elementary school is to get my immediate neighbors informed and prepared. The self-interested reason for this is that my prefererence in the post Y2K era would be to have more rather than fewer neighbors who are well fed and warm. The altruistic reason is that I care about these people... They just don't yet understand the extent to which they have been let down by their political leaders, the media, the captains of industry, the academic community and everyone else who should have prevented this stupid problem or warned them that is coming. We expect that very young men should be willing at times to give up their lives to maintain this way of life. We expect firemen to rush into burning buildings in the hope that one or two other's lives may be saved. I can give up a few evenings each month to try to get the word to these people.

The part Peter Mill got right? Nobody from the neighborhood showed up. Nada. Back to square one.

The half Peter Mill got wrong - seven people from nearby communities found out about my efforts from the Cassandra Project website http://millennia-bcs.com/cassief.htm#top [no longer available]. They contacted me by email and made their way to the meeting....

Ted Foster

These posts were often rebutted by those who felt that community preparedness was at best simply a reiteration of individual preparedness (along the logic that the community is simply an aggregation of individuals), and at worst merely a feel-good distraction from the important necessity of being individually prepared. Preeminent Doomer Peter Mill took this position adamantly:

From: Peter Mill Subject: Community preparedness: ROTFLMAO³³ Newsgroups: tech problems.year2000

Date: 1999/07/05

. . . In early 1998, when I first entered into the Y2K awareness arena, I did so with a purpose in mind. To save lives in case of a disaster. This, in keeping with my philosophy of sharing information, continues to be my prime motivator. Accordingly, I

contacted numerous groups and agencies to offer help in promoting personal preparedness.

Unfortunately, most community task force groups, though appreciative of my efforts, discounted my approach as "selfish" saying that the real effort should be to create awareness of the need for "community."

What they failed to realize/acknowledge was that a community is made up of individuals and that the whole effort would only be as strong as the weakest link. It is only when individuals prepare themselves and their families first that they become an asset to the entire group. My concern with those early community efforts was that citizens might see it as an easy way out.

Instead of utilizing personal energy and effort in a preparedness program, they could instead rely on a community to take care of them. Another concern was that the community groups would use time and resources attempting to acquire approval and funding of their grassroots efforts from their local, state and federal governments. Valuable time that I believed should have been used to create personal awareness and preparation programs.

It serves no purpose to belabor the point that many of the community/grassroots groups were unable to arouse the necessary participation from either their governments or more particularly from the citizens. . . .

I have been saying this for almost two years. Community preparedness is a joke. It is a joke because the community is made up of INDIVIDUALs. It is made up of individuals who REFUSE to prepare on their OWN.

It is a lovely notion to come out and hold meetings, disseminate information and try to stimulate the communities to prepare. It is a total waste of time. Oh, make no mistake, possibly one or two communities have done something. But that does not matter in the overall scheme of things. Even the, that community's preparedness is MOOT. Because much the same as an 'individual' who prepared is surrounded by a myriad of other 'unprepared' individuals a community that prepares is surrounded by a myriad of unprepared communities.

If that prepared community was relatively isolated from other communities, they might have some kind of chance. Consider that a town in NJ 'gets it' and they all decide to do something as a community in order to prepare. Will all the surrounding towns do that as well. Heck no. And when the time comes, they will descend upon that prepared town.

The community is composed of individuals. Never has a town meeting ever occurred where they could even all agree on the placement of a stop sign, yet alone achieving unanimity over an issue as devicive as Y2K.

Look around you. Do you see fifty percent of your community actively making preparations? 25%? 10% Even 5%? Nope.

This is precisely why I have said that the consequences will bae as bad as they will. It wil NOT be because technology failed. It will be because people were not PREPARED for it to fail.

The bottom line has ALWAYS been the same. Get out of populated areas. prepare for your own family. No town will prepare for you and even if it did do anything at all, the surrounding mass of unprepared communities will render that preparedness MOOT.

Mill's logic was hermetic as long as two premises were kept: first, that the Y2k computer bug would, in fact, hold dramatic consequences for the continued functioning of complex, interrelated socio-technical systems, and second, that people would not prepare prior to such a disaster, or could not prepare once the disaster had struck. Mill believed in these premises wholeheartedly, and defended them without hesitation.

As time went on and the process of interactive broadcasting became more familiar to the regular members, it appeared that the "myth of Y2k" began to take over, with the exemplary dualism of the two camps becoming more realized in the newsgroup discussion itself. In other words, during the months of late 1998 and 1999, the camps began to solidify, to become less variable in their opinions on the outcome of the problem. For example, in March 1999, Catt Forest writes:

From: Catt Forest

Subject: Re: Wachovia Slipping?

Newsgroups: tech.problems.year2000

Date: 1999/03/26

It feels like the lines are more clearly defined the later is gets. Many, many people have heard a couple of optimistic news reports and concluded there is nothing to Y2k, that it's just going to be a bump in the road.

Ultimately, the intent behind interactive broadcasting in tpy2k was always to get at the truth behind the Y2k computer bug. Truth, however, is most often

expressed in its binary form, in Western culture at least, and often compared solely to that which is false. The "either/or curse" that Etzioni fears in community development was evident in both the understanding of the Y2k computer problem and in the way in which these opinions divided the newsgroup into the opposing categories of Doomers and Pollyannas. The interactive broadcast by which the members sought and shared their interpretation of the truth of the millennium bug led to many claims of lying and deceit on the part of others in the newsgroup. This eventually impinged upon the civility within the newsgroup, which will be discussed in the next chapter.

Chapter 8 Civility and Incivility in tpy2k

From Civility to Incivility in the tpy2k Newsgroup

Blow it out your ass woosie ... Turn on courier font and read this (and weep asswipe):



- Locksmith's response to Jon Doe on tpy2k, August 27,

Civility is the fourth variable of community to be studied there are many indicators of civility (both quantitative and qualitative) in the *tpy2k* newsgroup posts. The level of civility changed significantly as the newsgroup grew larger, and the boundaries regarding netiquette, flaming, and trolling (all indicators of online civility) became contested.

Particularly when the Doomer and Pollyanna status and role relationships became concrete and well-recognized did civility begin to decline. In its second year (between November 6, 1997 and November 5, 1998), an entrenched "flame war" emerged in *tpy2k* between Doomers and Pollyannas. During its third year (starting November 6, 1998), *tpy2k* became, in the words of regular Curt Ovachart, a "troll

playground," as civility declined into a kind of "anarchic cooperation" (Tepper 1997).

Early in the newsgroup's history the definition of civil behavior was itself a clear issue in the forum³⁴, indicating that it was a consideration for the growing community of *tpy2k*. While civility may have been an underlying issue at the beginning of the newsgroup dialogue (particularly in discussions about on and off-topic posts), the emergence of the term "civility" in newsgroup conversation in December 1997 related to the Y2k problem itself, particularly the loss of civility in urban areas should the Y2k bug create disastrous consequences. On December 29, 1997, David G.W. Brown made the first direct mention to civility within the newsgroup proper. In a conversation about telephone operations and Y2k, Kim Nacent defends the call center's preparedness, prompting Smith to offer Thomsen the benefit of the doubt, "for the sake of civility":

From: David G.W. Brown Subject: Re: call centers

Newsgroups: tech.problems.year2000

Date: 1997/12/29

Kim Nacent wrote:

- > Call center representatives (in the call centers I'm familiar
- > with) are designed so that the average *trained* representative
- > can handle 95-percent-plus of the day-to-day problems he
- > encounters. Failing that, a supervisor or manager (a "PHM") can
- > be summoned to answer the extraordinary problems.

For the sake of civility, and being unfamiliar with BellSouth, I am quite willing to say "present company excepted." Not all call centers are necessarily bad or poorly implemented.

This level of civil behavior was typical of the conversation, with a few exceptional outbursts and some trolling, throughout 1997 and 1998. A few days later, on January 4, 1998, a similar call for civil behavior appeared:

From: Tim Graham

Subject: Re: a 260 year solution for y2k Newsgroups: tech.problems.year2000 Date: 1998/01/04

J H Multa wrote:

> Tim,

> Thank you for your response. All of what you have said has given

> me a very accurate view of what sort of character you have, and I

> choose not to be offended by someone of such character. But

> thanks for trying.

Janice, I do not know how one would obtain a full character reading from this brief exchange. And I personally apologize for any distress it has inflicted. I believe Lawton's post was the original insult, some of the initial response was rude but not uncustomary in the way this group deals with such, and your interjection was well-intended but misguided.

> I've yet to see anybody preface their posts with a letter of

> qualification. Funny I don't recall seeing anything in the

> Netiquette guide about that, either.

For the most part, we make our *bona fides* evident in the substance of our posts. Yours? In controversy over the obligations of civil behavior, however, we may greet each other as equals, and as in all things, differences of opinion are possible.

> If you really want to be heard, maybe sticking to facts and > treating others with respect will gain you the respect you > deserve.

Sound advice. Agreed, respect begets respect.

> Keep in touch, > Janice

Respectfully, -- TimGraham

Community is built only when members feel that reciprocity is an active value and "respect begets respect" is a value that promotes and reinforces such reciprocity. That one should be treated as an equal, on the same level despite differences of opinion, is a basic tenet of democracy as well. Etzioni (1999) outlines the importance of civility and cooling-off in relation to good community practice this way:

The designers of democracy, particularly the founding fathers of American democracy, were greatly concerned about the rule of the mob. They feared that demagogues would whip up irrational emotions and drive people to demand unreasonable policies and actions from their leaders. Democracy requires mechanisms for keeping passions in check and allowing reason to prevail; the House of Lords in the United Kingdom and the Senate in the United States are said to serve as such checks on the more populist lower houses.

The "cooling-off mechanism" inherent in Usenet is threefold: the participant must first take the time and expense to first log on to the Internet; second, to download and read multiple postings to the newsgroup; and third, they must take the time to respond in writing. The stipulation that responses be in writing is important in that it is far easier to "take back" a thought before it has ever been reviewed by another member; any message can be written and rewritten, edited with great care, and ultimately changed radically or not be sent at all, given the feeling of the sender after going through all of that trouble and waiting. Etzioni argues that irrational emotions will have been checked by the time that process is completed.

Netiquette

The fact that *netiquette*, a neologism for "network etiquette", was observed on the newsgroup early in its existence no doubt had a positive impact on its sustainability, despite the growing conflict between the Doomers and the Pollyannas.

Most rules of netiquette, the code of civil conduct for the Internet, are widely understood by all but the newest users of CMC. As Graham above touches upon, there is a guide for netiquette which can be found in a number of different locations on the World Wide Web (for example, at http://www.albion.com/netiquette). The rules include, but are not restricted to, the following brief list:

- do not (cross-)post to inappropriate groups;
- refraining from commercial advertising outside the biz groups;
- do not top-post (i.e., place your reply to a post above the message you are replying to this disrupts the flow of a thread); and
- do not post in all uppercase.

According to *Wikipedia* (an open-source encyclopedia for the Web, at http://www.wikipedia.com), "the most important rule of netiquette is "Think before you post." If what you intend to post will not make a positive contribution to the newsgroup and be of interest to several readers, don't post it! Personal messages to one or two individuals should not be posted to newsgroups, use private e-mail instead." This backs up Etzioni's theory that CMC enhances cooling-off periods and should lead to proper civility in online groups. Was Etzioni's theory evident in *tpy2k*?

The first mention of the term netiquette in tpy2k (out of 115 total references) is on May 13, 1997, when Buck Darma wrote the following:

From: Buck Darma

Subject: Re: How will you weather the storm? just curious...

Newsgroups: tech.problems.year2000

Date: 1997/05/13

Ford Haaken wrote:

- > At times I wonder whether I am exaggerating the seriousness of
- > the problem, but the conclusion that Y2K *will* lead to chaos on
- > an immense scale seems inevitable. There are a number of regular
- > contributors to this group that never touch these doom-and-gloom
- > threads (Harry?), and I would like to hear why.

Well I'm one of those who still believes in the Netiquette of reading a NG [newsgroup] for a while before posting so I don't qualify as a regular contributor, yet. However, I can tell you why *I* don't go in for the Prophet of Doom line: the cure is worse than the disease...

In some cases it was considered necessary and appropriate to break from netiquette and, for example, post a private e-mail. This was the case for Fred Fingress in June 1997:

From: Fred Fingress

Subject: Re: USA Today article

Newsgroups: tech.problems.year2000

Date: 1997/06/10

tcrane wrote:

>

>http://www.usatoday.com/life/cyber/cc.htm

> After all the good done by the article in Newsweek, someone had

> to go and write this in USA Today! This guy should be force-fed

> the contents of this NG and tied up in front of Harry and Peter

> de Jager while they tell him the real story.

I got a simplistic response from him shrugging off the issue. And the tone was quite condescending. <ggggrrrr>>>>

I would strongly urge readers of this newsgroup to email this fine idiot with their own comments.

Fred

P.S. Please find attached his email and my response. I suspect it's against netiquette to post email but there's sure nothing confidential in it.

[e-mail follows]...

In this case, the proof was clearly evident: Fingress felt it so necessary to back up his opinion on the breach of the reporters' journalistic duty that breaking from netiquette was justified. Perhaps more importantly, he let the newsgroup know that he was aware of his violation, so that he would not be flamed by another member. Marcus P. Sorenson also uses this "release clause" in the following message:

From: Marcus P. Sorenson

Subject: Re: What is the average IQ of this NewsGroup???

Newsgroups: tech.problems.year2000

Date: 1998/07/02

J. Frank Freleng wrote:

>> scores emblazened thereon. I do not know, however, if the Mensa

>> adminstered

During discussions of one's Olympian intelligence, it is considered proper to spell it 'emblazoned'. The normal netiquette rule against spelling flames being superceded by the situational irony.

--mps

The "netiquette rule against spelling flames" Sorenson mentions is a code of conduct that considered pointing out spelling errors in another's post too easy a mark for flamers. Sorenson makes clear that in this specific case, it was okay to break the code and flame Freleng for misspelling emblazoned.

By late 1998, the tone and usage of the term netiquette had changed dramatically. Netiquette did not point out more exclusions from the rules, but it did remind participants that there were some rules left. In the following message, a plagiarism offense is pointed out as Phyllis Martin, keeper of the *tpy2k* FAQ, chastises Datawizard for reposting some comments from another forum without permission:

From: phymart (Phyllis Martin)

Subject: Re: DATAWIZARD: fact or fiction?

Newsgroups: tech.problems.year2000

Date: 1998/12/30

Charlie emailed me that you've never asked for, and he's never given, permission to repost his remarks from another forum to tpy2k.

Please find and read one of the many articles available online explaining proper netiquette.

Then please think up an idea or opinion of your own to post, instead of stealing others'.

--

Phyllis

Unofficial t.p.y2k smallish FAQ

By August 1999, the civility of the newsgroup had decayed significantly and discussions of netiquette became more serious. In the thread quoted from in the introduction to this chapter (where Locksmith gives Jon Doe "the finger"), Jake Cowler claims that good netiquette is a "lost cause":

From: Jake Cowler

Subject: Re: Jon Doe - fuck you

Newsgroups: tech.problems.year2000

Date: 1999/08/27

Richard T. MacNewsome wrote:

> And no doomer has a problem with Brooks' behavior?

Two words: Partisan Politics

I agree, but then, I'm not a doomer. Ever since Manny went "undercover", he's gotten much more obnoxious.

I'd prefer to see good netiquette on this board, but ever since Peter Mill made "butthead" a term equivalent to describing this board, good netiquette is a lost cause.

Jake Cowler

Flaming

What prompted Locksmith to give Jon Doe "the finger" and Jake Cowler to write that civility in the newsgroup had become a lost cause? The post that preceded these responses was remarkably uncivil, by any standards. Filled with traditionally excoriating verbiage, its goal was clearly to incite to anger the party at whom it was directed. Here Don Gonya recalls the post in question (the one written by Jon Doe immediately prior to Gonya's satiric response) which came at the end of the back and forth messages between Lanocom and Jon Doe:

From: Don Gonya

Subject: Re: Jon Doe - fuck you

Newsgroups: tech.problems.year2000

Date: 1999/08/26

JonDoe wrote:

> >> This is not a real email address, nor a real name, so

> >> don't reply via email.

Lanocom wrote:

> >don't wanna be responsable for your lousy thoughts?

JonDoe wrote:

> Don't wanna be mailbombed by vindictive pricks like you, prick.

```
> You have a problem with anonymity on the internet? Wanna have a
> Hillary-Approved "Gatekeeper"? Wanna go fuck yourself?
>
> You want to indict me for my *thoughts*, you fucking tin-horn
> wannabe?
>
> Fuck you, fuck your mother, and fuck the pig she rode in on.
>
> Oh, and do have a nice day.

Jon, nice to see that you're trying to restore civility to the group with the "nice day" thing.

And, to the best of my recollection, wasn't that supposed to be a horse?
---
Don Gonya
```

Jon Doe's flame was remarkably intense, yet it approached the norm for the newsgroup in the first half of 1999. Where netiquette describes the codes of conduct online, flaming describes one of the breaches of civility that emerge in most newsgroups and discussion forums on the Internet. No two people shared exactly the same opinions and as the newsgroup grew in size and split into the dichotomously opposed camps of Doomer and Polly, flaming became more apparent. *The Jargon Dictionary*, a resource for Internet culture, defines a flame this way:

flame [at MIT, orig. from the phrase 'flaming asshole'] 1. vi. To post an email message intended to insult and provoke. 2. vi. To speak incessantly and/or rabidly on some relatively uninteresting subject or with a patently ridiculous attitude. 3. vt. Either of senses 1 or 2, directed with hostility at a particular person or people. 4. n. An instance of flaming. When a discussion degenerates into useless controversy, one might tell the participants "Now you're just flaming" or "Stop all that flamage!" to try to get them to cool down (so to speak).

The term may have been independently invented at several different places. It has been reported from MIT, Carleton College and RPI (among many other places) from as far back as 1969, and from the University of Virginia in the early 1960s (*The Jargon Dictionary*, August 2000, at http://info.astrian.net/jargon/terms/f/flame.html).

When flaming erupts into repeated occurrences in CMC this is termed a "flame war." The military metaphor purposefully fits the conflicting nature of the event. Like real wars, flame wars can last from moments to years, and may be started accidentally or purposefully (through the activity of trolling, described next).

During the Pseudonymous incident described in chapter 6, newsgroup regular Phyllis Martin used a thread subject title to specifically call out Pseudonymous as a "flame-baiter" who was instigating a flame war (though his rationale for doing so was not addressed):

From: phymart (Phyllis Martin)

Subject: Pseudonymous = Flame-baiter Newsgroups: tech.problems.year2000

Date: 1997/02/09

Mr. Pseudonymous,

Your posts show quite clearly that you're not interested in discussion of the y2k problem in any kind of constructive manner, but are using this forum to create a flame-war. Get a life!

BTW, your personal agenda is showing -- did you get fired by a strong, competent woman, or divorced by a strong, independent wife? Your posts indicate a level of irrationality, incoherence, and hostility that would certainly make you a less-than-ideal employee or husband.

Phyllis (I'm not wasting any more time on this jerk) Martin

Pseudonymous's shenanigans were forgotten a year later, but a new threat of "war" had surfaced. As the schism that emerged between the Doomers and the Pollyannas in *tpy2k* grew more obvious, the debate between the camps took on the characteristics of a prolonged flame war. In a growing number of threads, any opinion of a known Doomer or Polly would be purposefully flamed in an effort to gain the "advantage" for one's own side. As indicated above by Cowler's concern about his normalizing the use of the term "butthead," Peter Mill was a significant

perpetrator of the decline of civility in the newsgroup. On many occasions, newsgroup members asked him to "tone down the rhetoric" (Olson, March 5, 1998). The longing title of the message thread this comment belonged to was "O Tpy2k, Tpy2k! wherefore art thou, Tpy2k?" By March 1998, the originator of the thread (Scottish member Dan Westcreek) clearly saw a decay in the norms of the newsgroup that defined civil behavior.

From: Dan Westcreek
Subject: O Tpy2k, Tpy2k! wherefore art thou, Tpy2k?
Newsgroups: tech.problems.year2000
Date: 1998/03/02

Peter Mill wrote:

- > Only a drunken sot ,as yourself, would bother to defend such a
- > bogus position merely in order to defend it, not its accuracy.
- > Now you can go back to your drunkeness, and cursing, since that
- > is your only resort to the truth. You're a bozzy drunken loser,
- > Dan, You have lost, can argue nothing to the point and now resort
- > to the very things that you railed against and plead to be
- > stopped. I love it when the boozy, drunken, foulmouths come out
- > to play, so that their true colors are seen. You have evinced
- > that you are the true vulgar hypocritical drunk that I accused
- > you of being. Off Topic: ROTFLMAO at just another pathetic booze
- > swilling Scot, who would be speaking German right now if it
- > wasn't for Americans. LOL LOL

Totally unfounded, possibly criminally slanderous allegations. The most appalling type of abuse. Distortion. Lies. Misrepresentation. More false allegations. Xenophobia, in an "international" newsgroup, with more abuse. Resemblance to reality - nil. I will take no further action.

In other newsgroups I've seen this type of posting universally condemned by the other posters, saving the recipient from having to exercise his UseNet "Right to reply" and annoy other posters/lurkers. Not here....

There are people in the NG who actually support this sort of abusive tirade, against former strongly participative posters, and, I like to think, one whose contributions used to be valued over the last 9 months. Including some who were themselves active, useful and good-natured, good fun posters "in the good old days"....

This troll [Mill] has insulted people from soon after its arrival in this NG. For the reason that they disagree with its opinions - both voiced and hidden. And yet there are other people in this newsgroup, who expect the likes of me - and others in this same, though currently less extreme position of constant abuse, to:

- 1). Not reply to such constant explicit or implicit abuse.
- 2). Carry on regardless. Serious posts and humour.

You have got to be kidding - not me - but yourselves. I've got a life. And you're next. One slight expression of "optimism" or even truth and realism, and you're the next target for the troll's abuse.

I trolled this last fight against the troll - knowing I would "lose". I hope some of you, already subject to abuse, appreciated the distraction. I hope others of you, yet to come, positively enjoyed it. I did.

[Here Westcreek describes Mill's troll post] ...

I fought this "futile" battle, because I believe that tpy2k still has a chartered purpose to 1) help fight remaining denial 2) help actual remediation 3) provide reasonable opinion to the media 4) support those remediating (stories, "old times", humour break, blether=chat).

Survivalism belongs elsewhere. Trolls go where they please.... This was an NG with strong principals with strong moral principles.

And another one down, another one down, another one bites the dust...

:Dan

Westcreek paints a picture of a golden age of tpy2k where "strong moral principles" guided the members in making "active, useful and good-natured" contributions to the newsgroup. This myth of a golden age, defined as "business as normal," was certainly exaggerated (business had never really been "normal" in tpy2k). Westcreek also claims that members of other newsgroups would have "universally condemned" the kind of tit-for-tat flaming and trolling that went on in tpy2k. This claim may also have been exaggerated, but nonetheless it clarifies the direction in which tpy2k was heading – toward incivility rather than civility as a norm of the newsgroup culture.

Name calling became a standard practice. Starting with Mill's ubiquitous "butthead" comments, others joined the fray. In May 1998, Doomer Jon Stevens

describes Pollyannas Bob Roberts and Curt Ovachart as "a few bricks short of a load" and a "fruit loop," respectively:

From: Jon Stevens

Subject: Re: Atlant-a: The Next "Atlant-is" Newsgroups: tech.problems.year2000

Date: 1999/05/19

Bob Roberts wrote:

- > I have also offered up a number of predictions which were wildly
- > hooted at here and which have now come to pass but I don't
- > treasure them as highly as one might expect, because I thought I
- > was just using common sense in an arena where common sense is at
- > a premium.

How come Robert Bennett doesn't have your common sense? Or John Koskinen? Or the CIA? The only person I know who has the same "common sense" as Bob Roberts is Curt Ovachart. Ovachart is a fruit loop and you are probably a few bricks short of a load, too.

How about "Bob Roberts, the kid who was bullied all through school." Zits, the pocket protector, glasses with the tape, slide rule, fly undone, tee shirt inside out... Was everyone so mean to little Bobby that it has affected you this way? Turned you inrto a Curt Ovachart fruit loop, whose mission in life is to protect everyone from millennium madness?

Bob Roberts wrote:

- > BTW, Jon, can we count on you to tough it out here right through > to January 1st and beyond, when your ideas(?) are proven to be
- > somewhat, shall we say, suspect?

Nope. If I decide Y2k is over, I'm gone. Why would I waste my time here on a non-event? I got better things to do. Which leads to the question: Why don't you have better things to do than argue about a non-event? Don't you have zits to pop? Have you been kissed yet?

Jon

Even such a drastic event as the death of a newsgroup member was not enough to temper some members' lack of civility. When newsgroup participant Ronald Brown passed away unexpectedly in late 1999, the members responded with condolences – except for Mill, who could not separate his posturing from a deeper level of community connection upon learning of Brown's death:

From: Peter Mill

Subject: Re: Ronald Brown - RIP

Newsgroups: tech.problems.year2000

Date: 1999/08/14

Tim Hoodes wrote:

>I received word today that a long time friend

Mill:

"friend"?? Please.

Hoodes:

- > of tpy2k, Harlan Smith, passed away this past Tuesday in Palm
- > Beach, Fla. As many of you are aware, Harlan has been active in
- > Y2k for quite some time in speaking, authoring columns, and
- > generally considering the malaise that we're in.

Mill:

Actually, he has been busying himself CAUSING most of that malaise.

Hoodes:

> Ronald was a long time electrical engineer, and took the embedded
> system issue to heart.

Mill:

Took it to heart?? Don't make me laugh.

Hoodes:

- > While Ronald and I did not always agree, I respected his
- > opinions, and was always quick to tell him that when we spoke on
- > the phone.

Mill:

Frankly, I rarely agreed with him and I NEVER respected his opinions.

Hoodes:

> I have no other details at this time, but will update you if/when
> I hear something.

Mill:

Why is it that when someone buys the farm everyone falls over himself to come out and say 'nice' things, AFTER the fact, when they would not say hello to the man when he was still eating lettuce. Well, I call a spade a spade, and I did not like Ronald when he was breathing, and I don't like him one bit better now.

I thought he was a class "A" Pollyanna Butthead and I won't back off from that merely because he cashed in his chips.

He'll need a light spring suit.

Peter Mill

The responses to this post ranged from apologizing for Mill's egregious

incivility to complete outrage:

From: Bob Roberts

Subject: Re: Ronald Brown - RIP

Newsgroups: tech.problems.year2000

Date: 1999/08/14

I wish there was something that I could say that could somehow negate the vile that Peter Mill has spewed here, but the words aren't available to do so.

In life, Ronald was the most demanding poster here - never allowing any of us, no matter what our position may be, to carelessly throw words on the page without basing them on some relevant source. This was Harlan's way of demanding the same precision from us that he demanded from himself - the very same precision that scared off negligent posters like Mr. Mill.

I will miss Ronald, I will miss his posts and I will miss his demanding ways.

I ask all of you to please disregard the words of Mr. Mill - they are unnecessarily unkind to Mr. Brown and his memory, and we are best advised to forgive Mr. Mill for his unkindness, in the same way that Ronald Brown would have forgiven him.

BR

From: Mumford

Subject: Re: Ronald Brown - RIP

Newsgroups: tech.problems.year2000

Date: 1999/08/14

It is true we do lay aside our differences when someone's life comes to and end. But really Peter is there no love inside your heart and compassion for an human being who at least tried to do well?

Mumford

From: Timothy Frey

Subject: Re: Ronald Brown - RIP

Newsgroups: tech.problems.year2000

Date: 1999/08/14

Peter Mill wrote [among other things]:

- > Why is it that when someone buys the farm everyone falls over
- > himself to come out and say 'nice' things...

Here's a free clue for you, sir.

No one asked you to praise him.

Regards Timothy Frey

From: Mike

Subject: Re: Ronald Brown - RIP

Newsgroups: tech.problems.year2000

Date: 1999/08/14

•••

You piss me off, Peter. You really fucking piss me off. I don't give a flying fuck if you don't think Harlan was up to par, and I wish you'd just shut the fuck up if you don't have anything good to say. Nobody asked you to, "join in the hypocrisy". So just don't join in.

I'll tell you what, I think Harlan was a good man. I will miss him and his posts, Ok? I don't think I have to justify missing him either. And I don't think Harlan's work, beliefs or memory here have to be justified. Please butt the fuck out if you don't like this thread.

Respect was the code of civility being violated by Mill, a respect for the dead that, online or off, is still clearly important to people. Mill's breach was reproached because it was recognized that the dead cannot defend themselves beyond the memories which they left behind, memories in the case of *tpy2k* that were available in archive files for all to review.

Not all of the references to civility in *tpy2k* were cases of civility being lost. Some members tried to restore civility within the constraints of the increasingly out-of-control newsgroup by relying on very traditional etiquette. Using the word "Mr." (or the foreign language equivalent for international members), for instance, MrMidgit restored a basic kind of respect to his posts:

From: MrMidgit

Subject: Re: Flame Away, Mr. Mill Newsgroups: tech.problems.year2000

Date: 1998/04/09
John Denegro wrote:

[snippage about Mr Mill, culminating with -]

>He's upset about the consequence of Y2K.

Mr Denegro, I must disagree... Mr Mill stated that he saw a 'financial collapse' coming some time around 1995 and began to consider his preparations then...

The effort appeared to pay off as other users applied the nomenclature to their posts:

From: Fred D. Stiller

Subject: Re: The King of the Y2K Wacko's: was Why the attack?

Newsgroups: tech.problems.year2000

Date: 1998/08/27

Since there are specific conclusions of Mr. Mill's you dispute, how about bringing up one of the disputed conclusions and why you disagree with Mr. Mill. (Geeze, look at me, using 'Mr.')

Many others adopted this strategy as well, allowing for a modicum of normative behavior amongst the increasing flames and trolls.

Trolling

Trolling, or the practice of intentionally baiting a "sucker" into an argument based on false premises, was as prevalent on the newsgroup as flaming. In fact, trolling on tpy2k could have been considered a kind of purposeful lying – the purpose being to draw out other members in an argument. Westcreek suggests as much in his post above, where he identified Mill as the troll and then he "trolled...against the troll."

Like Westcreek, Ovachart recognized that the level of trolling had increased dramatically during the third year of the newsgroup's existence. However, as a Pollyanna, Ovachart did not have the sense of investment that the doom scenarios

helped foster in the more die-hard Doomers.³⁵ Note that the old thread title before Ovachart changed it to "Trolls on t.p.y2k" was "Roland Mollin agrees that MacNewsome is a troll." The appellation "troll" became part of online identities created not only by claims that individuals had posted about themselves, but also by the normative standards of the online group itself, standards that were violated by the "trolls."

From: covachart

Subject: Trolls on t.p.y2k (was:Roland Mollin agrees that MacNewsome is a

troll)

Newsgroups: tech.problems.year2000

Date: 1999/10/06

How many threads here on t.p.y2k are begun with a post that is essentially troll-work? Better yet--and easier to count--how many are not?

The classic troll-post involves little if any hard information. Cut-and-paste a flimsy article (probably filthy with bogus statistics); call somebody a name, point your finger and shout "LIAR," say "wrong again BOZO;" provide us with the details of some anecdote that your geek-vine buddy told you about (or just make up an anecdote) and extrapolate that valuable information so that it "proves" many things; ask a real dumb question that begins like "please help me decide...."; give us your half-baked theory based on nothing more than hot air; if you feel a move in the stock market, gold prices, generator sales, or whathaveyou, in one direction or another tends to support your theory, shout "SEE I TOLD YOU SO" whenever things move that way (of course, downplay or ignore any movement in the opposite direction); dare somebody to do something; tell us a story that you suspect (or know) is a fabrication; feel free to tell us a story that you yourself fabricated in part or in whole

Accountability was entangled with civility as well, particularly in the case of claims to truth. Evidence was the Rosetta Stone of *tpy2k* (and of the Y2k bug in general, for there was no clear proof one way or the other that there would be either major, minor, or no impact as a result of the Y2k bug). Claims that one's own position was factual and that one's opponents position was fabrication became an

inimitable part of the discussion in *tpy2k*. Ken Bordensen notes the difference between "telling stories" and "relaying the facts" in this early post to the newsgroup:

From: Kent Hoff Bordensen

Subject: Re: One of Many Reasons for the Y2K Problem

Newsgroups: tech.problems.year2000

Date: 1997/02/16

Graham Wilson wrote:

> If you can't get your stories together, you aren't going to have

> much luck convincing the rest of the world.

This is again an example of where you're basically wrong. We are NOT trying to get our stories together. We are NOT telling stories. We are relaying the facts as we see them.

Ken Bordensen

This theme of "facticity" became particularly well-established upon the arrival of Peter Mill to the newsgroup, who frequently relied on "the facts" (820 references) to back up his extreme Doomer position, and half as frequently tore down his Pollyanna detractors as "liars" (403 references), as in this post:

From: Peter Mill

Subject: Why curt ovachart Is An INTENTIONAL LIAR

Newsgroups: tech.problems.year2000

Date: 1999/11/18

ovachart has written that there will be no economic impact from Y2k at all. Zero, Zip, Nada. He called Y2k a hoax and a myth. ovachart stated that the resaon Y2k is a myth is because anyone who says that there will be economic problems is INTENTIONALLY LYING. They KNOW that nothing will happen and are intentionally lying....

Curt Ovachart is not only a liar but he is someone who is cognizant of issues similar to this and has pathologically lied about them publically.

This company has supposedly worked on this for two years and is still wildly screwed up. And this is only ONE company in the allegedly most prepared country.

Anyone who can say that there will be zero economic impact, no matter how bad it really does get, is a bald faced intentional liar.

ovachart can not escape that.

He was asked to provide the name of ONE person who can be PROVEN to know that Y2K is 'not' going to be bad and yet, has intentionally lied about it. ovachart refused to respond.

That is because he is a liar calling other people liars.

The difference is that curt is caught. Again. Red-handed with his pants down.

And please take careful note: If and when ovachart condescends to respond, he WILL NOT address any of the issues mentioned in the article. He will not discuss the pertinent facts and evidence.

He can't. He is a liar.
-Peter Mill

The claims of deceitfulness necessarily were attacks on an individual's character and motivation as well, and this did not sit well with some in the newsgroup who were not as well-adjusted as Ovachart. Here, Caillech condemns the troll DonJoe and tries to expose his identity:

From: Caillech

Subject: Is Jon Doe MrMidgit?/ was>Re: Leaked White House Y2K... Newsgroups: tech.problems.year2000, misc.survivalism

Date: 1999/09/12

Bullit was right. I did a search for Jon Doe on Deja News and Jon Doe has over 250 sum troll or nasty posts. He looks like a bad person. He even hides his real email stuff. I wish Jon Doe would go to troll hell. Bullit dont have to worry none, cause Jon Doe has left a record all over the intarnet, and he shure is a prick. I saw a couple messages that make Jon Doe look like mrmidget. I wonder if they are the same folks. Maybe Bullit was right, and Mr Midgit is Jon doe when he don't take his medicine. Ralf.

In other cases, direct intimidation and threats were made against the troll in question. In the following message, Doug Dock described another message where the topic was whether online incivility could transgress into offline violence:

From: Doug Dock

Subject: Re: Peter Mill the LIAR revealed Newsgroups: tech.problems.year2000

Date: 1999/01/06
Y2K Mary wrote:

> There have been a few ladies killed in D/s related online / live > meetings as well .. but how did we end up on THIS topic?? LOL

We were duscussing whether threats made over the internet should be taken seriously. He [Marcus] said you shouldn't and I decided to give a couple of examples of why you should. It is "on-topic" for this thread, but still I started not to reply. It's time to let the flame war end.

Also note the subject line in the thread which the online threat took place: "Peter Mill the LIAR revealed." Defamation and online threats were clearly connected.

Later in the year, the threat level increased. In this cross-post from *misc.survivalism* by Benny Trout, he addressed Jon Doe's concerns (or is it yet another troll?) that Bullit will carry out an online threat offline.

From: Benny Trout

Subject: Re: Notice to tpy2k & ms

Newsgroups: tech.problems.year2000, misc.survivalism

Date: 1999/09/13

Jon Doe wrote:

- > A certain obsessive individual, going by the aliases "bullit" and
- > "Caillech" (what's that translate to, "death up my ass" or
- > somesuch?), having lost a Usenet argument, has become obsessed
- > with me to the point that he has apparently dedicated his life to
- > my destruction.
- > He is trying to determine my real identity, and if his various
- > threats are to be taken seriously -- and they *are* taken
- > seriously, I assure you -- my family is at risk of great bodily
- > harm, if not death, should he ever actually succeed in
- > determining who I am.
- > If I, or any members of my family are killed, I would suggest
- > that the authorities begin their investigation with that person,
- > who gives every appearance of being unstable, violent, and unable
- > to exercise any degree of self control.
- > To compound matters, I think it only prudent to mention that
- > *anyone* who this individual *suspects* of being
- > "jondoe@example.com" is most likely in the same boat as I -- if
- > not to a *greater* degree.
- > I hope he either seeks help, or is apprehended before he can act
- > out his violent threats.

You pathetic asshole! "Bullit" has his own web site, with his real

name, his picture, and the name of the small town where he lives. If you really mean what you say, just turn him into the cops. But you won't, because you're just a troll, a jerk, a Moron.

Benny Trout

This post also shows the confusion that is created through anonymity online, particularly in a forum where the rules of civility have broken down: is Bullit also Caillech? Is Jon Doe trolling here or is he legitimately concerned about his own welfare? Unfortunately, all of the beneficial characteristics of interpersonal identity, authenticity, and accountability become meaningless in the wake of such confusion.

Near the end of 1999, more people seemed to be agreeing with Dock that the flame war should end, and a more "playful" attitude toward trolling seemed to dominate the culture of the newsgroup. In this post Carl Potter recognizes the decreasing civility of the newsgroup, but notes that posting to Usenet is like playing a "game;" nonetheless, the decrease in civility was problematic for Potter, especially when he pondered that it might be linked to a decrease in civility in offline society as well ("in which case we are all in very deep trouble"):

From: Carl Potter

Subject: On relevance and civility: tech.problems.year2000 Road Rage

Syndrome

Newsgroups: tech.problems.year2000

Date: 1999/08/29

An observation on a rainy Sunday afternoon:

While most postings and their content on t.p.y-2 etc. are a frequent source of information as well as humour, I for one must admit to becoming uncomfortable with the extend to which some posters, including myself, are prepared to go to make or restate their position. The game of usenet has few rules and flaming is satisfying in the very short term however, some of us (including myself) have taken a reactionary position that often involves name calling and intolerance. This self-perpetuating cycle of negativism serves no participant.

For what it's worth, t.p.y-2 etc. is the most widely read newsgroup on the topic. The subject matter has by no means come to any definitive conclusion, nor will it for many months to come. Forming

doomster vs pollies camps and shooting electronic insults at opposing viewpoints seems an over-simplification and a mishandling of the real issues, in my opinion. We all are participants in a unique situation that has global ramifications, yet we seem to be willing to squander the opportunity to exchange valid information by arguing religion, coverups, sexuality, politics, et.al. We are speculating on potential effects rather than discussing remediation, fault and blame rather than solutions. We are busy fiddlin' while Rome's a-burnin'...

Inevitably, an event such as the scheduled rollover has politicaland socioeconomic ramifications that will affect each and every one of us, to some extend. Because of the shelf life of this common denominator, perhaps the time has come to soften our respective positions and backseat our egos by returning to exchanging information that has a more direct relevance to Y2K manifestations.

In the final analysis, the issues have all been covered, discussed, argued over, regurgitated and processed. Positions have been taken, hardened and recorded. Collectively, we are at risk of becoming irrelevant due to endless and repeated bickering and polarization, yet this is the critically important Endgame, the period when manifestations of Y2K will finally show proof of Y2K's impact. This is where a flow of current information is most useful. Regardless of our particular position on any sideshoot topic, we are here because of a common denominator, our individual interest in Y2K as a unique event. Forest and trees.

Increasing lack of newsgroup civility is possibly a reflection of a decline in societal standards in which case we are all in very deep trouble. I for one regret my recent South Park-eque treatment of poster Derry aka Locksmith of the Seattle area, his reaction was no better than I should have expected in return. I for one will try to refrain from posting in a reactionary manner because doing so serves no more than my own ego.

What if more of us came to that conclusion, eh?

Carl Potter

In response, J. Frank Freleng noted that much of the growing incivility was due to the protection of one's ego. He also noted the one available sanction that could eliminate uncivil behavior – the killfile.

From: J. Frank Freleng

Subject: Re: On relevance and civility: tpy2k Road Rage Syndrome

Newsgroups: tech.problems.year2000

Date: 1999/08/29

Hey, who're you calling uncivil you #\$*&%! butthead! Quick, someone hand me a barstool -- I'll show you some real Road Rage!

Seriously, I have taken measures to reduce my bandwidth by finally killfiling the increasingly irrelevant MpS. He made the mistake of trying to stretch his untenable position just a tad too far. May I suggest that others consider similar actions.

I shall try to contain my more radical political rhetoric, but don't expect miracles since we all have egos to feed, ya know. ;-)

Ciao,

J. Frank Freleng

Ovachart took a different position, however. A month after Potter's post, in the message above in which Ovachart defined trolls in *tpy2k* he went on to claim that trolling could actually be a virtue. He also noted that while killfiles are "cool," anyone who actually used one was a "dolt":

From: covachart

Subject: Trolls on t.p.y2k (was:Roland Mollin agrees that MacNewsome is a

troll)

Newsgroups: tech.problems.year2000

Date: 1999/10/06

Factual? On topic? Off topic?

Who cares? Just make sure it's provacative. Make sure it supports something that half the people here have been sayin' over-and-over. Make sure it is likely to piss-off many others and directly contradicts what *they* have said over-and-over. Killfiles are cool--or at least cool to talk about (a few dolts actually use them, I suppose). In short: Be a troll. It's fun.

Lighten up, dood.

Are you a troll? Of course you are. Wanna be a better troll? Study the Masters. For off-topic troll-work, I suggest that you study the work of Mike August. His "Real Jews" thread is a classic. Mike is a double threat, at home with on-topic troll-work as well as his legendary off-topic trolling. I haven't had much time for it lately, but I've thrown together a few pretty good ones if I do say so myself. My "Concerned Christians on t.p.y2k" thread blended well with some off-topic axe-grinding while demonstrating a better-than-tangential relationship to Y2k. As Peter Mill has demonstrated, sheer volume of troll-work can make up for lack of originality.

T.p.y2k is a Troll Playground. Good troll-work can waste the valuable time of quite a few people over a period of days. Imagine the rush that a scheming-ne'er-do-well on welfare must feel knowing that s/he buffaloed several highly-paid and respected people into

spending a lot of time de-bunking some garbage post thrown together in just a few minutes.

Never complain about trolling (unless, of course, you're doing so insincerely).

Complaining about trolls on t.p.y2k is like complaining about the wine selection at the Road-Kill Cafe off the Interstate.

Complaining about trolls on t.p.y2k is like a flea complaining about a dog's breath.

Complaining about trolls on t.p.y2k is like a Mt. Carmel resident complaining about a lack of religious freedom.

Complaining about trolls on t.p.y2k is like a customer at the Pull-Yer-Part junk yard complaining about all the clutter.

Complaining about trolls on t.p.y2k is like complaining about the water being too saltly while swimming in the ocean.

Complaining about trolls on t.p.y2k is like aaaahh... I give up.

Never mind. Y2k is not really a Serious Matter anyway.

--Curt Ovachart

About a week later in a different thread, Ovachart reiterated his position that tpy2k is a "Troll Playground," indicating that the trolls that he identified earlier (August, MacNewsome, Mill, himself, and others) "moved in late around 97 and 98":

From: Covachart

Subject: Re: Why the Government will actually CAUSE the panic

Newsgroups: tech.problems.year2000

Date: 1999/10/12

The time for serious discussion of Y2k computer issues is long past. We've moved to a new phase here. It's more akin to a Usenet version of a food fight.

The original charter for t.p.y2k has long since been abandoned. The trolls moved in late around 97 and 98.

T.p.y2k is nothing but a troll playground right now.

Repeated calls to kick out the trolls and return to "serious" discussion of Y2k-related computer issues have been met with derision, indifference, and scorn. I'ts just as well, I suppose, since these issues have been beaten to death and there has been precious little new technical information on this subject in recent years.

From your comments, I gather you're not interested in researching archives here to gain any technical insight into Y2k. So, welcome to troll land. Have fun. I see it as one step above your average sitcom. You won't get any new information out of me...maybe a pie in the face--that's about it.

[...snip blatherings...]

--Curt Ovachart

The divisions in the newsgroup that separated the Doomers and Pollyannas and led to incivility were not wholly ideological – some members disliked one another so much they truly considered them enemies and would not stand for their presence offline. In November 1999, Mill offered to sponsor a pig roast at his farm should he be proven wrong about Y2k:

From: Peter Mill

Subject: Re: I want to know

Newsgroups: tech.problems.year2000

Date: 1999/11/18

The 'best' part of this result will be the pig roast at my place with the "Mill dunking Booth".

If and when I am proven wrong I will be more than happy to graciously concede that I was wrong and we can all have a good laugh and party at my expense.

But, while seemingly gracious in potential defeat, a couple of weeks later, Mill was sure to amend the invitation list:

From: Peter Mill

Subject: Re: Coop Back

Newsgroups: tech.problems.year2000

Date: 1999/12/04

...As much as I hate to say it, even loiyard would be welcome at my pig roast. There are onle a very select few pollies who would not

be acceptable. Ovachart is one. sweden, dock, nacent and frey round out a few more.

I guess I could even live with dock and frey if I got up on the right side of the bed.

Other members were not as particular about their company. For example, on August 14, 1999, Marcus P. Sorenson offered to meet any San Francisco Bay area tpy2k'ers at Brennan's Bar and Restaurant, "a Berkeley landmark at 4th and University":

From: Marcus P. Sorenson Subject: GPS Rollover Party Newsgroups: tech.problems.year2000 Date: 1999/08/15

I'll be at Brennan's Bar and Restaurant next Saturday to celebrate the rollover. At least one other tpy2k'er, a moderate, will be there, too. All Bay Areans are invited regardless of Y2k-persuasion....

I will be parked near the West entrance of Brennan's (blue Nissan Altima) at 3:45 PM with a GPS receiver. We can watch the GPS rollover and then hit the bar for some spiritual enlightenment. Once inside I'll make a little table-tent labeled 'tpy2k' for for latecomer navigation.

The first round is on me in memory of Harlan Smith.

Hope to see you there!

--mps

The flaming, trolling and general lack of conventional netiquette in *tpy2k* is what characterized the newsgroup by the time the year 2000 was near. While it had turned off some members, others found the incessant argumentation fun, a kind of game of one-upmanship for which there were few rules and no real winners or losers. The value of participation was no longer in remediating the Y2k bug, but in "playing the game" (i.e., debating online) itself. By the end of 1999, the point of argumentation was lost, and the game itself took over as the purpose of the newsgroup.

Chapter 9

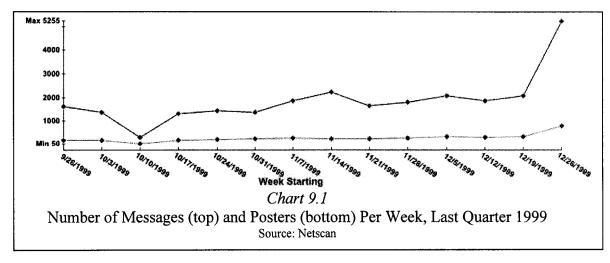
The Date Rollover and Community Memory in tpy2k

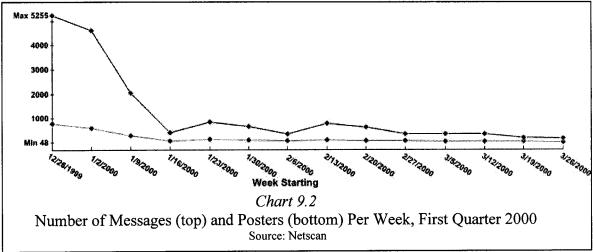
There will never be another issue like Y2K and honestly I'm bummed about that. I will never forget the fun, and interesting times I spent on this newsgroup. You would think I suppose that I wouldn't look back at it so fondly since I was wrong, but I still do, because we were family here. — Mary in MA (Y2k Mary) on tpy2k, February 22, 2003

The Year 2000 Date Rollover

The "game" of flaming and trolling that characterized *tpy2k* by the end of 1999, however, was held in relief against the impending knowledge that one camp or another, to some degree, was likely to soon be ultimately proved right or wrong. What happened when the moment of confirmation for the Doomers and the Pollyannas finally arrived, after three years of discussion? Did members change their views in order not to look too extreme? How did the confirmation or disconfirmation of the Y2k bug effect the newsgroup members who had so vehemently argued for one position or another? All of these questions, and many others, were discussed by the members at some time prior to the date rollover, but they became ever more important immediately thereafter.

The weeks surrounding the date rollover inspired much greater message traffic in the newsgroup. Charts 9.1 and 9.2 show the degree to which message volume increased.³⁶ The enormous increase in messages during these weeks might be partially explained as lurkers who have come out after weeks, months or even years of watching the debate silently, although the number of posters did not increase at nearly the rate as the number of messages.





While the increase in the number of messages indicated greater activity in the newsgroup, which was predictable given its topic and nature, what was being said was more important. In the last half of December 1999, a social accounting within the newsgroup occurred. Based on the position that the regular members had taken in the previous three years of discussion, member acarlen created a list of the hardcore Doomers, those who argued that the Y2k bug would have significant effects on economic, political, and social systems, on December 16, 1999:

From: acarlen

Subject: List of Doomers December 1999 Newsgroups: tech.problems.year2000

Date: 1999/12/16

Well, here it is. It is not totally complete. I went back a couple of years in the archives to add a few names that I had forgotten.

This is a list of individuals who believe that Y2K will result in a disaster. Even at this late date there is no convincing the zealots otherwise. 15 days and some people are still predicting calamity and chaos. How sad it is to watch them, and how joyful it will be to ridicule them after the new year. And that is all I intend. Unless your name is on this list and you are a professional programmer or software engineer. Please let everyone know if you are in the software industry. I can somewhat forgive the computer illiterate for their fears and ignorance, but there is no excuse for the hype and falsehoods spread by computer professionals.

I could have entered every poster from TimeBomb 2000 [Ed Yourdon's webbased discussion group], but I will limit this to tech.problems.year2000.

[The list that follows contains 52 names, including such notables as Mill and Porasky.]

In response to echristi's "outing" of the regular Doomers, Martin Rogers mirrored the post by offering a final accounting of the hardcore Pollyannas, those who argued there would be no demonstrable effect of Y2k on economic, political and social systems.

From: Martin Rogers

Subject: the smart pollies are waiting Newsgroups: tech.problems.year2000

Date: 1999/12/31

John Denegro wrote:

> Everybody wants their world view validated. Some need it

good point, john. the smart pollies may be waiting. shouldn't we be making a list? i'll make a first stab at it:

> validated in certain ways that remind me of out of control

> children.

> The smart Pollies are waiting patiently to see how things develop

> over the next couple of weeks. After all, death by a million

> paper cuts may not be as glamorous as one huge explosion, but it

> does get the job done.

Those who have declared Y2k dead *before* rollover -

 $[The \ list \ that \ follows \ contains \ 10 \ names, \ including \ such \ notables \ as \ Dock \ and \ Ovachart] \\ feel \ free \ to \ add \ or \ subtract \ your \ name \ or \ promote \ those \ of \ others.$

__

Martin Rogers

The accounting, which preceded the date rollover (which every member of the newsgroup had anticipated for years), also included the warning that those who decided to change camps at that late hour would be considered turncoats, traitors to their cause. The term "polly-come-lately" was reserved for those who decided to back off from the more drastic prognostications regarding catastrophic effects the Y2k bug.

On December 31, 1999 and January 1, 2000, during the hours of the rollover itself, a flurry of messages updated the newsgroup on the state of affairs in locations around the world. Many messages started an inevitable flame war along the lines of "you were proved wrong," but Doomers did not concede so easily. Some, in fact, claimed that the fact that nothing happened proved a Doomer victory:

From: Andy L

Subject: Re: Y2K- The Doomers Have WON!!!

Newsgroups: tech.problems.year2000, alt.talk.year2000

Date: 2000/01/01

Grimmis wrote:

- > HAHAHAHAHA. What a waste of our time. All the news and bull
- > shit. Generators are now 25 cents. LOL. This pathetic newsgroup
- > (tech.prob.y2000) can now shut down. I feel sorry for the people
- > who spent their valuable time here worried about nonsense.
- > HAHAHAHAHA. This was the biggest fraud, scam, con job ever
- > pulled on the American people. HAHAHAHAHA.

Oh wise up.

The doomers have actually won, or so it seems, so far. If not for their tireless efforts, a *lot* of systems that got fixed in time, would have been left to rot. Propaganda need not always be a bad thing.

IMO.

Andy L

Others addressed the attempt at Doomer revisionism by reminding them of their position, as indicated in this response to Andy L above:

From: snake

Subject: Re: Y2K- The Doomers Have WON!!!

Newsgroups: tech.problems.year2000, alt.talk.year2000

Date: 1999/12/31

Except the Doomer mantra was never "If this isn't fixed, it will be bad." It was "This CANNOT be fixed. Failure is INEVITABLE." The only real divisions in the doomer camp were over "Ten Year Global Depression" (optimists) or "End of The World" (Pessimists)

Perry Solo also found the idea that "propaganda need not be a bad thing" untenable:

From: Perry Solo

Subject: Re: Y2K- The Doomers Have WON!!!

Newsgroups: tech.problems.year2000, alt.talk.year2000

Date: 2000/01/02

Andy L wrote: > Oh wise up.

Try wising up yourself. The few people I know personally in the IT business who once followed t.p.y2k, pretty much abandoned it years ago on the grounds that it was mostly rubbish. (My own visits became pretty scarce after mid 1998, until last November).

A few well-known pessimists may have had some stimulating effect on the remediation (De Jager certainly, Yardeni probably, Yourdon possibly). It is very unlikely that North contributed anything positive. The suggestion that Milne and friends on t.p.y2k did anything to help the remediation is quaint, to put it mildly. (****ing laughable would probably be nearer the mark). Remember "remediation is futile"? Remember "haven't a prayer"?

Perry Solo Maastrecht, Holland

The media response to the date rollover recounted the stories of doom and gloom with derision and praised the programmers for "a job well done." One journalist, Declan McCullaugh, quoted the newsgroup members directly in an article written for *WIRED* magazine. McCullaugh had also contributed 91 posts to the newsgroup between April 8, 1998 and February 18, 1999.

Another segment of the many messages exchanged during the rollover were heartfelt congratulations to the members of the newsgroup who were actively involved in remediation for "a job well done." These congratulatory posts were well-received by programmers, but many of the Doomers felt congratulations were premature.

The responses of the Doomer camp to the rollover results followed very closely to the pattern found in *When Prophecy Fails* (Festinger 1956) in which the members of a "flying saucer cult" believed more firmly than ever in the truth of their convictions that the end-of-the-world was coming even after clear disconfirmation of the prophecy had taken place. Festinger became well-known for his theory of *cognitive dissonance*, the notion that two contending realities (one evidential, the other ideological) can exist at the same time within an individual's cognitive framework. In the case of the Doomers, this same phenomenon occurred.

The Millerites likewise prophesied TEOTWAWKI (The End Of The World As We Know It), an acronym with which the newsgroup members became very familiar. In fact, after the rollover one member nicknamed the Doomers the "Y2k Millerites":

From: frank@oas.com

Subject: The Y2K Millerites

Newsgroups: tech.problems.year2000

Date: 2000/01/02

It is now blindingly obvious that none of the TEOTWAWKI scenarios that were put forward are likely to play out over the next few weeks. All of them depended on some major piece(s) of infrastructure coming apart during the first few days, and nowhere is this happening.

What is now more interesting are the psychological and social issues surrounding the entire Y2K hysteria. I am using that word with all seriousness; there was certainly a Y2K problem (or, more correctly, a plethora of many Y2K problems), and with a great deal

of effort the worst of the possible consequences have been averted. What is even more interesting is that a number of the "doomers" are still predicting major financial meltdowns even after everything that has happened over the past year!

I will submit that the entire phenomenon has a precursor in the form of the Millerite movement in the 1840's. The Millerites were convinced that Jesus was going to return at a specific date (from their reading of the Bible), and many of them sold all of their belongings and went out into the hills to live more simply and await His return (Sound familiar?). When the anticipated Messiah did not arrive, they did not abandon their faith but merely decided that they had miscalculated and set a different date (Hmmm....).

Other groups have existed at different times and places with the same results. There have been numerous psycho-social studies on such groups, with the conclusion that most of the "date-setters" behave this way. It appears that in the Y2K hysteria we have the first example of a "secular" doomsday group (or at least a group without a single unified religous background) and that it appears to behave the same way.

I expect that these comments will make me very unpopular in some of the circles in this newsgroup; however, the best that I can say about those circles is that they richly deserve their fate.

Regards, Frank L. Wong

Like Festinger's flying saucer cult or the Millerites, a typical response on the part of the most hardcore Doomers was entrenchment in their position. For example, at 11:45pm on December 31, 1999, Carl Potter noted in his "final" post (he continued posting long after this), that "it's not over yet":

From: Carl Potter
Subject: Final post
Newsgroups: tech.problems.year2000
Date: 1999/12/31

...To recap: It ain't over, not for many, many weeks. The whole thing is too pat, too happy-faced. Too many balloons, too much fireworks, not enough reality. I honestly believe that many "local problems" will eventually add up to the point of overloading the system. But what the hell, no point on fighting over a dented can of smoked eel, is there.

Any gardeners out there, email me at [e-mail removed] and let's keep in

Best wishes to all. Carl Potter Vancouver Canada Potter and others were adamant that it was not over yet. One member, Eric

Mantle, even switched his screenname temporarily to "It Isn't Over." The theme

that more was to come pursued the Doomer discourse in the first weeks of the year

2000. As in the case of the Millerites and other millenialists, this "secular

apocalypse"³⁷ involved an alteration of the important date associated with

TEOTWAWKI. First, as January 1, 2000 fell on a Saturday, the alteration was to the

first business day after the rollover, Monday, January 3, 2000 when computers were

turned on and the utility grid and finance sector of the superpowers of the world

were "fired up." Doomers first claimed that would be the "do-or-die" day.³⁸

After January 3, 2000, there was a more general sense on the part of those

who remained steadfast Doomers that there would be a slow-growing, cumulative,

and negative effect over the next days, weeks, or even months, leading to the kind of

collapse forecast all along by the Doomers. Of course, with each passing day, the

Doomers' cause lost its remaining strength and believability, traits that had been

used to proselytize new members before Y2k.

However, for the month of January, at least, the Doomers continued to dig in

their heels. For example, further entrenchment in their position came from their

reaction to the vehement gloating that the Pollyannas took from a clear victory. In a

thread subject title that turned Godwin's Law on its head, Tom de Largo argued that

it was a case of the "Pollies going Nazi":

From: Tom de Largo

Subject: Pollies going nazi

Newsgroups: tech.problems.year2000

Date: 2000/01/02

Now that the rollover is behind us scores of (formerly invisible)

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pollies are crawling out of the woodwork to celebrate "their" success and ridicule the doomers. That's fine, very adolescent, but fine nonetheless.

Some pollies however don't merely gloat, they want to hold doomers responsible and even have tribunals. I don't exactly know what they accuse the doomers of, but it's quite clear that these induviduals are finally showing their ugly characters.

Please get these fine individuals some boots and uniforms. The uber-pollies are ready to march.

Marcus P. Sorenson said:

"Datawizard, **the tribunal is ready for you.**
I forgot to mention one of the primary **enemies of the people.**
Datawizard, a.k.a. Boris Polstin, a.k.a. Caligula."

acarlen said:

"So step up and you will be spared. I will not spare the Doomer computer professionals, including Porasky, Yourdon, Jenson, Datawizard, and others whose names escape me at this moment. **Accountability is waiting for you.**"

To the accusation that the Pollyannas were being bad sports, Ovachart

responded:

From: Covachart

Subject: Re: 12 Angry Pollies

Newsgroups: tech.problems.year2000

Date: 2000/01/02

"Peter Mill" wrote:

> ...And if and when I do admit that I was wrong, based upon the > evidence, \dots

What a crock! You will give it up when the last doofus in the media gives it up. Your campaign has consisted of nothing but waving shallow, stupid articles in the media and adding your own moronic extrapolations.

When the stream of stories dries up, you have NOTHING left. You never had the slightest understanding of computers or Information Technology.

This is the classic End Game. You can say whatever you like. Everybody knows exactly how it will end.

 $> \dots$ I will do so with the appropriate humility of one who was > mistaken and not with the disgraceful antics and shenanigans of > the pollies \dots

Have a look at the thread "Doomer Recants" where Jeff Bane admits he blew it. We're there patting him on the back and wishing him Happy New Year.

We're only giving people a hard time that try to tell us we were wrong when all the evidence clearly demonstrates that we got it right.

 $> \dots$ who even went so far as to make death wishes on people who's > opinion was wrong.

Reap what you sow, Paul. Don't cry about it. Look yourself in the mirror if you want to know why you've been blasted.

 $> \dots$ It is hard to be a good loser, but I will endeavor to be one, > if I am wrong.

Good for you. I'm waiting [drumming fingers].

--Curt Ovachart

Finally, the passing of Y2k brought a response on the part of some posters that the newsgroup itself had outlived its usefulness. In the following messages posted throughout the beginning of January 2000, one lurker in particular, T. Dole, repeatedly suggested that the newsgroup is dead, and that its members should "live life" again. The responses to the posts are telling:

From: TDole3771

Subject: a news group dies.

Newsgroups: tech.problems.year2000

Date: 2000/01/01

I am saddened that this fine group of people will no longer be here but living life.

From: Blane Dow

Subject: Re: a news group dies.

Newsgroups: tech.problems.year2000

Date: 2000/01/02

There has been so much crap posted here that I am sure we can ignore one small fact (that the rollover has happended) and just continue on regardless. Facts have never mattered here anyway.

From: TDole3771

Subject: THIS newsgroup IS dead Newsgroups: tech.problems.year2000

Date: 2000/01/13

OK, folks this newsgroup is officially over and done with! we made it!!!!! ok what's next? pole shifts perhaps???

From: Garth Brooks

Subject: Re: THIS newsgroup IS dead Newsgroups: tech.problems.year2000

Date: 2000/01/13

Yes, the NG is dead, broom-boy. We're conducting the autopsy. What's the rush to put the stiff in the ground? Do you want to bury the incriminating evidence with it?

* * *

From: TDole3771

Subject: this newsgroup is like should be done and over with come on guys

iet a grip.

Newsgroups: tech.problems.year2000

Date: 2000/01/19

ITS over.

* * *

The posts from Dole continued through April 2000 with few or no responses:

From: TDole3771

Subject: when does this newsgroup end? Newsgroups: tech.problems.year2000

Date: 2000/04/12

I look forward to checking this NG daily. Ah when does it end?

The regular members also speculated on when the newsgroup would meet its demise, now that the date around which its central purpose was organized had passed. A thread titled "tech.problems.year-2000 Charter," first posted to on February 16, 1997, which laid out the newsgroup's mandate, was revisited on January 20, 2000 by the proprietor of the charter, Phyllis Martin, no doubt out of a sense of irony regarding the final paragraph of the charter:

From: phymart (Phyllis Martin)

Subject: Tech.Problems.Year-2000 Charter

Newsgroups: tech.problems.year2000

Date: 2000/01/20

(A point of information: occasionally posting the charter is common practice in many newsgroups, and requires neither justification nor editorial comment from the poster.)

CHARTER: tech.problems.year2000

... [the complete Charter, cut here, can be reviewed in Appendix A]

All posts shall be directly related to the subject of year 2000 compliance. Topics of a political, philosophical or religious nature shall not be posted in tech.problems.year2000.

END CHARTER.

To which Rupert Sweden replied: "Bwahahaha! End of Charter? End of newsgroup!"

The fate of the newsgroup came to the forefront in a January 18, 2000, thread titled "The Future of tpy2k." A Usenet news.groups administrator posted a message indicating that the newsgroup may have outlived its usefulness. While not a formal Request for Discussion (RFD), it certainly did not bode well for the continuation of tpy2k as an online community.

From: Gerry Hogart

Subject: The Future of tech.problems.year2000

Newsgroups: news.groups, tech.problems.year2000

Date: 2000/01/18

This is not a formal Request for Discussion (RFD). This is a preliminary attempt to discuss the future of the newsgroup tech.problems.year2000. This newsgroup was established for the discussion of computer problems related to the rollover to the year 2000. In 1997 or 1998, the newsgroup became largely a forum for those expecting problems associated with the rollover to cause severe economic and social disruption (e.g., due to failure of electric and other utilities) and for discussions of planning and preparedness for those problems. Much of the traffic in the newsgroup came to consist of flame wars between those who expected severe disruption, who came to be known as 'doomers', and those who discounted the likelihood of disruption due to rollover and expected the rollover to be smooth, who came to be known as

'pollyannas' or 'pollies'. In 1998 and 1999 the newsgroup tech.problems.year2000 was extremely active, although much of the traffic was off-charter (e.g., due to a political or religious nature contrary to the charter) or only marginally on-charter (e.g., flame wars which digressed from the original focus). In 1998 a moderated newsgroup for the discussion of technical issues associated with rollover, tech.problems.year2000.tech, was established, largely in response to the flame wars and off-charter threads of tech.problems.year2000....

This is not a formal Request for Discussion (RFD), but is a preliminary effort to discuss the future of the newsgroup tech.problems.year2000.

Community Memory

Had the newsgroup outlived its usefulness? Did the members decide it was time to give up and move on?

Many people did find the idea of continuing to post to the newsgroup oxymoronic and concurred with Hogart's suggestion to end the newsgroup on March 1, 2000. Others argued that since Y2k problems technically were not over, and that they would, in fact, continue to emerge in the future (as they had in years prior to the date rollover), the newsgroup should stay intact.

From: Dr. Tom Proctor Subject: Re: The Future of tech.problems.year2000 Newsgroups: tech.problems.year2000, news.groups

Date: 2000/01/18

Ron Humrin wrote:

- > I'm sort of tempted to come up with an RFD renaming
- > tech.problems.year2000 to tech.problems.year2038 (or is there a
- > date panic prior to that?)

There are, at a quick count, some 75 dates of greater or lesser significance between now and 2038-01-19 in my list. Whether any of them will cause you to panic depends on your perturbability. At least some are IMHO at least worthy of note.

The lesson of tpy2k should be remembered - new newsgroups for this sort of matter should be arranged so that the world technical side can be carried on independently of the nutters, the senile, the America-first brigade, and the children. If the n/s/Af/c group is formed at the same time as the tech group, a little goodwill and

effort should keep them apart - though pessimists would robomoderate the tech group /ab initio/.

Even after the date rollover traffic spike had settled down, the number of

messages exchanged between February 14, 2000 and March 14, 2000, for example,

was actually more than one and a half times as many (164 percent) as were posted in

the same period in 1997. However, it was less than half (41 percent) of the same

period in 1998, and less than a fifth (18 percent) of the 1999 period, at which point

the real controversy in *tpy2k* had begun.

Rather than wait for the newsgroup to end, some people simply stopped

posting. In the case of the regulars, though, it was customary for the members to

leave a parting message, if only to let others know they would not be posting again.

These messages were typically long, recounting many of the favorite stories,

memories, and perspectives on the talk that had taken place in the previous years.

The farewells actually began long before the date rollover. Bob Brock, for instance,

bid adieu in January 1999 (with a caveat that he might return in November), and in a

long message (which he noted in the subject line), relates his introduction, his

experiences, and his reservations about tpy2k.

From: Doug Dock

Subject: Farewell to the Group (Long)

Newsgroups: tech.problems.year2000

Date: 1999/01/23

Well, it's almost the end of Januarry and it's time to start up

with my other interests...

I started lurking in this group about a year ago trying to find out if Y2k was something that I should be really concerned about. While most here have labeled me a polyanna, I never really fitted into that category. I really wish there was a category for

sceptical and unconvinced.

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I came looking for hard facts and most of what I've gotten are a lot of news reports quoting someone else's opinion of what's going to happen. Then there are the myths that couldn't stand up to critical inspection only to resurface again. I was almost convinced of TEOTWAWKI scenerio, but then all those predictions of computer related failures beginning in Januarary 99 didn't play out. Nor did the super shortage of programmers. So, I guess it's fair to say that I'm leaving the NG about as undecided on the final outcome as I was when I first started lurking.

Of all most as much interest to me as the actual technical failure are the psychological and societial implications of the threat. The psychology of those who think that Y2k allows no room for questioning of either the so called facts or the thought processes involved in turning good news into bad news absolutely amazes me. Hence my pollyanna label. It's truly ironic that I was tagged with that label since, should either the technical failure or societal failure occur, I'm more prepared than most of you are.

To the true pollyannas, I salute you. If it wasn't for you there would be no one here to try and keep the others honest. You have my admiration. If anything happens to change your mind, I'd like to know. E-mail me so that I can adjust my plans should it be necessary. When it gets bad enough for you guys to change your mind, it's time to build a bunker. BTW, I know a couple of guys who are in the process of doing just that. :-)

I hope that we are all around to laugh about this next January...

Doug (the polyanna)

But Dock did not leave the newsgroup. He was unable to stay away from tpy2k for even a day. This inspired inevitable criticism from the Doomer camp, who thought they were rid of one of their most verbose antagonists:

From: Mike August Subject: Doug Dock's Long Farewell Newsgroups: tech.problems.year2000 Date: 1999/01/25

... Hey, what happened to your farewell?

"To the rest of you, I say goodbye for now. I may be back in November or so. "

Did November come early this year?

--Mike August

From: Doug Dock

Subject: Re: Doug Dock's Long Farewell Newsgroups: tech.problems.year2000

Date: 1999/01/27

Or perhaps it's "or so"?

Some used the farewell letter opportunity to make amends and mediate the feelings that had not been spared during the incivility prior to the date rollover. James Bond, for example, left a five page letter on January 4, 2000 announcing his retirement from the newsgroup, discussing everything from his reasons for prognosticating doom, to the fact that his preparation brought his family closer together, from the great amount of information that was learned from his newsgroup experience, to the opportunity made available before leaving the newsgroup to "extend the Olive Branch" and apologize for past incivilities:

From: James Bond

Subject: A Look Back At Y2K: Before And After (A Farewell Post)

Newsgroups: tech.problems.year2000

Date: 2000/01/04

Greetings Fellow Pollies And Doomers.........

Now that it is all over, instead of seeing everyone on both sides rejoicing that the World is still intact, I see a lot of finger pointing, accusing, and down right mean-spiritedness going on between the two factions.....It makes me scratch my head and wonder a single question..... Why?.....

Folks, there is nothing to fight about....

I would also like to take this moment to bury the hatchet and apologize to the select few on this NG that I was VERY nasty to at times.....To MPS, acarlen, Doug Dock, and MacNewsome (Yes, even you, Rich), I want to take the time tonight to apologize for the really nasty things I said to each of you while I was posting here....Although we philosophically disagree on MANY things, I could have chosen better words to make my point with....I was pretty vile at times, and I guess after taking some time to think about things, it is clear to me that I should not have brought myself to such a level and been so venemous.... I am not doing this so you can gloat, and in now way is it an endorsement of you philosophies or way of viewing things, or a concession, because I still disagree with you on many viewpoints, and I'm not really sure that philosphically we will ever reach any common ground with one

another, but tonight I wish to extend the Olive Branch in hopes that somehow we can all reach one common ground, and that is happiness that things turned out OK....I wish you and your families well, and I hope that the New Millenneium will be a prosperous one for you....

There, that wasn't so hard was it.....

Thanks to everyone who was a part of this group.....It was one wild ride, and now it is time to Ride Off Into the Sunset, and into a Bright New Future.....May God Bless And Keep You All, And May The Millennium Be Prosperous And Wondrous For Each And Every One Of You.....

Happy New Year To You All, And May Your Millenium Bring You Happiness, Joy, And Prosperity.....
Goodbye, Farewell, And AMEN.....

I Remain Ever,

James Bond

James Bond returned briefly to post a few more times on the newsgroup, but under a different screenname ("Butthead Jesus").

The rush of farewells, memorials, and remembrances that occurred in the few months after the date rollover pushed others who were not planning on giving up their seat at the *tpy2k* table to post recollections as well. Although not planning on returning to "lurker mode," Mary in Ma (formerly Y2K Mary) also dredged up old memories about what she liked and what she didn't during the course of the newsgroup's short history, despite the fact that she didn't plan on leaving the newsgroup:

From: Mary in MA

Subject: "You need to be killed" Mike August's famous last words. (was re:

Question)

Newsgroups: tech.problems.year2000

Date: 2000/01/25

Ok anyhow I know alot of people are leaving soon...

Don't think I've ever gotten to know a group of people, as well as I've gotten to know so many of you. Where the departure is so

sudden, and so final. I've also never been involved in a group, where I was not well liked by all (or at least all but one or two) Hopefully it was just the atmosphere here, and not some changes in myself as a person which caused it. I'll leave, in time, believing that it was just that those who disliked me here, don't really KNOW me as a person, and judged me walking IN the door cause of the .aol.com for starters.

I've laughed so many times reading this newsgroup.. sometimes so hard my stomach hurt. I've cried a few times. And been frustrated / angry more times then I can count. But I've grown, and learned alot here. I will always look back on the time I spent here as valuable time, and not wasted time....

They other thing I enjoyed, and will miss about this newsgroup - is ranting. I've ranted live a few times ever in "real" life, here it was a weekly thing and it was *so* fun. Even if only a few people actually read them, they were so fun to write.

Mary

Rather than firm departures, the farewells that newsgroup members sent were an opportunity for themselves and others to reflect on the history of the newsgroup, as well as their connection to the creation of that shared history. This helped to restore some of the civility lost in the previous year. The community memory revealed in these farewell messages also helped to give the members, whether regulars, newbies or lurkers, a sense that they had built something, that there was a foundation for their continued discussion.

Part of the discussion involved settling old debts. Promises made in 1999 regarding "eating crow" had to be fulfilled for one to keep their honor in the newsgroup. The pig roast referred to back in 1999 did end up taking place at Mill's farm, although he states that "very few Y2k types attended":

From: govknow@breton.com Subject: Pig Roast: Conclusion

Newsgroups: tech.problems.year2000

Date: 2000/07/03

Well, the pig roast is over. We all had a good time.

Very few Y2K types attended. No skin off my nose. Pete Lockheed was

prevented from coming at the last minute. I am sorry for that because he came down the weekend before to help in the construction of the cooker. I was up a creek and could not have finished in time without his help. Harry came down from norhtern VA and Don Gonya came all the way down from Massachusetts. It was very good to see them. Michel Portier called from Quebec, and so did Lionel Louis from West Virginia.

The pig, about 175 pounds live weight, went on the cooker at 6 in the morning and was done at just after noon. It came out delicious.

We had a nice demonstration by six of the members of the Virginia Greys Fife and Drum Corps which included martial pieces from The War of Northern Agression and musket firing. Guests had the opportunity to fire the muskets as well.

I want to thank all the people who contriuted to the pig roast. It was very much appreciated.

And on one final note, I broke down and bought ten "Sorenson's"...that is, green resin lawn chairs. A fitting end to all that was Y2K.

Peter Mill

The pig roast brought together the online and offline worlds of the tpy2k'ers and this created a strong impression in the community's memory. Three years after it occurred it was still being talked about:

From: Curt Ovachart Subject: Re: Peter Mill Welcome to the real world Newsgroups: tech.problems.year2000

Date: 2003-08-16 12:37:04 PST

E Porter wrote:

> Four years on, and that pig roast is still being discussed? Good > Lord.

Barely 3.1 years. No need to exaggerate -- this is all getting old fast enough as it is

--Curt Ovachart

After the "Pig Roast:Conclusion" thread of July 2000, Mill's participation in the newsgroup included only one final post on December 4, 2000, in which he declared that he no longer read the newsgroup and only responded to the thread in question because it was brought to his attention. His final contribution reiterated his reasons for his survivalist outlook, as if they needed repeating after two years of constant repetition:

From: govknow@breton.com

Subject: Re: Doc, doc, was: Good Stocks to Own in a Civil War?

Newsgroups: tech.problems.year2000

Date: 2000-12-04 17:50:08 PST

Well, well. Looks like the pollies really don't have a life after all. I don't read the newsgroup anymore, but this thread was brought to my attention.

Harry is correct. I moved out of urban pest holes because sooner or later, the economy will not just tank...it will collapse. I am patient. I am way early. I am prepared. Soon, very soon, the docks and freys will be breaking out their rusty hubcaps. Canine suppliers will be surrounding them.

Y2K? I was dead wrong about it being a precipitating factor. Nevertheless.

Economy? We are in the early stages of the plunge, right now. I can laughably remember the pundits as the DOW was descending and the Naz was rising at the same time. They all claimed that the DOW was the old economy and as long as the Nasdaq remained strong, all was well in techno-land. LOL LOL What short memories. Now that the Naz [Nasdaq] is disintegrating before our eyes, they are all looking for 'buying opportunities'. Kinda like bidding for deck chairs on the Titanic. LOL

And, no....I will be too busy to bother replying to boobo or the unclean midgit's ridiculous diatribes.

I actually have a life, you see.

Drop a line , Harry!

Peter Mill

Unlike Milne, newsgroup regular Billy Nogrin left a lengthy farewell message only to return to leave more posts. In the initial farewell message, he used the analogy of terrorism (a label with greater power today than in 2000 when his

post was written) to describe the Doomer's "fear strategy," he summarizes some of the lessons learned in the newsgroup, and he gives thanks to those who influenced him most:

From: Billy Nogrin

Subject: Sayonara, over and out

Newsgroups: tech.problems.year2000

Date: 2000/01/03

...

The terrorists of 1997 - 1999, who only made the problem worse, took certain facts from The Mythical Man Month, software defect statistics, and the history of failed software projects out of context and targeted ordinary citizens with stories such as the horror of nn residual bugs found per million lines of remediated code. One could do the same with ppm of certain chemicals in your water supply, bacteria count on restaurant table tops, or the thousands of tiny crack in the metal of an airplane wing that grow deeper and deeper as they open and close with the wing's up and down movement

...

Questions to avoid being victimized by terrorists and propagandists:

- 1. How incomplete is your picture?...
- 2. Does the person reporting know what they are talking about?...
- 3. Ask "So what?" when you hear an outrageous claim....
- 4. Is somebody closer to the fire than you?...

I want to thank every contributor to tpy2k for teaching me something. Often it was not what you were trying to teach, but thanks anyway.

There are too many benefactors to thank each so I will single out two. I want to especially thank Marcus Sorenson and MrMidgit.

Marcus has bravely fought the slings and arrows of the terrorists with good humor and, where required, an acid tongue. Marc, don't let the bastards get you down.

MM has shown how courtesy, grace, and clear use of language can survive, or even thrive, even in such a wild and crazy newsgroup. MM, keep on keeping 'em honest.

I wish all posters to tpy2k a happy and prosperous new century and hope each one is honest enough to read their own posts to their children and explain why they said such a thing.

Pulling down the big switchSNAP.....

--

Tokyo, Japan Bill Nogrin Like many others, Nogrin also returned a couple of months after his farewell, when his name was mentioned in a list of the "missing." However, he was wary of his posting, knowing that Curt Ovachart, who was always trying to keep other members honest, might remind him of his earlier exit from the newsgroup.

From: Billy Nogrin

Subject: Re: Flint gets banned from the new TimeBoob 2000 fourm

Newsgroups: tech.problems.year2000

Date: 2000/03/06

Chichen Itza wrote:

- > Considering that "Y2k" is over and utterly dead, and there is
- > nothing whatsoever worth talking about, is being "on-topic"
- > really something to brag about? Look around you Doug. Where is P.
- > Mill? R. Mollin? mps? B. Roberts? B. Nogrin? Bordensen? acarlen?
- > Covachart? Harry? J. Stevens? etc. Where are all the people who
- > made this such a fun place just a few short months ago.

Lurking, and jamming cherry bombs down into anthills when needed. (;0)

I have to be careful or Curt will drop in and remind me that I bade farewell on January 3. (OK, so sue me.) Errr, sorry if I pushed the daily tpy2k post count above 20.

Nogrin noted in this post that he had been lurking. The cycle of *tpy2k* seemed to be the expectancy of lurking upon one's entrance to the newsgroup, prior to posting (following conventional netiquette), then to post relentlessly once the issues and context of the newsgroup had become clear, and finally to return to "Lurker Mode" when all was said and done (post-Y2k).

The thread titled "Back to Lurker Mode," initiated on April 1, 2000, indicated that the last part of this cycle had begun. Doomer participant DataManiac's message on April 1 started, somewhat ironically, one of the longest threads (411 posts) in the history of the newsgroup. The initial post from DataManiac began a string of responses that ended up revitalizing the newsgroup to a small extent.

Paradoxically, rather than sending more people back to lurker mode, the post reinvigorated the debates that had kept the newsgroup vital in the pre-Y2k days. It was the first sign of revitalization of the newsgroup after the passing of the date rollover. The expectancy, it seemed, was for the newsgroup discussion to die out, perhaps slowly, and eventually fade away. This did not happen, however.

This was a sign that the newsgroup participants had come to understand one another's ideas, thoughts, and positions more closely than even they perhaps knew. Rather than Y2k being the central platform of their connection to one another, other issues came to the fore. Though it started as a condemnation of the Pollyannas for not preparing in the event of a breakdown (representing further entrenchment), the "Back to Lurker Mode" thread quickly turned into a topic about government taxation.

This set a precedent in the newsgroup. Members began to recognize that the newsgroup might not simply die a slow death, but could continue on serving the same function it did prior to the date rollover: as a forum for polarized discussion on any number of economic, political and social issues. It was at that point that tpy2k became recognized as a socio-political salon going beyond the Y2k issue. People had become familiar enough with each other's positions that they knew what to expect. This kind of comfortable atmosphere within which one could espouse political, religious or philosophical opinions was the kind of community the tpy2k'ers had built for themselves during the course of the Y2k buildup. It appeared that they were not about to let it go so easily.

For those who did not go back into lurker mode (largely those within the top 50 regulars), and newbies who kept coming to the newsgroup out of sheer curiosity, new topics and threats emerged in the discussion. The newsgroup was, nonetheless, significantly smaller in population than before the date rollover. Occasionally, old members would drop in and comment briefly on how small the newsgroup had become:

From: Sodding Hun

Subject: Damn, did this newsgroup get small.

Newsgroups: tech.problems.year2000

Date: 2000-11-05 08:06:47 PST

I guess this newsgroup is itself not Y2K-compliant! I guess this newsgroup will end up empty after some while, or filled in with various flavours of wackos.

Don't forget about the Y2K+38 UNIX bug! In the mean time, the century and millennium are not Y2K+1-compliant. Happy New Millennium!

From: BHinden

Subject: Re: Damn, did this newsgroup get small.

Newsgroups: tech.problems.year2000

Date: 2000-11-05 22:40:06 PST

MM and M Portier make up about half of the traffic these-a-days, especially when they get to sparring.

Some of us do a little lurking now and then, as you can see.

In the discussions taking place in the newsgroup during the 2001-2002 period, more and more off topic posts appeared. The topics ranged from political rants to astronomical advice to high school football. Here is a sample of the posts that were explicitly labeled as off-topic (standard netiquette states that the letters "OT" appear in off topic thread subject headings):

- (OT) Leonids 2001 Oct 22, 2000 by Michel Portier
- (OT) *They* fear vote fraud Oct 25, 2000 by Michel Portier
- OT: Condoleezza Rice Fan Club Jan 1, 2001 by larryfnord

OT: Bush Tax Cut - Jan 5, 2001 by Pete Lockheed

OT: Earth Day - Apr 21, 2001 by MrMidgit

OT: Communism, Hope of The Future? - Jul 7, 2001 by Pete Lockheed

OT: Where Is Our President? - Sep 11, 2001 by Don Gonya

OT: Ethnic type humor - Oct 23, 2001 by Carl Potter

OT: Totally unbelievable photos - Mar 9, 2002 by Mark Rondell

Boycott the Body Shop !!! [OT] - Oct 10, 2002 by Guillermo Meldrum

The range of topics seemed wide and unfocused, and this led Mary in MA to write in April 2001 that they "needed a new cause," regardless of its relationship to Y2k:

From: Mary in MA

Subject: We need a new cause!!!!!!
Newsgroups: tech.problems.year2000
Date: 2001-04-26 18:13:41 PST

OK dammit - I'm one of the last of the diehards but - I'm done from reading it once every few weeks to once a month soooo we have to do SOMETHING! We need a cause. I don't care to bring Peter back... but we still have mps around so that's all we need... lets find something he disagrees on - then of course we can take the other side of the issue:)

MPS? Could you answer the following questions, hopefully one of them will work :)

How do you feel about the way us smokers are being persecuted?

Do you think a 6 month old baby is just "fetal tissue" or a baby waiting to be born...?

Do you think it's ok that a innocent man may be MURDERED - because we as a soceity support the death penalty?

(Ok well if we agree on these three - LOL - I'll come up with 3 more... there's gotta be something we totally disagree on since I disagreed with well basically every thing you wrote in the "old days" "

Mary

There was certainly no need for a call to action a few months after this post, when Al Qaeda terrorists attacked New York and Washington, D.C. Activity in the newsgroup spiked to a level not seen since 2000. Interestingly, the focus once again returned to Peter Mill. Though Mill's last post to the group was in late 2000, the memory of him clearly was not forgotten, as Pollyanna Bob Roberts demonstrates in this message posted the day after 9/11:

From: Bob Roberts

Subject: Re: Peter's New Club

Newsgroups: tech.problems.year2000

Date: 2001-09-12 15:39:10 PST

loiyard wrote:

- > So our old friend Peter is up to his old tricks again, predicting
- > that THIS TIME, he is correct and that BAD THINGS are gonna
- > happen REAL SOON NOW.
- > But things are different this time. He's the master of his
- > domain on clubs.yahoo.com. He's also the resident censor. He
- > killed my account, and deleted my posts, and now I can't post
- > anything, and I can't even see what other people have posted.

Those relatively kind things we said about Peter when he left t.p.y2k - Peter fought the good fight; Peter stood up for what he believed in; Peter took on all his opponents; yada, yada, were obviously just statements of relief that he was finally gone, because it is now increasingly clear that Paul is/was a coward of the highest order.

BR

Despite his absence, Roberts still felt it necessary to impugn Mill for the effect that he had had on the newsgroup.

The Development of a Common Culture

The remaining members in tpy2k were more than just a rag tag assembly of a few people connected only by current events and old history, however. There was still a core memory that helped to serve as a bonding mechanism between the post-

Y2k participants. This core memory resurfaced at times in jokes, phrases and epithets commonly understood only by members of the newsgroup who participated in the pre-Y2k discussion (or anyone who had reviewed those messages quite thoroughly). For example, repeated references to MrMidgit's "porous memory" resurfaced both before and after the date rollover. The words "porous" and "memory" surfaced in 835 posts during the life of the newsgroup, nearly exclusively in the phrase "my memory is, admittedly, porous" used most often by MrMidgit himself. There were 410 instances of the specific phrase "porous memory" being used between September 23, 1998 and May 29, 2003, when it occurred in a thread titled "The Kingdom of the Porous Memory" started by the Doomer Voyageur:

From: Explorer

Subject: The Kingdom of Porous Memory Newsgroups: tech.problems.year2000

Date: 2003-05-28 17:39:09 PST

[From] http://www.tompaine.com/feature2.cfm/ID/7899

In The Kingdom Of Forgetting

Memory can be an embarrassing thing. In politics, it's often more convenient to forget. The classic illustration of this idea was Orwell's dystopian Ministry of Truth, where functionaries fed any inconvenient bit of information down the memory hole -- "whereupon it would be whirled away on a current of warm air."

Not to be outdone by fiction, Republican Washington has constructed its own prodigious Kingdom of Forgetting. From judicial nominations to tax cuts to Mid-East policy, the arguments wielded on Capitol Hill have apparently been crafted for GOP true believers or people with very short memories.

Blissfull it must be, nay?

All them inconvenients facts and documents keepin' Dougsy and the Midgit from enjoyin' Disney, pink shades and Freedom fries!

Gone widda wind!

From: MrMidgit

Subject: Re: The Kingdom of Porous Memory

Newsgroups: tech.problems.year2000

Date: 2003-05-29 05:57:32 PST

I'm sorry, I seem to have forgotten. Blissfull (sic) *what* must

MM

Other catch phrases and quips that became "old hat" for the newsgroup regulars and which reappeared regularly throughout the conversation of the newsgroup were Peter Mill's ubiquitous posting signature³⁹ "If you live within five miles of a 7-11, you're toast," (which appeared over 2500 times), as well as a common mention to "rusty hubcaps" (171 total references). The hubcap comment was originated by Mill as well, in several posts in mid-to-late 1998, such as the following:

From: govknow@breton.com

Subject: Yes, Counties ARE In Big Trouble Newsgroups; tech.problems.year2000

Date: 1998/12/14

When 90% of the world's businesses and governments only have a minor fraction of their systems ready, what do you expect? Being blind they expect a 'muddle through'. Not based upon the facts, but upon their ill conceived optimism for optimism's sake alone.

When the time comes that they do not have food, I wonder how well that optimism will work for them? "Hey, that is not dog urine in that rusty hubcap. Just pick the used condoms out and think of it as 'Canine Champagne' see I told you we would have something to drink!.

The members recalled this unpleasant allusion many times. The hubcap became symbolic of the extreme Doomer position that Mill held. Before, and especially after, the date rollover it was used respectively both as a serious comment by the followers of Mill and laughingly as a satire against their extremist position:

From: itr

Subject: Re: And so it begins

Newsgroups: tech.problems.year2000, alt.talk.year2000

Date: 2000/01/01

Richard T. MacNewsome wrote:

- > Porasky, North, Mill and Yourdon all contributed squat to the
- > understanding and remediation of this problem. Their only
- > "contribution" was the spread of fear, doubt and uncertainty
- > among the innocent.

Messers Porasky, North, Mill and Yourdon put their cases as they saw them.. I, for one, am thankfull for them (cheers Harry, Gary, Peter and Ed!). The fact that I am writing this and not quaffing from a rusty hubcap is also something I am thankfull for Had it gone pear shaped, without the above mentioned, I wouldn't have even had the hubcap. I used to think that the (sp) after your name was an abbreviation for spelling... I now realise it stands for specious pillock. Just what is your fucking problem?

From: Doug Dock

Subject: Re: Polly-Folly Weekend

Newsgroups: tech.problems.year2000

Date: 2000/01/03

Accusations from the man with two lies in his sig.file? Welcome back Peter. Shouldn't I be drinking dog piss from a rusty hubcap while watching my children starve about now? Wassa madder, scared to address the issues little man? All those predictions about what was going to happen on the 1st and guess what...you're wrong again. When are you going to admit that, when it comes to threat assessments, you need someone else to do it for you?

Like the "rusty hubcap" comment, a reference to "canned eels" was commonly identified as having a special meaning within the newsgroup too. In this 1998 post, MrMidgit reviewed the meaningfulness of the canned eel comment to Mike August, which had previously skimmed past his "topic-horizon":

From: El Doogers (MrMidgit)

Subject: Re: Food Confiscation verified

Newsgroups: misc.survivalism, tech.problems.year2000

Date: 1998/10/05

Mike August wrote:

... > Lordy, wasn't Harry lecturing us a week or so ago about being "on

> topic"? What the holy hell does this thread have to do with

> anything related to either survivalism or Y2K?

Mr August, my apologies for not having been more explicit; it appears that Things Which Have Gone On Before have dropped beneath your Topic-Horizon.

You see, a while back at a Washington, DC, Year 2000 User's Group meeting (Y2K relation) Mr Porasky and I were discussing tactics for surviving the Gatherers and Sharers whom many posit will be using their jackboots to kick down doors for food redistribution, either Official or Amatuer (Survival relation). I suggested the tactic of laying in stocks of food which most folks would find to be unpalatable, such as wheels of Stilton cheese and canned eels; upon seeing such 'provender' the Latter-Day Socialists would then wander off, disappointed, muttering 'But somebody said they had Food... you call *that* food?'

To be truthful I had forgotten I had said this... Mr Porasky, knowing a Good Idea when he hears one (hey, that's why *he* makes the Big Bucks, neh?), retained it... and at the September WDCY2K meeting e'er-so-generously supplied me with a can of Hamanako brand Broiled Eels. suitable for stashing, placing in a bug-out bag or laying aside in anticipation of its becoming a Valued Heirloom. Now I'll grant you, Mr August, that concern over the appropriate sauce for said eels might seem a bit... namby-pamby for a Real Survivalist but I'll admit to being rather new at this game... and besides, what's broiled eel without the sauce? See? I *knew* you'd agree!

MM

These are just a few of the many commonly shared references that emerged naturally in the discussion in years past which helped to create the milieu of the culture they had created. The memory of this culture was held in the minds of the participants, but it was also preserved, word for word, in the archives held in numerous computer servers around the world.⁴⁰ The comment in Nogrin's post above (regarding the explanation one might give to their children should they ever discover the words one wrote in the newsgroup) refers to this memorial quality of newsgroup community.

As in the case of Ronald Brown's death, life changing (and ending) events also were recognized within the newsgroup after the rollover. It was discovered by Peter Mill that Lawrence Fontaine, a member who posted over 400 messages from

March 16, 1998 through January 1, 2000, died in April 2000. The discovery was made as a result of Mill's sending Fontaine an invitation to the pig roast.

Harry Porasky recognizes that others that were affiliated with the newsgroup, both actively and passively, may have passed on as well:

From: Harry Porasky

Subject: Re: January One will dawn bright and clear and fairly normal.

Newsgroups: tech.problems.year2000

Date: 2000/06/27

•••

There are likely others who died, lurkers who passed without leaving a mark, posters who dropped out but no one noticed.

The debate that raged when Ronald died did not diminish his memory. A part of mourning is to remember the good and bad in a person's life, to recall their life so that those who are left behind can hold onto their memories.

Larry won't be at Peter's party, he won't get the "first dunk" that he earned; we'll toast his memory by raising a hubcap of iced tea at noon.

Where ever you are on July 1st [the day of the pig roast], take a moment to reflect on Larry...and Ronald. Raise a glass to them. I am thankful that it is bright and clear and fairly normal.

--

harry porasky

The memories shared by the individual members of the newsgroup appeared to serve them well in garnering a personal sense of togetherness and community. Mary in MA mentioned that she felt as though they were a family in this melancholy February 22, 2003 post that reminisced about the "good old days":

From: Mary in Ma

Subject: o/~ And now she's back from outerspace....o/~

Newsgroups: tech.problems.year2000

Date: 2003-02-22 14:53:51 PST

Don't know who here might remember me, I'm the gal with the poor grammar and puncation and endless run-on sentences and elipses... I was at one time the 2nd most prolific poster to this newsgroup (after Peter of course who held that title for a few years at least)

There will never be another issue like Y2K and honestly I'm bummed about that. I will never forget the fun, and interesting times I spent on this newsgroup. You would think I suppose that I wouldn't look back at it so fondly since I was wrong, but I still do, because we were family here.

This newsgroup made me laugh, and at times cry but overall it was one of the most interesting experiences I've had. There were so many 'great moments' here for me, but the best ever had to be when I "nailed' Bob Roberts after he'd posted a private email of mine. My 'revenge' was to post his resume. He'd swore he was above all that... and would never post his resume (or something like that) and I took bits and pieces from a # of his posts and quoted them all in a way that looked exactly like a resume...

(I suppose you 'had to be there' but it was good...really good... and I still crack up when I remember it)

I hope life is treating y' all good, lets meet back here in Y10K?
:)

Mary

When Google began to offer the complete Usenet archives being sold by Deja News, this brought a new sense of relief to the members of *tpy2k*. The collective amnesia that Deja News created had been cured and their community memory was again intact. Curt Ovachart notes the nostalgic value of going through old posts in this message:

From: Curt Ovachart Subject: Just reminiscing

Newsgroups: tech.problems.year2000 Date: 2003-03-06 10:45:32 PST

Since the Y2K Fairy showed up here recently spilling her guts out about her TPY2K experience, I got to thinking how much fun it was.

I happened to go back over some of it (thanks to google for picking up the archive!). It seems even funnier now than it did at the time -- and I used to get a lot of laughs from it back then. I'm trying to decide which was my finest hour on TPY2K. I thought it might have been the "Bad Christians" thread (started 11/13/99) but then I just read "Doomsters abandoning t.p.y2k" (4/29/99) and nearly died laughing.

--Curt Ovachart

"Most people love a good story more than they love the truth."

In the most recent drama in the life of the tpy2k newsgroup, on February 26, 2004, a new proposal was made to end the newsgroup by a news.group Usenet administrator (see Appendix A for the entire transcript of this rmgroup message). The complete message outlined the newsgroup's history in detail and made a similar argument for its removal as the first "rmgroup" (remove group) discussion in January 2000 (the newsgroup had become intolerably off-topic). It was suggested by the administrator that the newsgroup was no longer appropriate as a member of the "Big Eight" newsgroups and that the prevalence of so many off-topic posts should relegate tpy2k to the alt hierarchy of newsgroups.

There was a significant response to the post, with 147 messages posted to the discussion from 28 individuals, many of them old regular members of the newsgroup, such as MrMidgit, Marcus P. Sorenson, and Barry Hinden. The general consensus was that four years after the passing of Y2k, the newsgroup had in fact outlived its usefulness:

From: Marcus P.Sorenson

Subject: Re: Discussion: rmgroup tech.problems.year2000 Newsgroups: tech.problems.year2000, comp.programming,

comp.lang.cobol, news.groups Date: 2004-02-29 05:46:43 PST

Usenet administrator wrote:

- > This is a discussion concerning the removal (rmgrouping)
- > of the newsgroup "tech.problems.year2000". This is not a
- > formal call for votes, nor is it a threat of rmgrouping the
- > newsgroup without a vote.

Put the damned newsgroup out of its misery.

--mps

From: Bhinden

Subject: Re: Discussion: rmgroup tech.problems.year2000

Newsgroups: tech.problems.year2000, comp.lang.cobol, news.groups

Date: 2004-03-01 23:46:53 PST

Marcus P. Sorenson wrote:

> Put the damned newsgroup out of its misery.

For once I agree with you. Party is over, turn out the lights.

Double digits are here to stay and the world goes on it's merry way. Besides if the programmers can rewrite all the code ever written in a few years, they can fix anything. Lights stayed on. Every line of code in its proper place. The coding job of all time, and nobody noticed. Oh well.

Ironically this backwater of computing history must be removed to make way for proper and serious programming discussions.

Any clued yet as to what actually happened in 2000? No? I thought so.

Any final comments MM? keep it *short*.

Got to clean up these pesky newsgroups using up too many electrons.

Bart and his Canadian freinds can get a room.

Besides, this newsgroup is at risk of getting back on topic.

Barry

From: MrMidgit

Subject: Re: Discussion: rmgroup tech.problems.year2000 Newsgroups: tech.problems.year2000, comp.programming,

comp.lang.cobol, news.groups Date: 2004-03-02 02:08:13 PST

B Hinden wrote: >Any final comments MM?

zzzzzZZZZZZzzzz... zzzzzaaaaaAAAAWWWWWWW...
zzzznnnnuuuuUURRRRKKKHHHhhhhhh... whuh? huh? oh... sorry, just...
resting my eyes, please, go right ahead, you were saying...

MM

By the beginning of 2004, even the charter members of the newsgroup were "falling asleep," and ready to "put the damned newsgroup out of its misery." One member noted that it might be the "End of the Newsgroup As We Know It!" The Doomer Hinden and the Pollyanna Sorenson finally had something they could agree on – they could agree to disagree and go their separate ways. Without substantive

support for the continuation of the newsgroup, it was likely that the group would be removed from the Usenet *tech* hierarchy.

Yet to this date (July 1, 2004), the newsgroup continues to idle along, discussing off-topic subjects and occasionally drawing upon memories of the "good old days," when Doomers and Pollyannas argued *ad infinitum* about an event that never came to pass.

Chapter 10 Analysis and Conclusions Can tpy2k Be Characterized as Communitarian?

We must not assume that the future of the Internet will be determined by some mindless, external "technological imperative." The most important question is not what the Internet will do to us, but what we will do with it. - Robert Putnam, Bowling Alone (2000:180)

This research has examined a case of online group discussion within the Usenet forums in order to answer the question of whether or not computer-mediated communication can create community, particularly the kind of community that can be called communitarian.

Community has been defined in this study as a social process that combines bonding and relationship building with the development of culture. These two aspects of community are indicated by the particular variables outlined by Etzioni (1999): access and boundary, interpersonal knowledge, interactive broadcasting, civility and cooling-off, and community memory. Each of these variables has been assessed in the case of one particular Usenet forum, tpy2k.

These variables represent aspects of the bonding and culture that is important to the development of community to varying degrees. For example, I consider access and boundary primarily a cultural variable: access to a community opens the doors for multiple participants and the boundaries that are predefined often come from previously organized systems (for example, the availability of computer infrastructure in a society, or the way in which the general Usenet netiquette influences access and behavior in a specific newsgroup).

Interpersonal knowledge is clearly a bonding variable, allowing for the identities of individual members to become known to other members of the group. Similarities and differences between the participants might also allow for the creation of sub-groups within the general community. Interactive broadcasting, on the other hand, could be considered a culture variable, as this aspect of group behavior allows for dialogue regarding the meaning of the group itself to be fully engaged by the participants in an open forum.

The variable of civility has implications for both bonding and culture, as uncivil behavior can loosen or break bonds between members. Yet, the general state of civility within the group as a whole, and at different times in its history, makes up a characteristic of its culture. Community memory is also a mixed variable, expressing the cultural history of the group while at the same time providing a means by which individuals feel connected to each other.

Were these variables evident in the case of tpy2k? It should be clear by now that each of these aspects of bonding and culture were, to some degree, present in the newsgroup. However, the degree to which the variables exist and the question of whether one might call tpy2k a communitarian group is less certain.

Analyzing the Evidence

The evidence provided in the form of a roughly chronological review of the tpy2k newsgroup supports some aspects of the relevant variables, while disconfirming others.

For a large majority of the group that tpy2k initially appealed to – computer programmers and technicians working on the Y2k computer bug – access to the group must have seemed like second nature. Many of these participants were professionals who are intimately familiar with the workings of computers and would find little to no difficulty in the technical details of receiving newsgroup messages through a newsreader or webpage. Other developments, such as the Deja News and subsequent Google web services, brought the group an even wider potential audience with relatively simple access requirements.

Boundaries were created in the first months of the newsgroups existence. They initially were taken from the cultural precedent of the Usenet; for example, technical groups were meant for technical talk. This created the first division in tpy2k, that of the strict technicians versus the socio-political representatives. After the technicians seceded from tpy2k, the boundary between purely technical and socio-political posts in tpy2k became much more loosely defined. After the date rollover, that boundary fell almost entirely.

With little question, there is ample evidence to conclude that access to the newsgroup held very few restrictions, either politically, economically or technically. A democratic community was built. Early access led to the creation of the unique boundaries, norms and roles shared by the participants. Aggregate descriptive statistics support the conclusion that the newsgroup was growing steadily in its early years.

Interpersonal knowledge in the newsgroup grew quickly and helped to transform the boundaries that were initially put into place. The creation of the

Doomer and Pollyanna social positions clearly conflicted with the more general Usenet norm that the *tech* hierarchy was for technical discussions only. The foundation of these categories was fundamentally socio-political and philosophical, with the technical aspects of the newsgroup's being used to demonstrate their socio-political theories. Nonetheless, this challenge to the boundaries of *tpy2k* allowed for increased interpersonal knowledge: a person's socio-political and philosophical perspective reveals much more about that person than their technical knowledge.

In addition to this factor, the ability to gain large amounts of knowledge about another individual online was remarkable, considering the absence of physical bodies. This shows that the technique of CMC can effectively communicate personality, autobiographical details, and political-economic cognitive frameworks (as shown in Appendix C). Of course, these identity traits may be different online than offline, due to anonymity and proximity factors.

The bonding variable of interpersonal knowledge, then, can be tentatively confirmed by the evidence found in the tpy2k group, with the caveat that online interpersonal knowledge may be different than face-to-face knowledge.

Interactive broadcasting was expected to be present in the newsgroup if it was anything like other CMC forums. It was, in fact, an unavoidable feature of the newsgroup and a prominent part of what created its unique boundaries, norms and culture. The threading structure of Usenet worked perfectly to create the kind of interactive, many-to-many forum that fostered communal rather than one-to-one relationships.

A vital aspect of the community development in tpy2k was feedback. Without the nurturance of a response, which was often immediate in the case of tpy2k, message threads die. Even hostile responses were in some sense welcome, as the worse alternative was no response at all. There were very few initial posts on tpy2k that went unanswered. One chief actor in this aspect of the group was MrMidgit, who scored 17,107 posts, far and above the most posts to the group (nearly two and a half times the second most prevalent member, Mill). His posts were often not long, but communicated just enough information to get a discussion going. His posts were ubiquitous as well; it could be difficult to find a message thread to which he did not contribute.

More than just establishing roles and boundaries, the interactive broadcasting that took place was socioculturally important. It transmitted the meaning and purpose of the newsgroup between members. The broadcast nature of the medium allowed for members to state what the issue was in one's own mind and then outline one's position on the issue. This was no small issue: the members were debating the Y2k computer bug, a problem of internal logic in systems upon which we have all come to depend for our very lives, and a problem which had a foreseeable execution date.

In Techgnosis: Myth, Magic and Mysticism in the Age of Information, Davis (1998:255) notes that the Internet is

shot through with myths that frame the story of time, myths of utopia and cataclysm alike. So it should not be surprising that many of the stories circulating about the 'information revolution' feed off the patterns of eschatological thought, nor that technological images of salvation and doom keep hitting the screens of the social imagination like movie trailers for the ultimate summer blockbuster....As of this writing [1998], the Y2K glitch is already fomenting anxious fears and paranoid rumors, stories that remind us how tightly we are lashed to time, or rather to the often arbitrary frameworks we use to categorize and control its always imminent

flux....Here is my humble prediction: the end times will keep beckoning long past Y2K. We must do better than simply snicker about the irrationality of apocalyptic thought, which is no more sensible and no less interesting or convulsive than gambling or good poetry. The really compelling question is how we grapple with the apocalyptic feelings and figments that already crackle through the world.

The tpy2k newsgroup was a community caught in the midst of this "crackling," with both the apocalyptics and the utopians battling for the expression of their unique meaning of Y2k to take precedence in the group.

Also an aspect of the interactive broadcast of the group was the focus on community and community values. The self-reflection that the group went through regarding their own status as a community was silhouetted by the political perspectives of libertarianism, liberalism, and others which informed individuals' positions in their response to the potential consequences of Y2k.

It may be that the interactive broadcasting aspect of *tpy2k* worked too well, in that the opportunity for debate, as well as the availability of anonymity, was so open that the boundaries of civility were too easily breached. To use the words of group member Mark Paddington (January 8, 2000): "That an idiot like Mill could basically hold a newsgroup captive for two years tells us a lot more about Usenet than it does about Mill or Y2k. But that's another story for another day, and probably, another newsgroup."

Civility, the fourth variable, was shown to decline in the newsgroup, especially after mid-1998, when the Doomer and Pollyanna camps gained members, entrenched their positions, and prepared for the all out flame war that the group endured in 1999. Neither the Doomer nor Pollyanna side was ready to give up as easily as the technicians did and migrate *en masse* to a different newsgroup

(although at times *misc.survivalism* served as a welcome retreat area for the Doomers), or create their own new newsgroup with a different heading. Serious suggestions never materialized. The fact was that they depended upon one another for the meaning of the group to remain stable. Yet, they often treated each other with such disdain that it was difficult to tell that they were part of the same community, the one concerned about outcomes of Y2k, good or bad.

According to Etzioni, the lag time provided by the technicalities of Usenet posting should have provided a cooling-off mechanism. This should tame abrupt, and uncivil responses to a post. However, as was clear in chapter 7, flaming was a dominant feature of the newsgroup, particularly as its initial purposefulness (discussing Y2k outcomes) approached an end point. It is possible that lag time online leads not to cooling-off, but heating-up. The Wikipedia definition of a flame war leads one in this direction as well:

A flame war is a series of flaming messages in an electronic discussion group or message board system such as Usenet, mailing lists or forums. There are a number of characteristics of electronic communication which have been cited as being conducive to flame wars. Electronic communications do not easily transmit facial expressions or voice intonations which may serve to moderate the tone of a message. Also, there is typically a lag time between the time a message is transmitted and the time a reply is read. These two characteristics can cause a "positive feedback loop" in which the emotional intensity of an electronic exchange increases to extremely high levels (at http://en.wikipedia.org/wiki/Flaming).

The "positive feedback loop" mentioned here perfectly describes the activity in the group through 1998 and 1999, when the escalation of the flame war between the Doomers and the Pollyannas continued unabated.

Michele Tepper (1997) studied a similar case of a Usenet group, alt. folklore.urban (AFU), which was fond of trolling. In her study, Tepper notes that

"trolling as a method of enforcing subcultural standards works with [some] tension, making it clear who among the newcomers are unduly credulous for a group intellectually predicated on skepticism and anxious to prove the extent of their cultural capital" (43). In the case of tpy2k, the subcultural standards were the recognition of the boundaries, roles and statuses of the group (such as the categories of Doomer and Pollyanna), and the tension between camps was obvious. Like AFU, tpy2k was intellectually predicated on skepticism, whether it was the skepticism of the Pollyannas regarding doom and gloom prognostications, or the skepticism of the Doomers regarding what they saw as ignorant optimism with no evidence to support it. They sought cultural capital and presented evidence to support their position. Where logic and evidence failed, trolling and flaming appeared.

It should be recognized that flaming and trolling were conceived by many as play ("tpy2k is a troll playground," said Ovachart). This is in fact how the residents of AFU used the troll – as a game. "Trolling is accepted and reinforced within the alt.folklore.urban subculture because it serves the dual purpose of enforcing community standards and of increasing community cohesion by providing a game that all those who know the rules can play against those who do not. It works both as a game and a method of subcultural boundary demarcation because the playing pieces in this game are not plastic markers or toy money but pieces of information" (Tepper 1997: 40). But simply playing games with information does not make a community. In tpy2k, information was being used to legitimate one's position regarding the consequences of Y2k. It was the meaning of the member's position which underscored their participation in and commitment to tpy2k.

Ultimately, the evidence that civility exists as a variable in establishing the effectiveness of the newsgroup forum to create community is tenable, but open to criticism in a way the other variables are not. Particularly because of a lack of physical sanctions and no great sense of local responsibility, tpy2k might be better characterized as a "cooperative anarchy" (a term used in 1994 by a member of the AFU group to describe themselves) rather than being conceptualized as an integrated, traditional community.

The last of the variables investigated in this research, community memory, was clearly present in the life of the newsgroup and is what gave the group a sense of uniqueness ("there will never be another issue like Y2k" – Mary in MA). From the constant reminders regarding the charter and purpose of the group in its early years, through the farewells and memorials which waxed rhapsodic about the effect the newsgroup had on their lives, many *tpy2k* members clearly saw the group as valuable, personally as well as professionally. They had created a real shared history through the nearly half million messages left in the seven and a half years of its existence, complete with common references, catch phrases, stories, all wrapped in the meta-narrative of Y2k and the Doomer/Pollyanna schism. There is no question that the community memory variable is evidenced in the newsgroup, as it was one of the chief aspects which created the community's spirit of togetherness.

Was tpy2k a communitarian social group?

To summarize, the data presented in chapters 4 through 7 indicate that evidence exists to qualify tpy2k as a community. The group members had a common goal, they had established roles and boundaries within the group with which to

pursue that goal, shared their identities with others online, broadcast their ideas to one another and provided feedback to others' ideas, acted with respect and denigration, civility and incivility, and ultimately wrought a forum that fostered a unique solidarity among its members. There were even rare physical gatherings, as well as lasting "real-life" friendships that grew from the group. Deaths were mourned (by most) in the group. One member, at least, even thought of the group as a surrogate family.

This ethnography provides the evidence to claim that the newsgroup became a community. This evidence shows a relatively high level of bonding and the development of a unique culture within the group, despite the great degree of difference expressed by the two polarized camps which developed. This schema is represented by the three-dimensional graph provided in Figure 10.1.

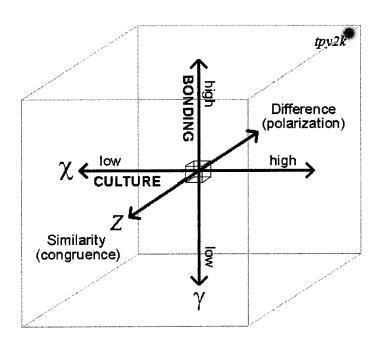


Figure 10.1 The Location of tpy2k along the Dimensions of Bonding, Culture and Polarization

It is important from a scientific perspective to ask if there was any disconfirming evidence that could lend doubt to the idea that tpy2k was indeed a community. In reviewing the newsgroup posts, the thought was entertained that perhaps it was not one community, defined simply by the boundaries of the Usenet architecture, but rather two communities, defined by the positions the members took on Y2k, the Doomers and the Pollyannas. Though there were "straddlers," these two communities typically had separate political values (libertarian versus liberal), came from different subcultures (survivalist versus technical programming), and preached different outcomes for Y2k (catastrophic versus a non-event). The dichotomies were clear, yet there was a problem with this kind of separation: in tpy2k, these communities defined themselves clearly in relation to the opposing camp. Indeed, the names themselves are derogatory, chosen not by adherents but by their counterparts. Furthermore, they were willing to talk ad nauseum to one another for more than three years before any ultimate proof could exist to back up their beliefs.

Iris Marion Young (2000) discusses the importance of inclusion in communities, particularly democratic ones, despite differences. "If democracy is a process of transformation by the people as a whole, can it make room for a diversity of sub-groups within the whole? Can democracy respect differences while also becoming more inclusive?" These are the questions Young asks, and they are particularly relevant to online community. Eschewing message moderation by an individual group member was the first step that tpy2k took toward inclusion. However, respecting differences was often the crux of the problems in the group messaging. For example, the killfile, used as a boundary-setting mechanism, was

also a tool of censorship. While group members like Curt Ovachart refused to use killfiles, out of a respect for difference (however inane or irrational these differences may have seemed), others used it with no holds barred (Mike August continually posted his large killfile, though some suspected it was fraudulent). This lends credence to the notion that people's thoughts and ideas alone have more power than we believe.

The problem of civility experienced within the group, which might also lead an observer to argue that no "real" community members would act in such a way towards each other, was indisputable. But, it must be remembered that this is a community wrought in a different atmosphere and with different rules and boundaries than traditional community.

The "real" incivility, in terms of threats and intimidation breaching from the online world to the offline world, was minimal, if it existed at all. Much of the animosity between the camps came off as somewhat "staged," intentionally dramatic play typical of the Usenet newsgroups. The "artificial" incivility, while arguably playful for some, was nonetheless disturbing and upsetting to others. But is this a basis for abandoning the notion of community? Do not offline communities become disruptive to the lives of its members occasionally? Certainly they do. The relatively higher levels of incivility online are accommodated for by the relatively lower level of consequences. To make a threat online, particularly against a member who is using a clearly anonymous name, is an empty gesture, as members like Doug Dock and Roland Mollin recognized. Nonetheless, the meaning behind the threat is important. Threats indicate that there is a clear understanding that difference exists

and that the difference should, in the mind of the perpetrator of the threat, be eliminated. Thus, camps emerge along the binary logic of the difference involved in the dispute; this then heightens the level of incivility and creates the positive feedback loop referred to earlier.

This leads to the idea that with higher levels of incivility, and a greater amount of individual impropriety online than could exist in face-to-face community, comes a "cooperative anarchy." A seeming oxymoron, this is what online community gives us – a greater ability to espouse our individual beliefs in a community setting, which creates a greater level of disorder among the order of what we traditionally recognize as "community," but is quite different than the traditional variety. Rheingold (forthcoming 2004) calls these new kinds of online communities "smart mobs." This emphasis on greater individual rights within a community setting, while maintaining the responsibility of contributing to the purpose of the community, might also be compared to Wellman's and Castell's ideas of networked individualism, the "the turn away from solidary, local, hierarchical groups and towards fragmented, partial, heavily-communicating social networks."

So, *tpy2k* was a community, one community, that held together despite being remarkably anarchic and individualistic. But was it a *functional* community? Just like families can exist with an incredible amount of dysfunction, so can communities. And dysfunctional communities, by definition, find it difficult to serve their constituencies and, more generally, the public good. In relation to the

communitarian potential of tpy2k, an important question to ask is "Did the tpy2k community serve a public good?"

A basic premise of the community concept is contribution to the public good. In his revision to Anarchy and Cooperation (1976) titled The Possibility of Cooperation (1987), political scientist Michael Taylor outlines a critique of the justification of the state as the only institution that can deliver the public good. He defines the public good as "a good or service that is in some degree indivisible and non-excludable" (1987:5). The public good that the members of tpy2k were pursuing certainly fell under that category: to protect the computer infrastructure that we depend upon in our day-to-day lives (in banking, in electrical supply, in water purity, in nearly every workplace - it is difficult to think of an aspect of daily social life that is not influenced by computerization). This, at least, defines the public good that most of the technicians and Pollyannas pursued. More subtly, most Doomers perceived their contribution to the public good as recognizing the imminent failure of such systems and proselytizing proactive survival steps to avoid panic and the inevitable collapse of civilization that would come with an immediate collapse of computer infrastructure. Of course, when the pursuit of this plan was not public, as in the case of the most extreme survivalists, the differences in the group came into sharp relief and were difficult to overcome.

Whether or not the Pollyannas and the Doomers actually contributed to solutions to the millennium bug (and it could easily be argued that they *did*, as *tpy2k* was likely the most read Y2k group on the Internet), the intention of contributing to the public good was what brought the group into existence and what allowed it to

flourish in the years prior to Y2k. Conversations regarding the moral aspects of Y2k, as discussed in threads like "Moral obligation to work on Y2k?" (April 29, 1998) and "The moral dimension of Y2K" (December 15, 1998) helped the group members to navigate through the end of the millennium. Dialogues regarding responsibility to one's community, as in the threads labeled "Community and Responsibility" (March 14, 1998) and "Y2K and Social Responsibility" (May 15, 1998), also fostered a sense of communitarian organization and understanding in the newsgroup. Although not everyone subscribed to a communitarian perspective, the differences allowed for deeper debate regarding these issues. Not knowing what would happen as a result of the millennium bug, the group members did their best to impute and share the best course of action in their own opinion.

After the date rollover, it was the memory of this contribution that helped members to justify their continued presence in the newsgroup (whether Doomer or Polly), as well as the possibility of cooperating to discuss new political and social problems.

Because there was this public good created by the *tpy2k* community, it could be characterized as more than just a "cooperative anarchy" or an example of networked individualism; it could also be characterized as at least partially communitarian. The communitarian movement emphasizes both rights and responsibilities. Certainly the "rights" half of the equation played out in *tpy2k*, particularly due to the unmoderated, democratic, and anonymous nature of the group. Members were free to engage in unmoderated discourse, debate, diatribe, and even defamation. The "responsibilities" half of the equation is more tenuous (as it is

in face-to-face communities, according to Etzioni 1993). There is ample evidence that group members felt responsible for their actions and opinions and the accountability of their speech. Yet, their responsibility to the community collectively failed in the instances where civility spiraled out of control, thereby affecting the functionality and viability of the community. *Tpy2k* was not only a community; it was an example of a type of new community that has the potential to reinvigorate communitarian values in a "place" (cyberspace) not burdened by the traditional association with political boundaries governed by the state, and thus inevitably open to coercion (Taylor 1987). This gives promise to online communities which can more effectively than traditional communities organize citizens for the production of a public good. However, the negative side to this new type of community should emphasize the problems with civility, particularly if online and offline community are to meet and integrate, which is the likely course of community affairs in the future.

Conclusion

To conclude, this cyberethnography of the Usenet newsgroup tpy2k was undertaken to better understand the nature of online community and what public good it can contribute to the society at large.

Based on the evaluation of variables provided by communitarian sociologist Amitai Etzioni, it was found that tpy2k was a community, although it suffered its own unique dysfunctions and at times was remarkably uncivil. Moreover, the tpy2k community could be considered to have produced a public good in the speech acts

that took place in the group that likely had an impact on members' behavior in their offline communities.

The research replicated the results of a number of other online community studies. Baym's (1998:57) finding that "not only can CMC participants have identities, they can have relationships with other participants" was clearly borne out. The idea of "play" online, particularly in relationship to flaming and trolling, is similar to Correll's (1995) conclusion that "although findings support some of the main tenets of interactionist and ethnomethodological theory, at the same time they call into question the distinction between reality and fantasy and challenge the traditional notion of community."

Markham (1998:222) noted in her study of a MOO (like a Multi-User Domain, or MUD) that, while many people experiment with identity online, "I am amazed that I don't find more weird stuff and more exotic transmutations of the body and mind online." In other words, compared to face-to-face community, online community is relatively normal. With respect to the differences and incivility experienced in *tpy2k*, Mele's (1999:305) observation that "while online communication may ameliorate negative features of face-to-face interaction...it does not eliminate them" was found to be true in this case as well. Similarly, Kollock and Smith (1999:23) express their reservations that "many of the same features that make the Net effective for coordination and communication also encourage the spread of inaccurate information and expertise." Disinformation was easy to find, particularly after *tpy2k* became a "troll playground." This was an obvious theme in the *tpy2k* group. And finally, as we have seen, the kind of

cooperative anarchy that characterizes tpy2k is akin to Wellman's theoretical concept of networked individualism which he has demonstrated over and over again (1996, 1999, 2001, 2003).

The reservations that attend ethnographic research such as this are typical of any case study experience. No methodology is perfect and cyberethnography is no exception. One must be careful in the analysis of the meaning of Usenet messages to take into consideration not only the content but the context of the post. This is more difficult to replicate in analysis when the post exists amid a fluid mix of a hundred others. While intense immersion in the flow of the group helps to reduce misinterpretations, they can still occur.

Another reservation to take into account is the field experience of "going native." Though I had not purchased a handgun, as some of the hardcore survivalists recommended, at a point in late 1999 I was preparing for Y2k by purchasing bottled water, extra batteries, and the like (I had become a "doomer-come-lately"). The Doomers had so affected my personal attitude toward Y2k as to change my behavior – it is likely that I would not have taken even those minimal preparedness measures had I not been intimately involved in lurking in *tpy2k* in 1998 and 1999. Having long overcome the experience, it is rather humorous to look back at how caught up I was, along with the *tpy2k* members, in "Y2k fever."

Finally, as in any case study, one factor that is always tenuous once the study is completed is its generalizability. In fact, this was an even greater problem in earlier research taking place in the 1990s on the Internet and CMC. Previous data had not yet emerged, so studies were often exploratory and descriptive only.

Rheingold (1993) noted more than ten years ago that "about two dozen social scientists, working for several years, might produce conclusions that would help inform these debates and furnish a basis of validated observation..." This dissertation is an effort to contribute to the foundation that has been laid by Baym, Jones, Wellman, Kollock, Smith and the many, many other researchers investigating online community.

Further research into online community can build upon the current work. It is likely, for instance, that other online forums split by strict dichotomies, such as those discussing the abortion debate, the effects of immigration, or some forums with a hardened religious or political outlook, can be expected to develop civility issues that might be problematic to the groups sustenance and to its integration with offline groups. Recognizing the potential for online community to foster collective goods, sociologists can embrace new studies which bring a greater intellectual order and understanding to the often chaotic emergence and growth of online groups.

Online community is genuine community, albeit of a new variety not yet well understood. It has the potential to carry communitarian values and deliver tangible public goods to its members, and if used properly, might revitalize communities in societies which find the public good to be fleeting. The potential for social transformation exists. We will yet see if that potential is fulfilled.

ENDNOTES

- In Digital McLuhan (2001), Paul Levinson continues the work of 1960s communications guru Marshall McLuhan, bringing his transformative ideas about media to the new medium of the Internet and CMC. Kevin Kelly, executive editor at WIRED magazine, wrote that "everyone thought McLuhan was talking about TV, but what he was really talking about was the Internet -- two decades before it appeared. This book makes McLuhan's strange ideas seem perfectly obvious in light of the web, email and cyberspace." The relationship between communications technology and society that McLuhan outlined are only now becoming fully realized.
- The textual sanction is depended upon by most people to defend themselves against a flamer or troll, and this sanction can range from written responses to the flame (which, when extended over a long period of time, may be referred to as a *flame war*) to placing a members' name in a *killfile*, a list of members from which an individual chooses not to receive messages. However, it is generally understood that the use of the killfile must be tempered against the reality that the broadcast and feedback of members may have less and less continuity as more members of the group are added to ones killfile. The ultimate online sanction, with the sole exception of disbanding the group itself, is available only in moderated groups with a discrete authority figure. This sanction blocks a specific users access to the group entirely. However, even this sanction can be bypassed by the offender by accessing the group discussion using a different pseudonym. Often perpetrators are quickly discovered after having used this trick to bypass the ban on their participation, partly because the textual clues offered by the user may lead to that conclusion, but mostly because the offender may wish to be (re)discovered. This is the online equivalent of "returning to the scene of the crime."
- BBS's, Usenet, and similar forums are recorded and preserved by the server computers involved. The access to Usenet through the popular Google Groups interface, for instance, allows one to search for any particular term from 1981 to the present, within any of thousands of discussion groups. Etzioni does note, however, that the information retrieved this way is largely of the cognitive type. In other words, it is not always interpreted in the same way by an outsider to the group as it is interpreted by a member familiar with the in-groups' identity and meaning structure. "CMC systems are much better at retrieving cognitive information, such as text of resolutions previously passed by the town's council, past budgets, and earlier voting results, than at evoking the communal past" (Etzioni 1999:10). Nonetheless, there is a significant advantage, particularly when it comes to the factors of authenticity and accountability mentioned earlier, in being able to retrieve, word for word, the claims and statements made by group members. There is also a clear advantage to the researcher performing an ethnographic study of such groups having, in essence, "pre-transcribed" data this may be the main reason, in fact, why the chief method of investigating online community by social scientists to date has been ethnographic.
- Since the messages, or posts, are being used to exemplify and represent the online forum itself, I will leave the message formatting as close to the original as possible without interrupting the flow of the study. This means that spelling, punctuation, grammar and syntax errors made when the message was originally posted to the forum will be reproduced in the examples used in the dissertation without comment. This will provide a better feeling of the life of the group and what the text of the messages looked like when they were initially received. It will also avoid the gratuitous use of the word *sic* throughout the work. Where messages are cut to highlight a particular part, ellipses will be used to denote the cut. Where other editorial comments are appropriate within the messages themselves, they will be offset with brackets and the normal text font.
- Because of the public nature of the forums, the Association of Internet Researchers (AoIR) determines Usenet data has the least impact on ethical issues and risks to subjects. Due to the ability of forum members to choose anonymous aliases when initially posting to the forums and the intentional public quality of Usenet forums, the AoIR places Usenet research in their lowest category of risk, noting in their ethics guidelines that "if the research focuses on publicly accessible archives;

inter/actions intended by their authors/agents as public, performative (e.g., intended as a public act or performance that invites recognition for accomplishment), etc.; venues assigned the equivalent of a 'public notice' that participants and their communications may be monitored for research purposes; then there may be less obligation to protect individual privacy" and "if subjects may be understood as authors intending for their work to be public (e.g., e-mail postings to large listserves and Usenet groups; public webpages such as homepages, Web logs, etc.; chat exchanges in publicly accessible chatrooms, etc.) — then fewer obligations to protect autonomy, privacy, confidentiality, etc., will likely follow" (Ess and AoIR 2002).

- ⁶ "Google...acquired the Usenet discussion service from Deja.com [in February 2001], including its entire Usenet archive of more than 500 million messages -- over a terabyte of human conversation" (Google Groups website, 2004).
- 7 UNIX is the computer operating system used at many large corporations and universities since the 1970s. Most servers storing Usenet messages use the UNIX operating system. Part of the Open Group (http://www.unix-systems.org/what_is_unix/ source initiative, Thehistory timeline.html) describes the origins of UNIX this way: "Since it began to escape from AT&T's Bell Laboratories in the early 1970's, the success of the UNIX operating system has led to many different versions: recipients of the (at that time free) UNIX system code all began developing their own different versions in their own, different, ways for use and sale. Universities, research institutes, government bodies and computer companies all began using the powerful UNIX system to develop many of the technologies which today are part of a UNIX system. Computer aided design, manufacturing control systems, laboratory simulations, even the Internet itself, all began life with and because of UNIX systems. Today, without UNIX systems, the Internet would come to a screeching halt. Most telephone calls could not be made, electronic commerce would grind to a halt and there would have never been Jurassic Park!"
- In relation to the issue of planned obsolescence, newsgroup member 'MSpringer' wrote on January 4, 2000: "If someone truly believes that there was a "mass-conspiracy" amongst programmers and other IS [information systems] they are just as cracked as extreme doomers. C'mon... can you imagine how much work is would take to organize a bunch of people who would rather be playing "Quake" or surfing for porn? How can it be asserted that programmers would rather dust off ancient source code written in COBOL and Fortran? Boy, it certainly was my idea of a good time. Pass the Foil and Egg-Salad..." The allusion to a "Tin-Foil Hat" is commonly understood among conspiracy theorists that the government or aliens have mind-reading abilities (using television or radio waves) that can be disrupted by the metal-shielding of aluminum foil. The "Egg-Salad" part was thrown in jokingly, to point out the utter absurdity of the notion that one's brain-waves can be read through the television set. There were 442 references in the newsgroup made to the Tin-Foil and Egg-Salad Hat, largely made by Pollyannas wishing to impugn the Doomers as taking unnecessary precautions for a problem that will not exist (i.e. Y2k catastrophe).

Governments of the Industrial World, you weary giants of flesh and steel, I come from Cyberspace, the new home of Mind. On behalf of the future, I ask you of the past to leave us alone. You are not welcome among us. You have no sovereignty where we gather.

We have no elected government, nor are we likely to have one, so I address you with no greater authority than that with which liberty itself always speaks. I declare the global social space we are building to be naturally independent of the tyrannies

⁹ Following are segments of John Perry Barlow's A Declaration of the Independence of Cyberspace:

you seek to impose on us. You have no moral right to rule us nor do you possess any methods of enforcement we have true reason to fear.

Governments derive their just powers from the consent of the governed. You have neither solicited nor received ours. We did not invite you. You do not know us, nor do you know our world. Cyberspace does not lie within your borders. Do not think that you can build it, as though it were a public construction project. You cannot. It is an act of nature and it grows itself through our collective actions...

We are creating a world that all may enter without privilege or prejudice accorded by race, economic power, military force, or station of birth.

We are creating a world where anyone, anywhere may express his or her beliefs, no matter how singular, without fear of being coerced into silence or conformity.

Your legal concepts of property, expression, identity, movement, and context do not apply to us. They are based on matter, There is no matter here.

Our identities have no bodies, so, unlike you, we cannot obtain order by physical coercion. We believe that from ethics, enlightened self-interest, and the commonweal, our governance will emerge. Our identities may be distributed across many of your jurisdictions. The only law that all our constituent cultures would generally recognize is the Golden Rule. We hope we will be able to build our particular solutions on that basis. But we cannot accept the solutions you are attempting to impose.

In China, Germany, France, Russia, Singapore, Italy and the United States, you are trying to ward off the virus of liberty by erecting guard posts at the frontiers of Cyberspace. These may keep out the contagion for a small time, but they will not work in a world that will soon be blanketed in bit-bearing media.

Your increasingly obsolete information industries would perpetuate themselves by proposing laws, in America and elsewhere, that claim to own speech itself throughout the world. These laws would declare ideas to be another industrial product, no more noble than pig iron. In our world, whatever the human mind may create can be reproduced and distributed infinitely at no cost. The global conveyance of thought no longer requires your factories to accomplish.

These increasingly hostile and colonial measures place us in the same position as those previous lovers of freedom and self-determination who had to reject the authorities of distant, uninformed powers. We must declare our virtual selves immune to your sovereignty, even as we continue to consent to your rule over our bodies. We will spread ourselves across the Planet so that no one can arrest our thoughts.

We will create a civilization of the Mind in Cyberspace. May it be more humane and fair than the world your governments have made before.

Davos, Switzerland February 8, 1996 In this abridged sample of posts from the tpy2k newsgroup, the authors identify themselves as geeks:

Re: History of Apocolyptic Thought

... I'm not wishing, I'm not a (whatever the F***, Benson is) I'm a geek with 29 years on Big Iron, an MS in Computer Science, and I've seen it happen. ... - Jan 5, 1998 by harry porasky

Re: Survey 1Q-1998 Results

... AD? [For the record, I'm a geek who's been programming since 1977.] - Mar 30, 1998 by Michael N Kirk

Moral obligation to work on Y2k?

... posts, I've mostly lurked here. I'm a geek working on a mix of 75% mainframe 25% other stuff, but not in Y2K work. I've spent a lot ... - Apr 29, 1998 by Todd Hansel

Re: Survey 2Q-1998

... probability it will be as bad as the 1930s or worse. I'm a geek. Because at various times I've combined computer work with other ... - Jun 22, 1998 by Lawrence D. Chelly, Ph.D.

Re: Newsgroup: alt.talk.year2000

... I'm a geek, too (10 years on big iron (COBOL and other dead (or was it "dread") languages), a few in CBD and/or C/S development, did the Y2K ... - Oct 14, 1998 by Terry Gore

However, the term geek is not always quickly adopted as a self-descriptor. On October 7, 1997, Lou Natalie wrote, "In traditional parlance, a geek is the guy in the carnival syde show who does really groos stuff like biting the heads off of live chickens. The term has come to mean a social pariah, and now anyone who is a little "different"," to which Buck Darma replied: "I remember the tune and the words, but not the source. Anybody recall the song that has this chorus (sung by a redneck):

Pencil neck geek, grit eatin' freak scum suckin' pea-head with a lousy physique. He's a one-man no-good losin' streak nothin' but a pencil neck geek.

Mike August wrote on April 1, 1999, "I abhor the term "geek," being old enough to know what it truly means. Forget the crap about how "geeks" have "liberated" or "reclaimed" the word, akin to how blacks have reclaimed or liberated the word "nigger." Like nigger or kike, a geek is a nerd is a dweeb is a person being insulted. And anyone who thinks otherwise is a geek, which makes the term paradoxically OK."

And finally, Robert "Bart" Gentles notes how the government is interested in changing the status of geek:

"I just glanced over this article, but you should take a look at it! http://www.washingtonpost.com/wp-srv/digest/tech3.htm

Here's a little snippet:

The Clinton administration will announce today a broad and unique federal effort to help train more computer programmers, responding to concerns from economists and business leaders that U.S. companies have a critical shortage of skilled technology workers.

The administration's initiatives, which include millions of dollars in grants to fund educational programs, the creation of a nationwide job bank on the Internet and a campaign to glamorize computer-related professions, come as a new survey shows that 1 in every 10 information technology jobs in the United States is unfilled.

A campaign to glamorize computer related professions? Oh, man! What did I start here? Okay, let me give a couple of suggestions (though I'm sure you guys can come up with some fun ones, I still think my NUMBER ONE is the absolute best idea... I might forward it to the White House!):

- 1. Give Scully on "The X-Files" a computer programmer boyfriend (played by the debonair "Bart" Gentles!)
- 2. Create some of those recruiting posters: a young Gen-Xer wearing t-shirt, torn jeans, a bandana, and sporting a goatee, holding pizza in one hand and a mouse in the other. He beckons with raised eyebrow, "WE WANT YOU, DUDE!"
- 3. Make a new TV action series with the hero being a geek. Gueststar Arnold, Steven Segal, Hulk-Hogan, and let the geek beat them all up, at which point he gets the bikini-babes!"
- The Y2k computer problem is a simple error that is built into the software (computer language instructions, often COBOL or COmmon-Business-Oriented-Language) that many computers use. It results from a shortening of the year from four digits to two. When the year changes from 1999 to 2000, computers that contain this type of date code will return an incorrect calculation. For example, an attempt to subtract the latter from the former would fail (00-99=-99, not 1). Another example is the fact that "most programs that calculate the day of the week using only the last two digits of the year will get wrong answers for January 1, 2000, and all subsequent dates. This is because the formulas they use implicitly assume that the dates are in the 1900s. January 1, 1900, was a Monday, but January 1, 2000, will be a Saturday" (Year2000.com FAQ list, 1998). Other varieties of errors occur, but they all have one thing in common: this is a century change language coding problem and it would occur at the turn of any century. "If digital electronics had arrived 100 years earlier, then the multifarious hodgepodge of problems we call Y2k would have gone by a completely different name, perhaps Y19C, Y1900, or even C-20" (Lynch, 1998).

There are five interconnected ways in which Y2k is deemed problematic. First, the bulk of the computer code that has been written is overwhelming. By one estimate, there are over 180 billion lines of COBOL code and about 900,000 COBOL programmers available to fix this code (http://www.Year2000.com, FAQ list, posted 1998, no longer available). That task would have taken each of these programmers one year to complete over five-hundred lines of code per day, with no weekends or holidays taken out. Due to the cost involved and the seeming simplicity of the problem, most businesses did not start their code reprogramming until about a year ago. Secondly, the variety of software programs written for unique business solutions is tremendous, making a single, universal and widely distributable "fix" program (or "patch") impossible. Thirdly, the amount of many computers that are networked together to control everything from manufacturing to communications to military defense is incomprehensibly complex; to determine which computers might fail due to bad code or to attempt to fix all of the code or to replace all computers is impossible. Fourth, while certainly the most common, COBOL is not the only computer language to be effected, nor are businesses singled out for problems; the chips that start some personal computers have known to be non-compliant as recently as 1997. Finally, a problem exists with "embedded chips," which are computer chips permanently placed within electronic devices from VCRs to satellites. These chips are not reprogrammable. 50 billion of these chips are supposed to exist; between 2 billion and 3 2000 related problems year estimated to have http://2000.jbaworld.com/embed/index.htm, 1999, no longer available). In these respects, Y2k is thought of as the proverbial "death of a thousand cuts."

- Moore's Law helps to explain the rapidity of change in the computing field: "The observation made in 1965 by Gordon Moore, co-founder of Intel, that the number of transistors per square inch on integrated circuits had doubled every year since the integrated circuit was invented. Moore predicted that this trend would continue for the foreseeable future. In subsequent years, the pace slowed down a bit, but data density has doubled approximately every 18 months, and this is the current definition of Moore's Law, which Moore himself has blessed. Most experts, including Moore himself, expect Moore's Law to hold for at least another two decades" (from Internet.com's Webopedia, at http://www.webopedia.com/ TERM/M/Moores_Law.html).
- Ed Yourdon himself began contributing relatively early in the history of tpy2k, posting his first message to the group on July 31, 1997 and leaving his last message on Oct 10, 1999.
- Michael Hyatt's *The Millennium Bug* appeared for six months on the *New York Times* bestseller list. Hyatt also contributed monthly to the Christian-oriented *Y2K News* periodical. These sources and many others, ranging from *Y2K-It's Already Too Late* (Kelly 1998) to *Don't Get Caught With Your Pantry Down* (1998), increasingly broke into mainstream book markets and, in a positive feedback loop, garnered free advertising via the news media in the 1998-1999 period. Certainly, many of these publications were opportunistically timed to the advantage of author and publisher pocketbooks alike. Nonetheless, the great attention brought to Y2k by the media no doubt influenced the attitudes and perception of many people regarding the strength of our technological infrastructure at the turn of the millennium.
- I recall very vividly thinking about the turn of the century in the 6th grade, contemplating how old I would be and what the world might look like in twenty years. Certainly I am not alone. Stephen Jay Gould, in fact, reveals his own millennial predisposition in his book *Questioning the Millennium* (1997), which he had planned to write fifty years prior to the event: "I began thinking about this book during the first week of January 1950. I was eight years old...." Later in his life, he recounts what helped him through a bought with cancer: "When I should have died of cancer in the mid-1980s, but recovered instead, I listed only two items as placeholders of all the reasons for cherishing life in our times: 'I dwelled on many things that I simply had to see my children grow up, that it would be perverse to come this close to the millennium and then blow it' (from the preface to *The Flamingo's Smile*, 1985)" (1997:39, 40). The year 2000 is clearly a dominant cultural marker by which we measure progress, change, and an eternal sense of judgment upon not only ourselves, but our civilization.
- In *The Origin of Satan* (1995, NY: Random House), Elaine Pagels writes: "Conflict between groups is, of course, nothing new. What may be new in Western Christian tradition... is how the use of Satan to represent one's enemies lends a specific kind of moral and religious interpretation, in which 'we' are God's people and 'they' are God's enemies, and ours as well." This "us and them" dynamic, fed by secular millennialism, is central to the development of a fundamental dualism in tpy2k.
- The first social movement based on the Millennial prophecy was Montanism, started by Montanus of Phrygia in A.D.156, who "declared himself to be the incarnation of the Holy Ghost, that 'Spirit of Truth' who according to the Fourth Gospel was to reveal things to come. There soon gathered around him a number of ecstatics, much given to visionary experiences which they confidently believed to be of divine origin....The theme of their illuminations was the imminent coming of the new Kingdom: the New Jerusalem was about to descend from the heavens on to Phrygian soil, where it would become the habitation of the saints" (Cohn 1957:25).
- By no means an exact science, the actual beginning of the millennium has been vigorously argued. The White House Millennium Council, in its authoritative wisdom, has defined it this way:

"The Arrival of the new millennium has sparked a great debate; when does it actually begin? Our instincts told us to celebrate on December 31, 1999. But logic says that every millennium is made up of 1000 years - which means that the year 2000 belongs to the second not the third. Credit for this confusing state of affairs goes to Dennis the Diminutive, a sixth century monk who prepared a calendar for Pope St. John I. Instead of beginning his calendar at year 0, Dennis started with 1 A.D. bequeathing us the chronological quandary we face today. So what is the answer? According to the U.S. Naval Observatory, the third millennium begins on January 1, 2001. Even so, most Americans and much of the world focused on the flip of the calendar from '99 to '00. White House millennium programs began in 1997 and will run through January 1, 2001. Greeting a new millennium is a onceyears a-thousand experience... let's make the celebration last!" http://clinton3.nara.gov/Initiatives/Millennium/when.html).

- In a 1999 Washington Post article titled "Bankers Preach The Gospel of Y2K, You're OK", staff writer Hanna Rosin notes that "the American Bankers Association has begun distributing a sample sermon to help clergy debunk that apocalyptic Year 2000 scenario, the one told in certain Christian magazines, in which people, convinced their bank is about to collapse because of Y2k computer problems, rush to withdraw all their money and buy gold bullion. 'Prepare as best you can,' advises the sermon, written by an ABA speechwriter and made available to local bankers earlier this month. 'Then trust God for the rest.' Written in a folksy pastoral tone laced with biblical analogies, it warns people against the fear that some computers' inability to read dates after 1999 will cause massive system collapses. 'We want to go into the new millennium with hope, eagerness and faith in this new century of promise. We don't want to be crouched in our basement with candles, matches and guns,' the bankers' sermon says."
- A common saying is that "attention is the currency of the Internet." Clinton Brooks has said that "information is not the currency of the Information Age because it is limitless—time and attention is the currency" (May 2002). As of 2002, there were 550 billion pages on the Internet. The real heart of the Internet explosion is that network capacity is doubling approximately every nine months.
- The message subject refers to the S/N ratio of the newsgroup. This refers to the acronym for "signal-to-noise ratio," a term commonly used in electrical engineering to refer to the quality of a signal, compared to the amount of interference, traveling through wire. A commonly used reference in Usenet, the S/N ratio refers here to the quality of the conversation in the newsgroup (as evaluated by reference to its chartered purpose), compared to the amount of off-topic posts, flames, spam messages, etc. *Tpy2k* is frequently mentioned as having a high S/N ratio. This would explain the sign-off (signature) message of member Ralph Duque: "news:tech.problems.year-2000 Come for the signal, stay for the noise."
- The term "Pollyanna" originates with Elizabeth Porter's 1913 novel of the same name, whose title character is "a person characterized by irrepressible optimism and a tendency to find good in everything" (Merriam-Webster's Online Dictionary, 2004, at http://www.m-w.com/cgibin/dictionary?va=Pollyanna).
- In Usenet, <G> means "grin" and usually denotes sarcasm or humor, a relatively difficult concept to express in CMC.
- There was no convenient way to measure the number of users or the number of posts for every contributor to the newsgroup; this goal was even more difficult prior to the September 1999 cutoff date for the Netscan utility. Thus, the method for culling the top one-hundred posters to tpy2k was not as concise as would be desired. Initially, knowledge of the top posters to the newsgroup was gained through countless hours of reviewing thousands of messages. With this knowledge, the pseudonyms which drifted to the top were entered into the Google Groups search engine which

provided more accurate estimates (in terms of concrete number of messages sent and the beginning and ending dates of transmission). In one case, at least, (GWNY2K, or Nathan March), many of the initial messages sent by the member were not recorded by the Google server; this became evident when other members started referring to and "snipping" from the messages that were not received by the Google server (or, more accurately, the servers from which Google assembles its own representation of Usenet).

The process was further complicated by the fact that some members used multiple pseudonyms and e-mail addresses. This may have been due to having two different e-mail accounts (one at work and one at home, for instance) or when a member changed jobs. However, these unique addresses could be tied to the same user through similarities in address names and the desire on users part to have a continuity of identity in the group. Of course, where users sought the goals of subterfuge and trolling, different identities could not necessarily be detected, although group members sometimes claimed that two usernames were being used by the same individual based on similarities of writing style, content and ideological position. Ultimately, these claims could never be verified, which speaks to the issues of authenticity and accountability in the group.

The level of accuracy of the Top 100 list decreases as 100 is approached. I feel confident that at least the Top 25 users are accurately represented, if not the Top 50 "Major Regulars", as the sheer number of messages at this position on the scale would be hard to miss after having thoroughly reviewed the newsgroups content. Members 51-100 (who I have called the "Minor Regulars" and the "Lurkers and the Less Devoted") are less reliably held to their positions, particularly as 100 is approached. I have included a number of other members beyond 100, in an effort to recognize other participants. At the end of the list, I have also included a number of other users, the "Pundits" – people from the broader Y2k culture who contributed, even summarily, to the group discussion.

- Even face-to-face relationships involve the presentation of different fronts in everyday life, as Goffman (1959) famously pointed out. One goal of ethnomethodology, in fact, is to break through these fronts to see how they are constructed. The same goal should exist whether one is examining offline or online interactivity, though it may be more difficult to verify and authenticate online fronts.
- The Stanford Encyclopedia of Philosophy describes a Turing machine this way: "The concept of a Turing machine has played an important role in the recent philosophy of mind. The suggestion has been made that mental states just are functional states of a probabilistic automaton, in which binary inputs and outputs have been replaced by sensory inputs and motor outputs. This idea underlies the theory of mind known as "machine functionalism" "
 (at http://plato.stanford.edu/entries/turing-machine/).

The idea that one of the members is a "Turing machine," i.e. a logical robot programmed to respond to human queries in a human-like way, is not as far-fetched as it might sound. For example, Turkle (1995) describes ELIZA, an early version of this kind of "artificial intelligence" which acted as a computer psychoanalyst. The results of were surprisingly good for the simplicity of the program, indicating that perhaps it does not matter so much who is listening when we chat or post online, but rather by simply having a sounding board to chat at (even a computer program that mimics human responses) we can gain recognition of ourselves and what is important to us in the exchange.

"Godwin's Law: prov. [Usenet] 'As a Usenet discussion grows longer, the probability of a comparison involving Nazis or Hitler approaches one.' There is a tradition in many [news]groups that, once this occurs, that thread is over, and whoever mentioned the Nazis has automatically lost whatever argument was in progress. Godwin's Law thus practically guarantees the existence of an upper bound on thread length in those groups. However there is also a widely-recognized codicil that any *intentional* triggering of Godwin's Law in order to invoke its thread-ending effects will be unsuccessful. Godwin himself has discussed the subject" (at http://www.wired.com/wired/archive/2.10/godwin.if_pr.html). Eric Raymond, current ed. Retrieved 2004, *The Jargon File*, at http://www.catb.org/~esr/jargon/html/G/Godwins-Law.html.

Aristotle emphasized that the third, middle term of the syllogistic form of logic was the most important, for it represented the hidden reasoning behind the connection of two related facts. Hegel returned to the study of Socrates' dialectics in his conceptualization of ideal progress and synthesis of theses. More recently, Karl Popper has reiterated the importance of third alternatives: "My schema shows that there may be more than Darwin's alternative, 'survive or perish', inherent in the process of error-elimination: error-elimination may bring out new emerging problems, specifically related the old problem and to the tentative solution" http://www.marxists.org/reference/subject/philosophy/ works/at/popper.htm).

Where an unacknowledged alternative exists, reason fails. Hagbard Celine (in Robert Anton Wilson's *The Illuminati Papers*, 1990) notes that bad reasoning (which she humorously calls "stupidity") has been addressed throughout the ages by some of the most famous thinkers: "Various cures have been attempted, of course. Socrates thought he had found the cure in dialectic, Aristotle in logic, Bacon in experimental method, the eighteenth century in universal democracy and literacy, Freud in psychoanalysis, Korzybski in General Semantics, etc. Although all these inventions have been beneficial to some of us some of the time, they have not stopped the worldwide ravages of the plague, and they have not even abolished totally the occasional lapses into stupidity of their most accomplished practitioners (the present author emphatically included)" (at http://members.core.com/~diedrich/web/stupidity.htm).

In Questioning the Millennium (1997:18), Stephen Jay Gould remarks on the unpredictable nature of the Y2k problem: "In the year 2000, we concentrate our anxiety on a technological glitch that may cause computers to read the 00 of a two-digit date code as 1900 rather than 2000.... I do not, of course, deny wither the power or the desirability of prediction as a goal of science in appropriate circumstances. But I do wish to argue, as the central theme of this preface, that our inability to predict futures for most major questions prompted by millennial angst – and I do mean our inability even to come close, or to specify the possible ranges and configurations, not just our failures in fine-tuning a general forecast – does not record mere human ignorance of a deterministic world, but rather epitomizes the fascinating reality of complex systems as they develop historically through time. Unpredictability, in other words, usually expresses the nature of things, not the limits of reason, or the rudimentary state of human knowledge" (emphasis added).

The thread being examined here is a good example of threading and the interactivity of broadcast in a Usenet newsgroup or similar threading CMC forum. This thread is 151 messages long, was contributed to by 60 users and all of the contributions took place within a 41 day period between November 5 and December 16, 1998. The initial message was cross-posted to the following groups, as were most replies: alt.talk.year2000, alt.folklore.computers, alt.memetics, sci.skeptic, tech.problems.year-2000, uk.tech.y2k. Some of the users contributing to the thread, then, were not regulars of tpy2k but of one or more of these other groups.

It is useful to examine the actual thread structure visually, as it is presented below, for after repeated exposure to this structure, it allows one to grasp more concretely the nature of the thread from a glance (not unlike the examination of code by a computer programmer, or language by an instant translator). The thread below shows the initial posting by User1 on Nov 5, 1998. Subsequent messages all flow from this initial posting. Messages further to the left represent replies to replies, or a continuation and elaboration of the conversation either by two parties (as in the case of messages 6 through 10), or more (as in messages 10 through 16). The zig-zag structure in the middle of the thread indicates that replies are being made to replies as new data, topics, or other information emerges in the discussion (such as the "sub-conversations about the interconnectedness of computer, utility, banking, and transportation infrastructures" mentioned in the text). At the end of

The noted biologist and social commentator Stephen Jay Gould (1997: 56) also acknowledges that our binary logic is somehow tied to our brain structure: "...I must agree with several schools of thought (most notably Claude Levi-Strauss and the French structuralists) in viewing dichotomization more as an inherent mechanism of the brain's operation than as a valid perception of external reality."

this particular thread (but not chronologically at the end the broadcasting) exist many replies to the original post that went unanswered.

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       \-144 User57 Nov 10, 1998
  \-145 User20 Nov 9, 1998
1-146 User58 Nov 10, 1998
\-<u>147 User5</u>9 Nov 11, 1998
\-<u>148 User6</u>0 Nov 12, 1998
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151 User1 Nov 13, 1998
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The Cassandra Project was an initiative taking place in 1999 initiated by Cathy Moyer at a website domain that is no longer available. Its goal was to foster community preparedness for Y2k should a catastrophe occur. The name stems from the tragic heroine of Greek mythology, who was blessed with the gift of prophecy by the god Apollo, but after spurning him he put a curse on her so that no one would believe her forecasts.

In addition to offering relevant, up-to-date information regarding Y2k preparedness (often of a local nature), *The Cassandra Project* was a clearinghouse for local Y2k preparedness groups, the webpage of which listed the names, personal contact, and email address/telephone number of the contact. Many of these groups were of a religious nature, such as the "Concerned Christians for Christ Preparedness Group" of Prescott, Arizona, or the Vineyard Christian Fellowship: Y2K Seminar/Joseph Project of Clarence-Akron, New York. The Joseph Project was a similar initiative regarding Y2k as the Cassandra Project, but with a specifically religious focus.

Gary North mentions The Cassandra Project venomously on his Y2k website:

...When an outfit devoted to warning large numbers of city-dwellers adopts the middle-of-the-road rhetoric of time-serving, risk-avoiding, career-defending government bureaucrats, which Ms. Moyer has, the public will turn the page to read about the Big Game.

I don't know if the grid will go down. I only know that it's July, and out of 7,800 U.S. power companies, about a dozen have announced y2k-readiness of mission-critical systems, using legally vague terms, and there is no third-party verification of these claims.

If that is not cause for public panic, I'd hate to think of what would be. Possibly the launch of 10,000 Russian nuclear warheads (about a third of what they've still got) against the U.S... (at http://www.garynorth.com/y2k/detail_.cfm/5253).

ROTFLMAO is an acronym for Rolling on The Floor Laughing My Ass Off. Usenet members, and other CMC participants, often use such commonly recognized acronyms to express some common sentiment. Other acronyms found in use in tpy2k include:

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BTW = By The Way
FWIW = For What It's Worth;
HTH = Hope This Helps;
HAND = Have A Nice Day; Often used sarcastically and in connection with HTH, as in:
        > Where's the point of alt.stupidity?
          Between the 't' and the 's'. HTH. HAND.
IIRC = If I Recall/Remember Correctly;
IMHO = In My Humble Opinion (sometimes shortened to just IMO, In My Opinion);
LOL = Laughed out Loud;
OTOH = On the Other Hand;
NG = Newsgroup;
TTFN = Ta Ta for Now;
TTYL = Talk to You Later;
TEOTWAWKI = The End Of The World As We Know It (commonly used on tpy2k);
Y2k = Year 2000, of course; computer programmers were often conscious of the small caps
"k" at the end, as a "k" in technical language refers to "kilo," or 1000, as in "kilobyte," but
in the newsgroup a capital K usually slipped by uncorrected, as with spelling errors.
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The following exchange, helpfully followed up by Roland Mollin, explains how newbies kept up with all of the acronyms:

From: Roland Mollin Subject: Re: Datawizard (Whew) Newsgroups: tech.problems.year2000 Date: 1998/12/04

>>> Could you please explain what HTH means?

- >> Hope that helps. It's one of a number of common acronyms used on
- >> the net. There are a couple of URLs that list the more common
- >> ones, but I can't remember them off the top of my head.
- > Thanks. That one has been bugging me for a long time. I searched
- > for it as an acronym but could find no references.

I can usually learn what the geek acronyms mean at this URL: http://wombat.doc.ic.ac.uk/foldoc/index.html

Roland Mollin

The use of emoticons and text symbols (characters viewed from the side, such as :-(for sadness, 8-] for giddiness, or :-(for surprise, shock, or awe, or text such as <g> for grin, to indicate emotion and facial expressions) was also common in tpy2k, as it is in most other CMC forums. According to Mann and Stewart (2000:193), "CMC scripts should be considered 'actual' communication because non-verbal aspects of interaction are explicitly presented within the body of the electronic text (using emoticons, descriptions of movement and expression and so on). Similarly, Kollock and Smith (1996:114) point out that, like audio recordings or telephone conversations, CMC texts have 'the advantage of capturing everything that was publicly available to the participants in that setting'."

- Curiously, when the search "' definition of civility' in sociology" is put into the Google search engine the first site to appear is William Joule's *tpy2k* web page: http://www.jediknight.com/~wmjoule/fix0999b.html, from which, for example, Peter Mill's profile as 'ringmaster of *tpy2k*' is taken (see Appendix C *Personalities*).
- The sense of investment at times was costly as Michelle Hunt expressed in the following message:

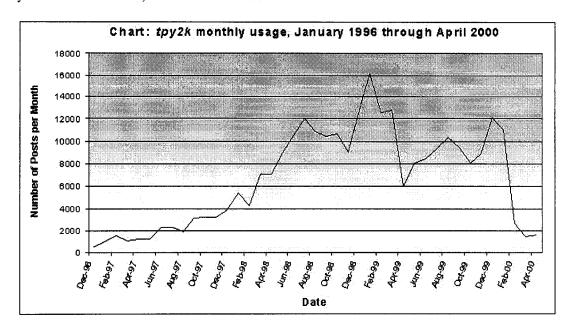
From: klhosta Subject: Re: The "downside" of preparing for Y2K Newsgroups: tech.problems.year2000, misc.survivalism Date: 1999/08/18

Will T. wrote:
> <SNIP>

Great post... you've stated how I feel too. I started lurking here last spring and have learned so much. As I've said before, this preparedness stuff becomes a part of you. Old lifestyles change, and I wouldn't go back to it being like it was before I started. I know I can never be fully prepared, who could? But I'm not sitting around staring at the TV either. I've gained a lot of new skills, had a great time doing different experiments and have reached a level of comparative peace, knowing I'm trying and moving forward and have the resources on hand to last for a while should ANYTHING occur.

Karen

Message volume during the year 2000 date rollover was actually *less* than the volume at the year 1999 date rollover, as this chart indicates:



The nature of the millennium bug was such that many different dates were important indicators of the severity of the programming problem as a whole. On January 1, 1999, any programs that were set to record or calculate dates one year ahead might not have worked probably if they suffered from the Y2k bug. Another date that was important was September 9, 1999, or 9/9/99 – this code, 9999, was often used by programmers to refer to the end of a file, which may have confused some software. As on January 1, 1999, and January 1, 2000, no material consequences emerged beyond a few glitches on this, or any other, date related to the Y2k bug.

The following post points out the recognition that the Doomsayers in the newsgroup were secular apocalyptics:

From: David G.W. Brown

Subject: Re: History of Apocolyptic Thought Newsgroups: tech.problems.year2000

Date: 1998/01/04

GreySkies wrote:

- > According to Stephen Jay Gould (the Harvard prof) the only constant
- > among apocalyptic predictions is that they have been all wrong. He
- > has a book out that describes the major predictions of apocalypse
- > from The Sermon on the Mount to the present day. He thinks Y2K will
- > be another example of apocalypse failing to materialize. I hope he is > correct.

Finally, keep in mind that those people in this newsgroup whom I regard as extreme pessimists are NOT talking about The Rapture. Everything they talk about (e.g. currency collapses) has, in fact, happened historically somewhere, often within the last century or so, and usually the folks _like me_ have sat around like jacklit deer saying "It can't happen here." We can't have a currency collapse here, we can't have a dictator here, we can't have the army failing to respect the civilian chain of command here... we can't have a speculative bubble in the stock market here... the lights _can't possibly_ go out because _it's much too important_ for anyone to neglect...

--- David G.W. Brown

Waiting for This was to be expected though, as this understanding went back to February 1997, in a message from Justin Kroltz:

From: Justin Kroltz
Subject: Re: entry level y2k
Newsgroups: tech.problems.year2000
Date: 1997/02/20

Glen Joslin wrote:

- > I predict that even with the increase in demand for programmers
- > and analysis staff that we see now, and will see accelerate in the
- > near future, there will be more demand after Y2K as these
- > companies crash and burn on the turn of the century.

Definitely. Of course, we'll all have to wait until Monday, January 3, 2000 for our phones to ring. 8-)

Signature files, or "sigs," were commonly used in *tpy2k*. A signature file typically holds work contact information for the individual (as is common in e-mail signatures), and often will quote from a favorite book, proverb, epithet or phrase by a famous individual, or one made up by the newsgroup member themselves. In some cases later in the life of the newsgroup, people used quotes from other members as their own signature, often as a troll to point out poor logic. Another signature file technique was to use "text art," making borders, images or even words out of carefully arranged blocks of text. The text would be unreadable unless one was using a basic font, chiefly Courier, to read their newsgroup messages.

Signature files had conventions, as pointed out in general netiquette guides and by newsgroup members who were sticklers for the details, like Dr. Tom Proctor below, who includes proper sig file rules (a sig file should be four lines, separated at the top from the message text by two hyphens --, and replies should be followed by the following character, ">") in with his sig file. The most famous sig file on *tpy2k* was by far Peter Mill's "If you live within five miles of 7-11, you're toast," likely because of it's prophetic quality. Other sigs included:

Betty Masterson:

Number 1 on the best-seller list! The comp.software.year-2000 FAQ! Be the first on your block to read it! http://www.computerpro.com/~phystad/csy2kfaq.html

Dr. Tom Proctor:

Tom Proctor, Guildford, UK.

Web URL: http://www.merlyn.demon.co.uk/ -- includes FAQqish topics and links. Correct 4-line sig separator is as above, a line comprising "-- " (SoRFC1036) Before a reply, quote with ">" / "> ", known to good news readers (SoRFC1036)

Benny Trout:

"Tax and tax, spend and spend, elect and elect." After 65 years, it's still working.

Steve Winny:

"America is at that awkward stage. It's too late to work within the system, but too early to shoot the bastards. On the road to tyranny, we've gone so far that polite political action is about as useless as a miniskirt in a convent."

- Claire Wolfe, _101 Things To Do 'Til The Revolution_

Mike August:

Y2K -- Where were you when the lights went out?

Michael F. August | Crypto Anarchy: encryption, digital money,
ComSec 3DES: XXX-XXXX-XXXX | anonymous networks, digital pseudonyms, zero
W.A.S.T.E.: Corralitos, CA | knowledge, reputations, information markets,
Licensed Ontologist | black markets, collapse of governments.

Manny Brooks:

When they say, "Eat your spam," I say, "Drink your [purple] Koolaid".

Brook's signature file led to the following exchange:

From: hgw0782

Subject: Re: Why I don't try (very hard) to argue with Y2k skeptics

Newsgroups: tech.problems.year2000, misc.survivalism Date: 1999/03/01

when he says "eat your spam" and "drink your purple koolaid" i always wonder what the hell he is talking about and most of all i wonder if anybody in this group finds it funny in anyway!

From: Manny Brooks

Subject: Re: Why I don't try (very hard) to argue with Y2k skeptics

Newsgroups: tech.problems.year2000, misc.survivalism

Date: 1999/03/01

Who gives a fuck, moron? It's my *signature file*, and it's appended to my posts anywhere. Don't like that? Tough shit. Usenet is a big place. If you can't stand to be around my traffic, then go play with yourself someplace else.

As mentioned before, these servers, complete with archives going back to the origins of the newsgroup, became accessible via the World Wide Web through the Deja News service in 1997. In 2001, when this service started to be cut back (particularly when the archive search was limited to going back only as far as August 15, 1999), it was objected to by the members of the newsgroup:

From: Ralph Duque

Subject: Re: [OT] Weirdness at deja.com? Newsgroups: tech.problems.year2000 Date: 2001-02-11 14:28:04 PST

Ralph Duque wrote:

> >I've found similar ah, ah, let's say anomalies at deja.

> >My suspicion is, has been, and will remain that they really

> >still have the old postings on disk (not archived), but they

> >say they are not there and are artificially windowing the

> >search results due to performance reasons.

>

> MrMidgit wrote:

> Could be... the earliest posting I've been able to retrieve was

> mid-Nov 1998. Have you been able to go even more deeply back into

> the Before Time?

I got a May 1998 one time, though I cannot recall how I arrived there, other than by clicking on PREV messages on a long running thread that had totally gotten off topic. Of course, that may have been due to a bug and/or their

database being screwed up. I.E., maybe the headers were not really the correct ones for the text. I've seen cases on Usenet servers that exhibited that problem, and it's possible that mismatched stuff like that made it to deja.

I'm longing for the good old deja.

Appendix A

tpy2k and tpy2k-tech Newsgroup RFD, FAQ and rmgroup Information

This appendix includes information regarding how *tpy2k* and *tpy2k-tech* were originated as newsgroups, the Charter and FAQ of the newsgroups, and Requests for Discussion (RFDs) on the removal of the newsgroups.

* * *

From: Fred Beerston

Subject: RFD: tech.problems.year2000

Date: 1996/08/14

followup-to: news.groups

archive-name: tech.problems.year2000

organization: . newsgroups:

news.announce.newgroups, news.groups, tech.software.testing, tech.programming, tech.org.acm, tech.lang.cobol, alt.cobol, tech.os.vms, bit.list

serv.ibm-main, tech.admin.policy, tech.databases

REQUEST FOR DISCUSSION (RFD) unmoderated group tech.problems.year2000

newsgroup line:

tech.problems.year2000 Year 2000 compliance: projects and issues.

This is a formal Request For Discussion (RFD) for the creation of a world-wide unmoderated Usenet news group tech.problems.year2000. This is not a Call for Votes (CFV); you cannot vote at this time. Procedural details are below.

All discussion should be posted to news group: "news.groups".

RATIONALE: tech.problems.year2000

Many projects are now in progress for the purpose of converting computer systems and planning new systems to accommodate "Year 2000." There is a need for a dedicated online newsgroup for unmoderated discussion of technical, management, and legal issues related to the conversion of data processing logic to handle 21st-century dates - so-called "year 2000 compliance".

A new newsgroup, "tech.problems.year2000" is being proposed to

supplement the e-mailing lists and world-wide-Web pages which focus on "Year 2000" issues. Considering the high volume of traffic on the aforementioned mail lists, and the need to focus on selected topics, a newsgroup like "tech.problems.year2000" has advantages for many participants, because of its faster access and "thread" structure.

Sub-groups may later be added for specific countries, systems, etc., if needed. The main idea is to provide a forum that will be easier to review than a mail list or Web page, as the volume of messages inevitably increases over the next three years. This structure may further evolve as needed.

The new group is proposed as a member of the "tech.problems" hierarchy because proponents and mentors found it to be the closest match, in terms of content, of all existing "tech." groups.

CHARTER: tech.problems.year2000

This newsgroup will be open to all aspects of the year 2000 century conversion, including:

- * Project-management issues suggested phases in year 2000 projects; how to get projects budgeted; experiences with "offshore consultants"; cost estimating; test strategies; contingency plans; checklists; expected staffing demands.
- * Technical discussions year 2000 problems and solutions on various computer systems and networks. "What we're doing in our project"; suggestions on test setups for specific systems. Programming solutions.
- * Software tools for inventory and/or conversion of affected code. Rating of/experiences with specific tools. Pitfalls to watch out for. Pointers to relevant products and vendor documentation.
- * Announcements upcoming or recently published newspaper or magazine articles, TV spots, etc. on year 2000 issues. Notice of lectures, classes, conferences.
- * Legal and corporate-level year 2000 software issues liability for problems, insurance coverage, officer/director responsibility, software vendor responsibility to customers.

Language shall not be restricted to English.

All posts shall be directly related to the subject of year 2000 compliance. Topics of a political, philosophical or religious nature shall not be posted in tech.problems.year2000.

END CHARTER.

PROCEDURE:

This is a request for discussion, not a call for votes. In this phase of the process, any potential problems with the proposed newsgroups should be raised and resolved. The discussion period

will continue for a minimum of 21 days (starting from when the first RFD for this proposal is posted to news.announce.newgroups).

All discussion should be posted to news.groups.

At the end of the discussion period, a Call for Votes (CFV) will be posted by a neutral vote taker. Do not attempt to vote until this happens.

This RFD attempts to fully comply with Usenet newsgroup creation guidelines outlined in "How to Create a New Usenet Newsgroup" and "Writing an RFD". Please refer to these documents if you have questions about the process.

DISTRIBUTION:

This RFD has been posted to the following newsgroups:

news.announce.newgroups, news.groups, tech.software.testing, tech.programming, tech.org.acm, tech.lang.cobol, alt.cobol, tech.os.vms, tech.risks, bit.listserv.ibm-main, tech.admin.policy, tech.databases

and the mailing list: year2000@hookup.net

Proponents: Edward Florida Fred Beerston

Unofficial tech.problems.year2000 FAQ

(The following is a **Draft** document, prepared by Phyllis Martin for the tech.problems.year2000 newsgroup. She maintains her copy at http://www.computerpro.com/~phymart/tpy2kfaq.html.)

Phymart's Unofficial Year 2000 FAQ

(draft, last updated 1998-04-26)
Phyllis Martin, with contributions and suggestions from Tom Proctor, Butch Dhole, Ronald Brown, and others

This FAQ provides brief introductory answers to common questions regarding Year 2000 problems. It is a general starting point for further research into specific areas of concern. The material presented here will be updated as new information becomes available, and is as timely and accurate as is possible at this time. This document may be copied, in its entirety, for non-commercial or personal use; all rights are reserved by Phyllis Martin, 1998.

WHAT IS THE PROBLEM?

The most common misconception about Y2k is that it is a single problem, when in fact the Year 2000 date roll-over will cause a variety of problems. Because all of these errors have the same root cause, and because the remediation processes for many of the defects are similar, many people refer to all date roll-over problems as a single issue. Unfortunately, this perspective has created a commonly-held belief that the "problem" is trivial although widespread, and that a single solution is possible. It must be clarified that the "problems" are both complex and widespread, and that each problem area requires specific and individual solutions.

It has been common practice for many years to write dates in abbreviated forms, such as:

Mar 3, 98
3 Mar 98
3-3-98
98-03-03

to list just a few of the possibilties. People are generally able to interpret the various abbreviations correctly, and in 2000 will assume, usually correctly, that 3-3-00 is an abbreviation for March third of 2000. Computers, however, are unable to make assumptions. Computer hardware and software must be explicitly directed to perform correct interpretations of the data to be processed. When using only dates from 1900 to 1999, no-one can tell by looking at a

screen or a printout whether the computer has Year-2000 compliant software instructions or not.

WHAT ERRORS WILL OCCUR?

Most often, computers aren't instructed that "98" is an abbreviation for "1998". Some software instructs the computer that "99" is the highest possible value, to be followed by a return to "00". Some software instructs the computer that 99 is a number, that should be followed by 100. Some software doesn't provide any explicit instruction to the computer about what comes after "99".

In some cases, software does command the computer to treat "98" as an abbreviation of "1998". Usually this instruction is performed by inserting the characters "19" in front of the "98". Other types of software tell the computer to add 1900 + 98. There are cases when the addition method will work as well in 2000 as it does now, *IF* the software tells the computer that 99 is a number, followed by 100. In these instances, adding the number 1900 to the number 100 will correctly produce the number, 2000.

In many cases, though, the software instructions to the computer will result in an incorrect year of "00", or "1900", or "19100", or will fail to produce any answer at all. Sorts, comparisons, and calculations performed with incorrect year values will result in a variety of unexpected consequences. Depending on the type of software and hardware, these failures could result in garbled reports or they could cause computers to crash.

IS YEAR 2000 A LEAP YEAR?

2000 is a Leap Year and there will be a February 29th, as decreed in about 45 BC, and not altered by calendar changes instituted by the Papal Bull of 1582 and the Calendar Act of 1752. Some software doesn't recognize 2000 as a leap year, and could cause a variety of problems. There are many web-sites which document the rules for calculating leap years, including

http://www.merlyn.co.uk/misctime.htm and

http://millennium.greenwich2000.com/millennium/info/millennium-faq.htm

WHAT TYPES OF COMPUTER FUNCTIONS ARE AFFECTED?

A wide variety of computers are affected by Year 2000 problems, ranging from personal computers for home use to mainframes that run huge corporations, and everything in between. Workstations, client/server systems, networking hardware, processors embedded in machinery, the globally interconnected "system of systems" - none of these are immune to Y2k problems.

Hardware, "firmware", operating system software, and applications can all be incapable of handling the Year 2000. Simply upgrading hardware doesn't cure problem applications running on that hardware; and compliant software can't run if the hardware crashes.

Any activity performed by any type of computer involving dates after 1999 is at risk, such as software appplications that perform forward planning, financial calculations, processing of taxes, wages, benefits, scheduling, sell-by and expiry dates, school and medical records, retail transactions, reservation systems, transportation, communications -- there is no aspect of our lives that is untouched by computers.

In addition, almost all food processing, manufacturing, power generation and transmission, water and waste treatment, and all the conveniences of modern life are conducted by computerized automation. The software and hardware that run electric power plants are as susceptible to Year 2000 problems as the utility company's metering and billing systems.

WHAT SOLUTIONS ARE THERE?

Date Expansion

The safest solution is to use full four-digit years rather than abbreviations in all dates. Most data entry procedures can be written with instructions for correctly interpreting two-digit year entry, while displaying, storing, and outputting dates with all four digits, and can allow the user to enter four digits if required.

Date expansion is unambiguous and will work correctly until 9999, if the hardware and operating systems allow.

Date expansion has the disadvantage of requiring changes to the storage space allotted for data; conversion of all existing date data; modification of screens, reports, and other outputs; changes in the software code to handle dates correctly; and the possibility that data-exchange partners may not be able to accept dates in expanded format.

Date Windowing

Two-digit year values can be windowed, by assuming that the year must fall within a 100-year range. This method is essentially how abbreviated dates work right now -- the 100-year period is assumed to be from 1900 to 1999, inclusive. If the 100-year range assumption is from 1950 to 2049, and correct instructions are written in the software, the software will perform date processing correctly until 2050. The date window can be set to any 100-year period, or can be interpreted according to the current year (e.g. from 10 years before this year to 89 years after this year).

Date windowing requires no changes to data storage, no conversion of old data, and no changes to screens or reports.

Date windowing has a number of disadvantages, however. The code to perform the interpretation of dates must be written very carefully, keeping in mind the varying requirements of all of the applications which may use or interact with the dates. Within a single application, an employee birth date may require a window range entirely in the past, while a forecasting function will require a range entirely in the future. All users of the application, and any other application that may share the data, must be cognizant of the assumptions made in every circumstance. At some point most windowing techniques will require further modifications to continue to function.

Windowing is inherently ambiguous, and should not be used in applications requiring the exchange of data across systems.

Date Setback

There are two types of date setback techniques, one requiring the manipulation of data, and the other involving the system clock itself.

The year data can be set back by 28 years (or 56; the calendar repeats itself every 28 years), making "98" appear to be "70" (or "42"). This approach is by far the riskiest, as it involves changes to both code and data; requires alteration of existing date values; and requires manipulation of date values at input to subtract the setback, and at output to restore the amount of the setback.

Setting the computer's system clock back by 28 (or 56) years is sometimes an acceptable temporary remedy, for a stand-alone device that has no inputs or outputs from other systems, and if the clock permits a system date of "71" or earlier.

Caveat: a company known as Turn Of the Century Solution (TOCS) has received a patent from the U.S. Patent Office regarding a specific type of date setback procedure. The patent description mentions the prior existence of a 28-year date setback technique, so it is unclear what specific methods or procedures have actually been patented.

WHAT ARE THE CONSEQUENCES OF YEAR 2000 PROBLEMS?

It isn't possible to predict right now (April 1998) how many computer systems won't get fixed in time, or how badly the failed systems will affect our lives. Nobody really knows whether most people will muddle through somehow, or if civilization will collapse. There are likely to be wide variations in the quantity and the quality of remediation efforts; and geographical differences in the impact of failed computer systems on society.

Many people tend to be myopic in their understanding of the extent to which "first-world" technology relies on computers. To date, an estimated 25 billion or so processors have been sold. This is 3-4 processors for every person alive on Earth. On average, many thousands of lines of code have been written per processor. The amount of communication between processors is beyond estimating. All of this has the potential to lead to chain-reactions of failures that are stranger than any fiction. There is a very common tendency for us to say, "I don't know what all might happen, therefore nothing much (or a huge amount) will happen." In truth, the future cannot be predicted even in broad terms.

The social consequences of possible widespread computer failures are beyond the scope of this FAQ.

WHAT ABOUT MY PC?

Date Rollover

On many PCs, the clock will go from 1999-12-31 to 1980-01-04. On some PCs, it may look like the clock rolled over correctly, but after you turn it off and back on, the date will be wrong. Most computers will remember the correct date after being manually set, although some older PCs can't be forced into 2000 no matter what you do. DON'T set your PC system date ahead without first taking safety precautions to protect your PC, software, and data.

Leap Year

2000 is a Leap Year and there will be a February 29th, so there will also be 366 days in 2000. Some software doesn't recognize these days, and could cause a variety of problems; incorrect date roll-over on 2000-02-29, 2000-03-01, 2000-12-31, and 2001-01-01; and day-of-week errors after February of 2000.

Inaccurate Time-keeping

A small number of PCs are unable to maintain the correct date and time consistently after 2000. A test to identify this defect, known as the Skatch-Joslin Effect, and a possible software remedy are being tested at this time. This FAQ will be updated as more information becomes available.

Peripheral Devices

There are no **known** Year 2000 problems with printers, modems, scanners, or other devices commonly connected to PCs. In some cases driver software may have to be updated. Vendors generally provide information for specific models.

HOW CAN I TEST MY PC?

Setting the system date ahead for testing may have adverse consequences; at worst, the PC may crash and become unbootable. Licenced software and passwords may expire; forward-dated records may be generated or "too-old" records deleted. Processing centres should test on isolated systems. However, it is usually safe to test a stand-alone PC by booting to DOS from a clean system (bootable) floppy disk, and running no applications — after making and testing a backup of the hard drive. There are a number of step-by-step guides to safe testing procedures:

http://www.cinderella.co.za/pccomply.txt (the safest and most comprehensive guide)

http://www.sba.gov/y2k/cdc2.html (a good step-by-step test
procedure for PCs)

There are a number of software test tools to automate the process, and some that promise to fix incorrect dates automatically. Please see the list of URLs below.

HOW CAN I MAKE MY PC AND SOFTWARE COMPLIANT?

Start getting accustomed to using the "YYYY-MM-DD" date format now. For a helpful discussion of the ISO-8601 date format recommendations, see http://www.aegisl.co.uk/y2kiso.htm

In Windows, set the default date format to year/month/day order, with 4-digit year and leading zeros in month and day. Most current Windows software applications use this default setting, so many applications will use this format as soon as the Windows default is set correctly. However, all applications should still be checked, and the date default set if necessary. In addition to familiarizing yourself with this date format, applications that truncate date fields or use date values incorrectly will be easier to identify. See Ned Masterson's site for excellent instructions, notably: http://www.cinderella.co.za/cindmeth.htm

Ask vendors about Y2k compliance before buying new software or upgrades. Many of the sites listed below provide compliance information, known problems, or safe testing procedures for some common software packages.

ARE THERE OTHER PROBLEM DATES?

Yes. The Global Positioning System (GPS) week number will roll over from week 1023 to week 0 in August 1999. The clock on some Macintosh computers cannot be set after 2019. Asteroid 1997 XF11 will miss Earth in 2028. UNIX has an overflow problem in 2038. For a list of critical dates, see http://www.merlyn.co.uk/critdate.htm

WHAT CAN I DO?

Personal Preparation

Personal preparation can be as simple as stocking up on candles, food staples, potable water, and batteries; or as all-encompassing as moving to a rural location and becoming as self-sufficient as possible. There are as many opinions on how to ensure personal safety as there are online resources for every level of preparation. Several of the sites listed below are good starting places for individual planning efforts. Obtaining paper copies of important records; writing to service and utility providers requesting information on their compliance and contingency plans; making sure to have some cash on hand and a full fuel tank in the car — these are some cheap, easy, very basic precautions everyone should take.

Raising Awareness

Write letters of enquiry to government representatives and agencies, service and utility providers, all the businesses and organizations you rely on to maintain your lifestyle. Don't forget to ask questions of your employer! Several of the URLs listed below include sample letter templates that you can use.

Talk to your family and friends; they might think you're crazy, or they might invite you to visit their rural farm over Christmas and New Year's of 1999-2000!

WHERE CAN I FIND MORE INFORMATION?

Further reading is essential. Very many articles, of all sorts, are available. The following is just a small sample of many helpful sites.

(URLs verified on 1998-03-30)

Tim Hoodes
http://www.euy2k.com/index.htm

Ned Masterson
http://www.cinderella.co.za/cinder.html
http://www.cinderella.co.za/minifaq.txt

Fred Fingress
http://www.granite.ab.ca/year2000/index.html

Dan Westcreek
http://www.elmbronze.co.uk/year2000/index.htm

Glen Joslin
http://www.intranet.ca/~glen.joslin/bestif/index.htm

Perry Knowlton http://members.com/PanicYr00/Home.html Dave Elmwood http://www.prepare4y2k.com/

Tom Proctor (Year 2000 and Miscellaneous Information Sections) http://www.merlyn.co.uk/~proctor

Westergaard Year 2000 http://www.y2ktimebomb.com/

Cassandra Project
http://millennia-bcs.com/CASFRAME.HTM

Ivana's Site, and Web-Ring for Y2k sites
http://www.y2klinks.com/
http://www.y2klinks.com/ring.htm

Greenwich 2000 http://millennium.greenwich2000.com/millennium/year2000/index.htm

Computer Professionals for Social Responsibility http://www.cpsr.org/y2k/

AIAG (Automotive Industry Action Group; embedded systems) http://www.aiag.org/testproc.html

Institute of Electrical Engineers
http://www.iee.org.uk/2000risk/Welcome.html

Electric Power Research Institute
http://www.epriweb.com/year2000/

Ed Yourdon http://www.yourdon.com

From: Barry Spring

Subject: 2nd RFD: tech.problems.year2000.tech moderated

Date: 1998/08/26

Message-ID: <904115307.21087@isc.org>#1/1 Archive-Name: tech.problems.year2000.tech

Approved: newgroups-request@isc.org

Followup-To: news.groups

Newsgroups:

news.announce.newgroups, news.groups, tech.problems.year2000, alt.talk

.year2000,uk.tech.y2k

REQUEST FOR DISCUSSION (RFD) moderated group tech.problems.year2000.tech

This is a formal Request For Discussion (RFD) for the creation of a new moderated group tech.problems.year2000.tech. It is not a Call for Votes (CFV); you cannot vote at this time. Procedural details are below.

CHANGES from previous RFD:

The proposal is now for a moderated group instead of unmoderated, in response to virtually all discussion of the previous RFD. Current thinking is to use very lite moderation until it is obviously not working. Also, the charter has been modified to look much more like the tpy2k charter.

Newsgroup line:

tech.problems.year2000.tech Fixing date-related bugs. (Moderated)

RATIONALE: tech.problems.year2000.tech

The newsgroup tech.problems.year2000 has, virtually since its inception, been overrun by predictions and speculation about what might or might not happen to the infrastructure and to society in general when/if remediation of the year-2000 problem fails. This speculation tends to generate on the order of 300 messages per day; clearly showing the need for such a group. However, the original purpose of the group is not being served well, and so this is technically a recommendation for a split. The new group would provide a forum for technical help for remediators of year-2000 problems, which is needed now more than ever. While it might be raised that these ng's will have limited life, there are a class of related problems that will continue to be discussed well into next century.

Current deja-news stats:

tech.problems.year2000 - 19041 messages in standard archive of these, 5546 contained one of the following words: (Doom or butthead or collapse or death or denial or pollyanna or stock or survival or clinton or asia or gold or water or food)

uk.tech.y2k - 798 messages in standard archive

CHARTER: tech.problems.year2000.tech

This newsgroup will be open to technical aspects of the year 2000 century conversion, including:

- * Technical discussions year 2000 problems and solutions on various computer systems and networks. "What we're doing in our project"; suggestions on test setups for specific systems. Programming solutions.
- * Project-management issues suggested phases in year 2000 projects; how to get projects budgeted; experiences with "offshore consultants"; cost estimating; test strategies; contingency plans; checklists; expected staffing demands.
- * Software tools for inventory and/or conversion of affected code. Rating of/experiences with specific tools. Pitfalls to watch out for. Pointers to relevant products and vendor documentation.

Moderation policies:

Language shall not be restricted to English. All posts shall be directly related to the subject of year 2000 compliance. Topics of a political, philosophical or religious nature shall not be posted in tech.problems.year2000.tech. No binary/HTML posts. Initially, we hope to keep the moderation lax, and allow most non-spam posts.

END CHARTER.

MODERATOR INFO: tech.problems.year2000.tech

Moderator: Stan Lawrence

Stan has been active in Usenet since 1988. He is the FAQ maintainer for an alt group currently, and has a firm understanding of moderator issues.

END MODERATOR INFO.

PROCEDURE:

This is a request for discussion, not a call for votes. In this phase of the process, any potential problems with the proposed newsgroups should be raised and resolved. The discussion period will continue for a minimum of 21 days (starting from when the first RFD for this proposal is posted to news.announce.newgroups), after which a Call For Votes (CFV) will be posted by a neutral vote taker. Please do not attempt to vote until this happens.

All discussion of this proposal should be posted to news.groups.

This RFD attempts to comply fully with the Usenet newsgroup creation guidelines outlined in "How to Create a New Usenet Newsgroup" and "How to Format and Submit a New Group Proposal". Please refer to these documents (available in

news.announce.newgroups) if you have any questions about the process.

DISTRIBUTION:

This RFD has been posted to the following newsgroups:

news.announce.newgroups news.groups tech.problems.year2000 alt.talk.year2000 uk.tech.y2k

Proponent: Barry Spring

CHARTER:

tech.problems.year2000.tech

This newsgroup will be open to technical aspects of the year 2000 conversion including:

- * Technical discussions year 2000 problems and solutions on various computer systems and networks. "What we're doing in our project"; suggestions on test setups for specific systems. Programming solutions.
- * Project-management issues suggested phases in year 2000 projects; how to get projects budgeted; cost estimating; test strategies; contingency plans; checklists; expected staffing demands.
- * Software tools for inventory and/or conversion of affected code. Rating of/experiences with specific tools. Pitfalls to watch out for. Pointers to relevant products and vendor documentation.

Moderation policies:

Language shall not be restricted to English.

All posts shall be directly related to the subject of year 2000 compliance. Topics of a political, philosophical or religious nature SHALL NOT be posted in tech.problems.year2000.tech.

No job postings.

No binary/HTML posts.

Single, short announcements of Y2k products (either new or significant upgrades) are acceptable, but should refer to Web pages for details.

We hope to keep the moderation light, and allow most non-spam posts.

END CHARTER.

Moderator's annotations

Moderator's annotations:

The charter is almost identical to the original charter for tech.problems.year2000. The main difference is, this group is moderated. "THIS TIME WE MEAN IT."

Based on the discussion in news.groups:

- * Please remember that the UNMODERATED group tech.problems.year2000 remains open. We're not the only forum available to you!
- * All approved posts will be PGP-signed by the modbot using PGPMoose.
- * The moderator does not edit posts. They are either accepted as-is or returned to the sender with an explanation. To get a reply your email address must be valid; the modbot will not try to remove any "NOSPAM" strings (except the literal "nospam.") before replying.
- * If you think your post was rejected in error, your appeal will be reviewed by a third party (the newsgroup proponent). This is automatic if you use the "Reply-to" address given in the modbot's rejection notice.
- * If you feel that someone else's post should not have been approved, please address your complaint to the moderator rather than posting a followup to the group.
- * To avoid flames over netiquette issues, the moderator may ask you to correct a technical problem with your post. To make this as objective as possible, there is a written list at

http://www.cin.com/~tpy2kt/errs.htm

that will explain the sort of problems we want to avoid.

* We explicitly accept ON TOPIC commercial ads and press releases. We will accept two per calendar quarter for the same product or service. Attempts to re-post anything that was accepted less than 45 days ago will be treated as a duplicate (i.e. an accident, to be rejected without prejudice).

Boilerplate messages

For your information, here are the pre-recorded messages which the tpy2kt modbot may send when it rejects a post. Please understand that these messages may not be a perfect fit for a given situation.

- Off Topic [hyperlinked]
- We Need to Talk [hyperlinked]
- Excessive Crossposting [hyperlinked]
- Duplicate [hyperlinked]
- Personal Conflict [hyperlinked]
- No HTML, Please [hyperlinked]
- We're Not a Test Group [hyperlinked]
- Why You Don't Want to Spam Us [hyperlinked]

- Excessive Quoting [hyperlinked]
- Miscellaneous [hyperlinked]

A personal note from the moderator:

If the fact that this group is moderated bothers you, you should realize that there are more than 32,000 other newsgroups which I don't moderate.

Even if something is off-topic here, it may still be important. I accept that. I'm not here to belittle your beliefs or concerns.

Even though something is important, it can still be off-topic here. We asked for one group out of 30,000+ where we can talk about Y2k code issues on a professional, technical level. I'm here to keep it running, not to argue about it or apologize for it.

Let's crank code.

Moderator's address: tpy2kt@cin.com Submissions: tpy2kt@stump.algebra.com

Remove Group Messages:

From: Gerry Hogart

Subject: The Future of tech.problems.year2000

Newsgroups: news.groups, tech.problems.year2000

Date: 2000/01/18

This is not a formal Request for Discussion (RFD). This is a preliminary attempt to discuss the future of the newsgroup tech.problems.year2000. This newsgroup was established for the discussion of computer problems related to the rollover to the year In 1997 or 1998, the newsgroup became largely a forum for those expecting problems associated with the rollover to cause severe economic and social disruption (e.g., due to failure of electric and other utilities) and for discussions of planning and preparedness for those problems. Much of the traffic in the newsgroup came to consist of flame wars between those who expected severe disruption, who came to be known as 'doomers', and those who discounted the likelihood of disruption due to rollover and expected the rollover to be smooth, who came to be known as 'pollyannas' or 'pollies'. In 1998 and 1999 the newsgroup tech.problems.year2000 was extremely active, although much of the traffic was off-charter (e.g., due to a political or religious nature contrary to the charter) or only marginally oncharter (e.g., flame wars which digressed from the original focus). In 1998 a moderated newsgroup for the discussion of technical issues associated with rollover, tech.problems.year2000.tech, was established, largely in response to the flame wars and off-charter threads of tech.problems.year2000.

The rollover has occurred. While the period in which rollover problems may be encountered is not yet over, most of the potential problems have already been addressed. The bulk of remaining potential problems associated with rollover should be encountered or avoided not later than 1 March 2000. For example, monthly billing cycles containing a mixture of transactions from 1999 and 2000 should be completed in February 2000. Any problems resulting from incorrect leap year coding will be encountered either on 29 February 2000 or 1 March 2000. There will continue to be a few potential exposures for rollover problems for the remainder of the year 2000 (e.g., quarterly and fiscal year cycles), but they will be few in number compared to the large number of exposures in January and February 2000.

The intended purpose for tech.problems.year2000 will have been largely completed by 1 March 2000. In 1999 the traffic in the newsgroup consisted mostly of flame wars rather than of technical discussions of remediation strategy. In January 2000 the traffic is even more heavily slanted toward flame wars, since most of the technical issues have been solved. Consideration should be given to eliminating the existing newsgroup tech.problems.year2000 by moving its remaining traffic into other groups.

One suggestion has been made that remaining technical discussions be merged into tech.problems.risks. It should be noted that tech.problems.risks is a moderated newsgroup. There may be other tech.* newsgroups that would also be appropriate for the few remaining discussions related to rollover. Discussions of preparation for survival of social disruption can be continued in misc.survivalism; some threads in 1999 were cross-posted between tech.problems.year2000 and misc.survivalism. Flame wars between 'doomers' and 'pollyannas' or 'pollies', which have largely degenerated into arguments over whether doomers should be blamed for incorrect predictions or credited with creating awareness that avoided disaster, should now be moved to an appropriate soc.* or talk.* newsgroup that welcomes flame wars.

I have not collected or computed traffic statistics for tech.problems.year2000. I have not researched all of the possible newsgroups into which tech.problems.year2000 traffic can be merged or moved. This is not a formal Request for Discussion (RFD), but is a preliminary effort to discuss the future of the newsgroup tech.problems.year2000.

- - Gerry Hogart

From: Pat Michaels

Subject: Discussion: rmgroup tech.problems.year2000

Newsgroups: tech.problems.year2000, tech.programming, tech.lang.cobol,

news.groups

Date: 2004-02-26 10:53:56 PST

This is a discussion concerning the removal (rmgrouping) of the newsgroup "tech.problems.year-2000". This is not a formal call for votes, nor is it a threat of rmgrouping the newsgroup without a vote.

I begin with some history, followed by a discussion of the newsgroup topics today and the people posting articles to the newsgroup today. I end with some conclusions. An appendix contains a listing and classification of some recent threads in the newsgroup.

This article is intended to provoke discussion, in the hope that someone with more time on their hands than I have will be moved to hold an actual vote on rmgrouping the newsgroup. I will not formally propose or administer such a vote, however.

History

The newsgroup "tech.problems.year2000" ("tpy2k" in this article) was created in 1996 in order to discuss the "Year 2000 problem". This was the problem, thought to be widespread at the time, of the "Year 2000 bug" in software. The "Year 2000 bug"

or "Y2K bug" was a generic term for any fault in software that would cause inappropriate software behaviour on or around Jan. 1, 2000. It was thought that many software systems might have such faults because many software systems stored dates (e.g. 20 Sept. 1987) with only two digits for the year (e.g. 20-09-87), a strategy that would no longer work as soon as the year 2000 arrived.

The first posts archived on Google Groups from tpy2k appear to be from 6 Nov 1996. Over the next few years, until 1 Jan 2000, many software systems were revised or replaced due to the threat posed by the Y2K bug. During that period of time, tpy2k was a forum in which people were able to express their thoughts and opinions on this important topic. Now, over four years since 1 Jan 2000, the newsgroup is no longer necessary to the same degree, and some would say it is almost completely unnecessary.

In the first years of the newsgroup's existence, discussion about the Y2K problem evolved into sometimes-vehement debate between the so-called "doomsayers" or "doomers", characterized as having an overly-pessimistic attitude to what might happen, and the "Pollyannas" or "pollies", characterized as having an overly-optimistic attitude. Some of the discussion on the newsgroup today appears to be a continuing flame war between the "doomer" and "polly" camps.

The Newsgroup Topics Today

On 25 Feb 2004, I analyzed the articles on tpy2k stored on the comprehensive Usenet server "news.individual.net" from 18 Sep 2003 (the date of the first article still stored) to 25 Feb 2004. There were 144 threads, containing a total of 701 articles. 60 of the threads contained more than one article, with the remaining 81 containing only one article each. I classified the threads into 6 types, and counted the number of threads of each type. (The full listing of the threads and their classification is below, after my signature.) The result was:

- Y (Y2K) -- Discussion somewhat related to the Y2K problem:
 4 threads
- R (Risks) -- Discussion related to other, non-Y2K risks of using computers: 10 threads
- P (Political) -- threads (not having to do with the above topics) about politics, conspiracies and issues of corporate governance: 59 threads
- F (Flame) -- threads apparently started by long-time posters in order to flame other long-time posters: 15 threads
- S (Software versions) -- threads in which people pose questions about Windows 2000 and other "2000" versions of software: 4 threads

- I (Irrelevant) -- subjects apparently having little or nothing to do with any of the above topics: 72 threads

The "P" and "F" topics arguably have no place on the tech.* hierarchy at all, and many of the "I" topics are the same. The "R" topics could be discussed on tech.programming or posted to the Risks Digest (mirrored on tech.risks). The "S" topics are probably appropriate for other tech.* groups, such as those intended for discussions of the particular pieces of software in question.

This leaves the four "Y" threads mentioned above. However, on closer inspection, these threads turned out to be "Y2K-related" only in the loosest sense:

- The first thread concerns some software problems at Goodyear, starting with a claim (quickly denied by others) that they were Y2K-related.
- The second consists of one article saying that there was a Y2K-related discussion currently on tech.lang.cobol.
- The third is a link concerning the related 29 Feb 2004 bug (the fault in which software does not realize that 2004 is a leap year), followed by some reminiscences by old posters about the state of the newsgroup close to 1 Jan 2000.
- The fourth is a discussion about the 29 Feb 2004 bug, crossposted to tech.lang.cobol and spawning several "flame" and "irrelevant" subthreads.

I conclude that there was no currently-relevant and serious discussion of issues strongly related the year 2000 problem going on in the newsgroup tech.problems.year2000 from 18 Sep 2003 to 25 Feb 2004.

I did no formal analysis of the threads before 18 Sep 2003. However, I have been reading the newsgroup from time to time since before 1 Jan 2000. I believe that the time period of the above analysis is typical of the newsgroup over approximately the last two to three years.

The Newsgroup Posters Today

94 of the 144 threads on tpy2k during the period of the above analysis were started by one poster, using two aliases. Many of those threads consisted of only a single article, often posting a link to a web page followed by an excerpt and/or a provocative comment. Some, however, led to longer discussion.

Using Google Groups, I looked at the postings for four prominent recent posters over the same period (18 Sep 2003 - 25 Feb 2004). Google estimates that these posters contributed, respectively:

- 269 articles, using two different aliases;

- 155 articles;
- 62 articles; and
- 52 articles.

These four posters therefore contributed 538 of the 701 articles, or 76.75% of the articles, on the newsgroup in that period, with the first poster alone contributing 38.37% of the articles, an average of over two articles per day.

Again, this is consistent with my observations over recent years: the personalities sometimes change somewhat, but a few posters contribute most of the articles.

Conclusion

I conclude that the newsgroup tech.problems.year2000, though very relevant as recently as four years ago, is now a newsgroup dominated by a few personalities rehashing old battles and engaging in off-topic discussion. Since most of the discussion is more appropriate for the alt.* hierarchy, the newsgroup is no longer appropriate as a member of the Big Eight.

The small amount of relevant and semi-relevant discussion on the group could fit in the newsgroup tech.programming, in the RISKS digest and its mirror on tech.risks, or in newsgroups such as tech.lang.cobol that have often contained discussions of the Y2K problem in the past.

Why has tpy2k not been rmgrouped already? This is probably attributable to the fact that very few people want to engage in *on*-topic discussions of the Y2K problem anymore. As a result, few people are around in the newsgroup to complain about the pervasive *off*-topic discussions.

Finally, I conclude that the newsgroup, with 701 articles over the last 131 days, or an average of 37 articles per week, is not a problem that should be ignored. tech.problems.year2000 should be rmgrouped as soon as possible.

Please post your thoughts on this matter. Thanks for your time and patience in reading this.

```
--Pat . (nel mezzo del cammin di nostra vita)
Michaels .uwo ) Merge these two lines to obtain my e-mail
address.@csd.ca ) (Unsolicited "bulk" e-mail costs
everyone.)
```

Appendix: tech.problems.year2000 threads, 18 Sep 2003 - 25 Feb 2004

as stored on news.individual.net

(Types are as referred to in the above article)

Type Num Subject

```
umax Astra 2200 Scanner
i
     1
          Isabel and White Plastic Patio Chairs
i
          This Is Necessary
i
          Wink, wink!
     5
          Computerised Vote Counting
r
          How the Midgit and assorted pollies went astray..
f
     6
i
     7
          fff
     8
          Electronic Vote Counting
r
     9
          Democracy is in the machine.
р
    10
          The Poly Theory
р
          More on Electronic Voting -- UCSC forum
    11
r
          Lookit *mah* hole Ma.. An' ah didn't feel a thang!
    12
r
f
    13
          Porasky-san and his stoic stand
          Ship 'em to Georgia!
i
    14
          Votin' machine.doc
    15
i
          Onstream tape backup ADR2.60ide-06-vtc03 Flash v34d
i
    16
    17
          Conspiracy theorists last longer!
р
    18
          Oh Dear....
r
          Diana feared sabotage!
    19
р
    20
          Spot the signs 101
р
          Y2k bug long term effects hit Goodyear!
    21
У
          One again, conspricy terrists were righto!
    22
р
          Them craaayzee oil people, eh?
    23
    24
          Rays from outta space!
r
          Borland's Quattro Pro 5.0
    25
s
          Bobby's coon dawg!
i
    26
          Why Porasky-san loves blondes..
f
    27
i
    28
          What if indded!
          Krispy Kreme's shareholders babes
i
    29
          Wall Street's scared: Price of coke to fall!
    30
i
          Fifth Estate runnin' a mock!
    31
р
          "War of Ideas"
    32
р
          Coup de gr?ce for the crownies?
    33
р
          The healing powers of LED
i
    34
          Exemple of a *framing* op.
    35
р
          Plato fer dummies
    36
f
          Auld Yeller at the rescue!
    37
i
f
          E'er so slowly...
    38
    39
          See the fireworks at:
i
          Programmer's unpaid overtime.
i
    40
          getting ready to launch
i
    41
          In there own words: Coder's fooleries with votin' machine
r
    42
          Best one-page summary of Iraq Invasion
    43
р
          Offshorin' torture!
i
    44
р
    45
          Common sense..
    46
          Full Faith and Credit ...
р
          Larouche is gaining in the polls: time to frame him!
    47
р
          Another belly flop in the backroom
r
    48
          Jes frame 'em...
    49
р
          Inside and outside Walter Reed
    50
i
          Rev. Moon Editor in chief
    51
р
    52
          Mind games!
р
f
    53
          Music to the ears
          With a *special relation* like this....
    54
р
          Is that you, old goglle?
    55
i
```

New babes' site for ..

Blukett again in the news!

56

57

i

```
58
          Bobby's on his way to the poor house!
р
          Interesting (and refreshingly on topic)
r
          Quicken 2000 Downloads with Mac 9.2.2
    60
s
          Good clean fun, eh what?
    61
i
          How the midgettes fared in Babylon!
i
    62
          Exibit A: an titillatin" experience!
i
    63
          China: Ol' Yeller fer all!
i
    64
          How grand ma did it...
    65
р
          Symptoms o' porousness!
    66
i
          [OT] '1706 House'?
f
    67
          Canada's crooked elites
    68
р
          The Emprah is easily seduced!
    69
р
    70
          That Perle guy!
р
          Merrylander in denial!
    71
р
          The Grandees abroad!
    72
р
          Gawd bliss Murka!
    73
р
          Upgrade to Windows 98
    74
          Edduhmuhcaytin' Murkans
р
    75
          Doomers as wise guys!
    76
р
          Coders still manage..
    77
р
          A site for wise guys!
    78
i
          Bit o' y2k rumble in
У
    79
          CoolTick.com stock ticker for your desktop. FREE
i
    80
           Paging Porasky-san: a pill to attract babes!
f
    81
          Bring the friggin' burro to Gitmo
    82
р
          Accuracy is a concept, Bob.
    83
р
           Yeah, well....
    84
р
           Canada prepares to enforce Islamic law
    85
р
           No Bull - Canadian Animals Barred From Top Rodeo
р
    86
           Air Canada Rewards Staff With Burger Coupon
    87
i
           Bugs crawling back into Canadian beds
i
    88
           Canadian Gitmo Detainee 'Dropped Into Afghanistan'
    89
р
           Easy going Canaduh's is the best place...
р
           No Donkeys, No Monkeys, just a bit of perspective.
    91
i
           Cauze they hates freedum!
    92
р
           For the Barron ranch....
    93
i
           Blonde geek babe does the math!
i
     94
           Martini fer real men!
i
    95
           Political reactions, Canadian style.
    96
р
           You VILL adore us or we VILL kill you.
р
    97
           Unifying Event
р
           bartcop is getting better all the time....
 f
    99
           Vote riggin' in Merka and the Great Florida Codin'
    100
           Chemtrails over NC
    101
 i
           Oooooooh Caaanaaaduuuuuuuh!
   102
           Ya wanna press-releases.....
   103
 р
           The SARS calamity
   104
           Easy on the mayo, said she....
    105
 i
           Le Carr?'s latest!
    106
 p 107
           Sign the petition!
           A parting bit of levity!
   108
           Bobby's X-mass decorations!
 f 109
           The picture of...
 i 110
 p 111
           Texans and gold!
           Codin' fools to unionized!
   112
 i
           Four years later... January 10 meltdown
    113
           Niagara Falls' survivor!
    114
```

```
p 115
          We wish you an ORANGE ALERT xmas - wooo hoooo !!!
p 116
          Best wishes for a safe and happy festive season!
f 117
          Coders' in dire sthraights
i 118
          [OT] Holiday Poetry
f 119
          Mr Dooger havin' a mouthful of eels
p 120
          Only in Canuckistan!
          No panic - but .. Y2K + 4
  121
У
f
  122
          Piddie's bike and the Holidayz
i
  123
          Diskette Bad Sector
p 124
          The news in Merk...er....Iraq
p 125
          WTC7 pulled?
          Red faces about Mars?
r 126
          I've made $9,000 sitting on my ass, you can too, its Easy
i 127
i 128
          New Book From Tom Volinchak, Tommy Volinchak, TommyTunes,
i 129
          $$$ Im at a loss for words THIS WORKS $$$
p 130
          Canadian punk wannabees and the Auld British Laws.....
p 131
          Men of conscience
  132
          What about Vietnam's citizens?
р
          Postal Lottery: Turn $6 into $60,000 in 90 days
  133
i
p 134
          Mumbo-jumbo in Merka...
p 135
          Hutton report warning
          can anyone tell me what software I needed. Thanks.
  136
i
          Sun and climates
i
  137
          Biz is biz!
  138
р
p 139
          Hilarious!
f 140
          Posting for Dr Tom!
p 141
          Hutton the mutton...
i 142
          Sept. 29, 2004!
          scanning software?
i 143
s 144
          office xp file-how to open in office 2000?
```

Appendix B.1

Postings to tpy2k by Volume

November 6, 1996 - April 1, 2004

	The state of the s	E. Children C. Commercial Commerc	
	llie	Top Ten	
MrMidgit	email1	Sep 6 1997 - Sep 8 1999	3
	email2	Nov 6 1997 - Dec 7 2001	9
	email3	Nov 8 1999 - Dec 17 2001	3
	email4	Dec 1 2001 - March 26 2004	
	Totals	Sep 6 1997 - March 26 2004	17
Peter Mill	email1	Oct 27 1997 - Dec 4 2000	6
J. Frank Freieng	email1	Nov 29 1997 - Mar 21 1998	
	email2	Mar 22 1998 - Aug 11 2000	5
	Totals	Nov 29 1997 - Aug 11 2000	6
Marcus P. Sorenson	emali1	Apr 1 1998 - Aug 11 2000	4
(aka MPS)	email2	Oct 27 2000 - Mar 27 2004	
	Totals	Apr 1 1998 - Aug 11 2000	4
Harry Pörasky	ēmail1	Nov 8, 1996 - Apr 3 1998	1
	email2	Apr 1 1998 - Apr 1 2001	2
	email3	Apr 20 2000 - June 16 2001	
	Totals	Nov 8 1995 - June 16 2001	4
Doug Dock	email1	May 13 1998 - Jan 7 2004	4
Mike August	email1	Apr 15 1998 - Dec 18 2002	4
	email2	Jul 10, 2003 - Sep 21, 2003	
	Totals	Apr 15 1998 - Dec 18 2002	4
Michel Portier	email1	Apr. 25-1998 - Jul 31 2001	2
200	email2	Aug 1 2001 - Dec 14 2001	
	email3	Dec 14 2001 - Mar 30, 2004	
$\frac{10}{4}$	Totals	Apr 25 1998 - Mar 30 2004	4
Manny Brooks	email1	Mar 6 1998 - May 20 1998	
	email2	Aug 24 1998 - Nov 6 1998	
	email3	Nov 30, 1998 - Jun 6, 1999	3
302015763 800 ptp	Totals	Mar 6 1998 - Jun 6 1999	1 3
Dan Westcreek	email1	May 10 1997 - May 11 2001	3
	email2	Oct 21 2002 - May 4 2003	
A CONTRACTOR OF THE SECOND	Totals	May 10 1997 - May 4 2003	3

		T		
		The Major	Regulars	
11	eli@goblin.net	email1	Jan 29 1999 - Nov 13 1999	743
			Apr 2 1999 - Jun 14 2001	2050
	A CONTRACTOR OF THE CONTRACTOR	Totals	Jan 29 1999 - Jun 14 2001	2793
12	I.Sauros	email1	July 4 1998 - Feb 14 2003	2610
13	Eric Mantie	email1 email2	Sep 5 1998 - Jun 7 1999 Jan 27 1999 - Jan 31 1999	488 31
_	Water to the second second	email3	Jul 5 1999 - Sep 22 1999	393
	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	email4	Sep 22 1999 - Jan 2 2000	1149
		email5	Mar 7 2000 - May 5 2000	18
		emall6	May 28 2002	2000
	37.0	Totals	Sep 5 1998 - May 28 2002	2080
14	Timothy Frey	email1	Jan 2 1998 - Jun 1:1998	146
		email2	Jan 10 1998 - Jun 7 1998	176
	The state of the s	email3	Jun 7 1998 - Mar 24 1999	788
	The second secon	email4	Oct 27 1998 - Feb 9 2002	757 1
		email5	Apr 14 2002 - Sep 14 2002 Jan 2 1998 - Sep 14 2002	1871
15	Ronald Brown	email1	Sep 8 1997 - May 27 1999	23
	-d. Aug 1999	email2	Dec 7 1997 - Nov 3 1998	120
	The second of th	emali3	Nov 4 1998 - Apr 10 1999 - H Jun 4 1999 - Aug 9 1999	16i 26i
	The second secon	email4	Sep 8 1997 - Aug 9 1999	187
16	Richard T. MacNewsome	emali1	Dec 8.1997	
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17	Steve Winny	email1	Dec 2 1998 - Oct 24 2000	176
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18	Ralph Duque	email1	May 22 1997 - Apr 23 1999 Dec 18 1997 - Feb 27 2000	2 162
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19	Bob Roberts	email1	Jun 21 1997 - Mar 21 2003	170
20	Yosef	email1	Jun 10 1998 - Dec 21 1999	56
40	RN Phillip K. Schmeltz	email2	Jun 10 1998 - Mar 23 1999	57
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22	Tim Graham	email1	Aug 24 1997 - Feb 21 20	1543
23	Roland Mollin	email1	Jul 12 1998 - Jan 27 20	1506
24	Y2KMary: (aka Mary in MA)	email1 email2 email3 Totals	Dec 6 1998 - Nov 28 199 Jun 10 1999 - Jul 5 2000 Mar 22 2001 - Feb 23 20 Dec 6 1998 - Feb 23 20	163 03 21
25	Ulrike Katzav	email1 email2 email3 Totals	Jan 14 1998 - Feb 19 19 April 27 1999 - Nov 8 19 Nov 11 1999 - May 5 20 Jan 14 1998 - May 5 20	99 7 00 669
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27	whitejo	email1	Oct 16 1997 - Apr 2 200	1231
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33	Dr. Tom Proctor	email1	Nov 24 1996 - Mar 11 20	04 1053
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58	Elnadir	email1 email2 Totals	Feb 25 1999 - May 26 1999 May 27 1999 - Jan 3 2000 Feb 26 1999 - Jan 3 2000	247 404 651
59	David G.W. Brown	email1 email2	May 18 1997 - Jan 4 2000 Dec 19 1999 - Jan 12 2002	563 83
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	Ted Sturgeon Jake Cowler	email1	May 26 1998 - Jun 27 2000 Jan 3 1997 - Mar 18 1998	
68	Pratt Jenson	Totals email1	Jan 3 1997 - Jun 27 2000 Feb 13 2000 - Apr 27 2003	574
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73	ftw	email1	Aug 26 1999 - Jul 13 2000	522
74	Murray Shaker	email1	Nov 17 1996 - Dec 31 2003	509
75	krw.	email1	Apr 9 1998 - Mar 25 1999	504
76	Tim Hoodes	email1	Mar 27 1997 - Aug 14 1999	490
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		Totals	Mar 16 1998 - Jan 1 2000	445
78	GWNY2K aka Nathan March	email1	Nov 16 1998 - Apr 18 1999 references back to Nov 16 1998 -	438 Google server NA
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82	Marjoram	email1	Jan 25 1998 - Dec 27 1999	378
84	Barry Hinden	email1	June 6 1998 - May 26 1999	180
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90 PRY	Present Bu	It Less Devoted	310
91 Paul Savak	email1		308
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97 Terry Gore	email1	Oct 22 1998 - Felt 15 1999	24
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105	Robert 'Bart' Gentles	email1	Sep 25 1997 - Jan 7 2000	174
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107	Sue Forte	email1 email2	Nov 11 2000 - Mar 17 2003 May 26 1999 - Oct 8 2000	
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	Calvin Hobbes	email1	Mar 11 1997 - Dec 16 1999	155
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111	Eric Almond	email1	Nov. 8 1996 - Jan 13 1997 Jan 13 1997 - Jun 3 1997	51 43
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	Phil Skulker	email1	Oct 11 1999 - Jun 23 2000	111
	Patrick K. Mahoney	email1	Apr 23 1998 - Sep 8 1998	106
	Brad Laker	email1	Jan 17 1999 - Jan 25 2000	84
	Enrique Garcia	email1	Dec 17 1997 - Dec 20 1999	54
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119	Michael Granger	email1	Apr. 25 1999 - Jan 1 2000	76
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Appendix C

Identity Profiles for the Top Ten Posters to tpy2k

		e Top Ten	
1	MrMidgit (El Doogers)	Sep 6 1997 - March 26 2004	17107
2	Peter Mill (govknow@breton.com)	Oct 27 1997 - Dec 4 2000	6990
3	J. Frank Freleng	Nov 29 1997 - Aug 11 2000	6019
4	Marcus P. Sorenson (MPS)	Apr 1 1998 - Aug 11 2000	4826
5	Harry Porasky	Nov 8 1996 - June 16 2001	4482
6	Doug Dock	May 13 1998 - Jan 7 2004	4350
7	Mike August	Apr 15 1998 - Dec 18 2002	4054
8	Michel Portier	Apr 25 1998 - Mar 30 2004	4029
9	Manny Brooks	Mar 6 1998 - Jun 6 1999	3626
10	Dan Westcreek	May 10 1997 - May 4 2003	3176
	TOTAL	为"2000"。 2000年 1100年 11	58659
	(Gross Total = 445,593)	Top Ten = 13.2% of total posts	

Top Ten Posters to tpy2k by volume, November 6, 1996 - April 1, 2004

1) MrMidgit

"MrMidgit" ("MM"), also known as "El Doogers," is a male COBOL language programmer from Columbia, Maryland. He is married, likely middle-aged, and provides no evidence of having children. He is easily the number one contributor to *tpy2k*, having posted 17,107 messages through April 1, 2004. He is a pollyanna. His first message to the newsgroup appeared exactly one year after the newsgroups initiation, on November 6, 1997, and he has continued to contribute until the present time. Here, fellow member Kaneke Pual describes MrMidgit as a "word merchant":

> ... and moved to an American-controlled, South Seas island

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> to set up a business selling Digital Audio Tape... because
> he thinks that we all could use Samoa DAT?
> MM
Booo! Hisss! (The standard and well deserved reward for any
'good pun') I can smell that one all the way out here in
Hawaii. Gotta tell that one to my Samoan friends. You, Doc,
are what a sportscaster friend of mine once described himself
as: 'a word-merchant' (and a wealthy one, at that.) <grin>
Aloha,
Kaneke Pual
```

In this post, MrMidgit reveals some of his personal life to the newsgroup:

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MrMidgit wrote:
> > Well it has been a Lazy Day... the Little Woman's up in
> > NYC, visiting her youngest sister and cooking up more
> > business-deals; I am left to fend for myself here in
> > Columbia, the Gem of the Suburbs, and I find myself
> > falling back on reflexes of Bachelor Living, doing
> > things like...

Betty Masterson wrote:
> You're *married*? Go figure.
Magnetarson why so surprised? Mantion of her was made a
```

Ms Masterson, why so surprised? Mention of her was made a bit back; she was introduced to Mr Porasky, Mr Louis and Mr Hoodes at the WDCY2K meeting in the Rayburn building.

MrMidgit was known by his catch phrase "but my memory is, admittedly, rather porous," a long-standing joke in the newsgroup. Coming off as difficult to fluster or troll, MrMidgit stayed above the fray in many instances, questioning definition and meaning rather than evidence, which may have contributed to the large difference between the volume of his posts and all others who inhabited the newsgroup.

2) Peter Mill

"Peter Mill," who may or may not go by his given name, has been awarded by another member of the newsgroup the title of "ringmaster" of the *tpy2k* circus. This member goes on in his web-based Y2k newsletter from June 1999 to describe Mill more fully:

Mill is a former commodities broker who left New York several years ago because he had become convinced that an economic collapse was imminent. He landed a job as an electrician and began building his survival compound in rural Virginia.

When he first discovered the Year 2000 computer bug, it validated everything that he'd feared and warned of for all those years. (His own mother had considered him "psychotic.") ... In addition to being the Foremost Guru On Y2k (and if you don't believe it, just ask him), he's a tax protestor and a crack mathematician to boot.

He now [1999] claims to be self-sufficient; that when The Collapse comes (remember, this must always be capitalized and spoken with reverence), he will Be Ready (ditto). (Joule, June 1999).

Obviously a doomer, Mill was the newsgroups' "Gary North," a die-hard survivalist ("There are survivalists, and then there is Mill," says Joule) who unrelentingly proselytized his message of impending catastrophe and preparedness for Y2k. His title of ringmaster is well-earned – newbies in the newsgroup instantly recognized that he was a main character, and requested more information about him from the newsgroup in threads with titles like "Who Is Peter Mill?" Regulars discussed his behavior in threads like "The Peter Mill Fact File". Not everybody believed Mill to be a radical, however. In this message, Bob Pierce defends Mill after a particularly vicious flame:

First, Peter Mill is my friend. It may surprise you to learn that when Peter and I first crossed written swords a year or two ago that I didn't much care for him either. But as I got to understand the *SUBSTANCE* of what he was saying and look past the *STYLE* in which he was saying it, I reconsidered my position....

He has shown clearly why Y2k is not a mere technical problem like the idiot savant Ovachart would have us believe. Thankfully, there are only a few people in this news group that are stupid enough to believe Ovachart.

My advice Eli? You have misjudged and mischaracterized Peter. You owe him an apology as do several others here. We all owe him a good measure of respect.

Bob Pierce Proud Member Of The "Vast Right Wing Conspiracy" Mill's first message can be tracked back to October 27, 1997, and he left the newsgroup almost a year after the January 1, 2000 rollover, with his last recorded message (of only a few post-2000 messages) being sent on December 4, 2000.

3) J. Frank Freleng

"J. Frank Freleng," who likely goes by his real name, describes himself as the "Millennial Infarction Mitigator." A computer programmer by trade, Freleng entered the newsgroup early, posting his first message on November 29, 1997. He was born in Wheaton, Illinois, and lived and worked in Minneapolis, Minnesota while contributing to *tpy2k*. He went to Army boot camp in Fort Polk, LA, and he has at least one child, a son. Freleng is a "doomer-light," nearly riding the fence on the Y2k outcomes. Here, Freleng talks about his family in a way someone might talk with a personal friend:

My family moved from our townhouse (which I purchased in 1977) to our present home in 1982 IIRC [short for "If I Recall Correctly"]. Last summer we replaced my wife's old Mercury Sable wagon with a bright and shiny new Mercury Villager Estate minivan -- with all of the candy.

The minimum cost slightly more than the original price of the townhome (just under \$30K), or about the same as the cash required to close on the house.

Of course, timing is everything. Thirty thousand bucks would have purchased _TWO_ nice homes (and a new car or two) in the blue-color Chicago suburb where I was raised post-WW II. Of course, I used to think that a million dollars was a lot of money back then!

In this post, Freleng and El Doogers (a.k.a. MrMidgit) identify with one another's musical tastes:

^{...} El Doogers wrote:

> Blind Willie Johnson was like the Reverend Gary Davis... a

> low-down, dirty blues player BUT... a low-down, dirty blues

> for Jesus. He recorded about 30 sides (15 disks) between

> 1927 - 30. He was not very old at that time and how

> is anyone supposed to know with which blues 'artists'

> you are and are not familiar?

OBVIOUSLY my guess was "educated" -- in that I suspected the occupation from the name. This is not to say the Deaf Bernie Goldberg would have evoked the same response. But thanks for the heads up, I'll have to seek him out through a friend who owns what is likely the "definitive" R&B record/CD library. Ciao, Frank

Freleng left his final message at *tpy2k* on August 11, 2000.

4) Marcus P. Sorenson

"MPS," or Marcus P. Sorenson, is a project director at a biotech firm in Oakland, California. A picture of him is available at the website where he hosts his C.V., complete with a project history dating back to 1982 and a list of publications in some major scientific journals. MPS might be classified as one of the "Digerati," a computer technician working in the very high tech region of Silicon Valley during its booming heyday. A "militant polly" in the words of Ed Yourdon, Sorenson is left-leaning in his politics and he was a particularly sharp thorn in the side of Peter Mill and other Doomers. His first message to the newsgroup was posted on April 1, 1998 and he concluded his contributions on August 4, 2000. After being asked what his stance on Y2k was, he provided this rather enigmatic, yet personally revealing, response revealing a piece of his personal identity:

In 1987 I bought the first new vehicle in my About Y2k? life. It was an 87 Dodge Caravan, metal-flake blue. I had to go to a meeting in Washington D.C. I had a lot of vacation time accrued so I took 4 weeks vacation plus the week for the meeting, got one of those Sears Snail Shell boxes for the top, put all my camping gear up in the box, and my wife and I and our daughter headed out of the San Francisco Bay Area. Driving across South Dakota at about 69 mph, well maybe 71 or 72, I heard a peculiar noise from the roof. I waited for it to subside, but it did not. I pulled over to the side of the road to check the gear and to my dismay, 3 good sleeping bags, a coleman stove and a duffel bag of assorted camping accoutrements had managed to work their way out of the box to meet their fate on the Interstate probably 20 or 30 miles back.

As I was securing the now nearly empty box, a car with South Dakota plates pulled up in front of me. A very friendly fellow steps out and tells me he's been trying to catch up with me. He opens his trunk and there are the sleeping bags the coleman stove and a duffel bag. The coleman stove had one corner crushed, but it has worked to this day.

--mps

5) Harry Porasky

Porasky acts as a gatekeeper for the newsgroup. An early entrant (he joined on the third day of newsgroup activity), he was a mainstay of the newsgroup. He produced a biweekly report, the *Washington D.C. Y2k Newsletter (WDCY2K)* and aided the cause of the Doomers on *tpy2k*. William Joule nominated Porasky for ringleader but passed him up for Peter Mill in this passage from Joule's website:

... We're trying to find a ringmaster.

There's Harry Porasky, who must be terribly annoyed that Yourdon, North, Kappelman, and a host of other Y2k Gurus have thus far achieved more notoriety than he; should we not give him this tiny bit of Naugha-fame?

Nah, we need someone with a taste of foam about the mouth. \dots (Joule, June 1999).

Porasky was more reserved than others about his Y2k position, but still maintained that serious problems with computer-based infrastructure were likely to be experienced.

6) Doug Dock

"Doug Dock," likely going by his real name, was a police officer for 17 years, before moving to the nuclear security and training business in late 1998. Dock would not make a clear commitment himself to a doomer or polly stance; he called himself a "Pollybrood." Nonetheless, because of a strong stance on survival preparedness, he was identified by most others in the newsgroup as a "closet

doomer." However, he was frequently disinclined to agree with Mill's more flamboyant claims of Y2k catastrophe. In fact, he takes extra measures to demonize Mill, as in this post:

From: Doug Dock

Subject: Re: Mill was righta all along - DC officials

Newsgroups: tech.problems.year2000

Date: 1999/12/19

...Peter says so much and so many different things that no one can tell what the truth about him is anymore. He posts that he collects EIC and brags about getting it in installments. Then he says that he makes too much money for EIC. He says that he wouldn't shoot someone for trespassing and then posts a piece of trollwork where he says that he's glad to see that is agree with him that trespasser should be shot. I've yet to see one news article that gets his background right. For some reason they all get it wrong. Could it be because Peter tells them enough to make them think that he was a New York commodities broker with a Caddy in the garage before he decided on hermitdom?

Peter's a nutcase. Fortunately, except for his Internet access, he's a harmless nutcase.

In a response to a message from the newbie "Taxman," Johnny Ferret labels Dock a

"Queen Doomer in drag":

From: Johnny Ferret

Subject: Re: Hoarders go to jail

Newsgroups: tech.problems.year2000

Date: 1999/12/09

My Dear Mr Taxman,

Welcome to the club! LOL! You will find in time our Mr. Dock is the resident clown, his summations, conclusions, and objective analysis is always blurred and a bit "slanted" when he confronts Peter Mill.

And he is never wrong (his words, in general) And note Mr.Dock I said in general...LOL....

But be aware! Mr. Dock is a Queen Doomer in drag...He has more stores put back than you or I. And as he says, he has had them for years now.

But please show a little patience with the poor fellow. Where it comes to Peter Mill, Mr Dock isn't quite all there, if you get my drift. And as the indians believed, a person not quite playing with a full deck is considered to be holy and not to be harmed.

That's How he plans to go through the roll over! It just hit me! His constant ranting nd raving at Mill could come only from some one not playing with a full deck.

I have to admit he puts on an academy award performance LOL Johnny

Although his sanity is not truly in question (this being a good example of trolling), Dock was a chameleon, breaking the mold of the doomer/polly dichotomy.

7) Mike August

Mike August entered *tpy2k* via it's closest Usenet neighborhood, *misc.survivalism* after cross-posting several articles to the newsgroups. With a clear emphasis on guns and machismo, August set himself up as, if not the ringmaster, then certainly a popular performer under the Doomer tent (perhaps the high-wire act or a trapeze man). Having begun a wise investment streak in 1974, August is now independently wealthy. No references were found to having a wife or children. According to a June 1998 Salon magazine article which featured August, Peter Mill, Harry Porasky, and Gary North, his wealth purchased him significant preparedness: "Says Mike August, the cypherpunk co-founder who is a 20-year veteran of the technology industry and an active Usenet poster, 'I don't know how likely it is to happen, but I know it's a reasonable thing for me to devote five or 10 grand to supplies and generators and whatnot. And then I can sit on my hilltop and ride this thing out without leaving home, which is my intention."

An anarchist, August co-founded the "cypherpunk" (not cyberpunk) community, a loose affiliation of experts committed to preserving the anarchical nature of the Internet through working the 'front lines' of cryptography and codebreaking. He is the author of *The Crypto-Anarchist Manifesto* (1988) (in which he

evokes Marx by beginning the manifesto with the paraphrase "A specter is haunting the modern world, the specter of crypto anarchy"). He has also authored an essay titled "Crypto Anarchy and Virtual Communities," in which he outlines his theory of anarchy and how it connects to the development of communities online:

The basic right of free speech is the right to speak in a language one's neighbors or governing leaders may not find comprehensible: encrypted speech. There's not enough space here to go into the many good arguments against a limit on access to privacy, communications tools, and crypto....The advent of full-featured communications systems for computer-mediated virtual communities will have even more profound implications. MUDs and MOOs (multi-user domains, etc.) and 3D virtual realities are one avenue, and text-centric Net communications are another.... Most of the consequences described here arise from this chemistry of links and nodes: unless nearly all node[s] and links are forced to be transparent, including links to other nations and the nodes in those nations, then the result is that private communication can still occur. Crypto anarchy results (May 1996 at http://www.idiom.com/~arkuat/consent/Anarchy.html#virtualcomm).

Rabidly anti-government, August says, "They take my money, therefore they are threats to me. Try paying a few hundred K in taxes, much of it sent to welfare breeders and those paid to stay home to watch Oprah. Such thieves deserve to be rounded up and forced to pay back what they have stolen. And if they don't, they should be given a bullet in the head and their families billed for the cost of the bullet. I am proud to be leading a 'crypto rebellion' which is making untraceable liquidated" be Millions need to possible. assassinations contract http://www.geocities.com/Heartland/Shores/crypto.html). While this may well be bluster, it is enough for him to gain the attention of government officials - or so he claims. It served the newsgroup members well to remember that August is a master of puzzlement. Unlike Mill, who dropped out, August kept posting to tpy2k long past the year 2000 date rollover, through September 21, 2003.

8) Michel Portier

Michel, one of the participants who brought an international perspective to the newsgroup, seemed well-liked throughout the newsgroup for his humility and sense of humor, in spite of health difficulties. From Montreal, Canada, Michel's first post was in French:

Y-a-t'il des visiteurs québécois ou d'autres régions francophones à ce site? Au Canada, où les conditions climatiques sont sévères, notre première préoccupation doit être la préservation du réseau électrique...

meaning, roughly:

Are any of the visitors on this site inhabitants of Quebec or other French-speaking areas? In Canada, where the climatic conditions are severe, our first concern must be the safeguarding of the electrical supply network...

Michel was not shy about revealing his personal health troubles with the newsgroup. In many posts, he went into detail about his condition:

Early last summer I had to be on schedule if my apprehensions toward Y2k were real. And this meant laboring in the bush to get Plan B going. I had a tight budget and couldn't hire. To make a long story hort I started with a Jeep and U-Haul full of necessities and tools, a 46 ft insulated semi parked on the side of small hollow in knee high grass next to an old summer shack :-]

I have been now handicapped with an colostomy since August 1997. It has been a real burden because the specialised bag (\$10-5days.), glued next to my belly button, were always askew due to sweat and movements. Skin irritation were ever present. itching or burning.

I also had to wear a home made stretch belt over the whole affair because, as bad luck beget bad luck, of a *prolapsus*. It is a kind of an hernia where part of your gut hang in the bag. If a propapsus become too big there is a risk of constriction. One has to either keep the gut in until TSHTF ["the Shit Hits the Fan"] or free flow of said vs hanging gut. I must have pushed back many hundred feet of guts since and it *does*resist easy reinsertion:-]...

When I was operated on first, the surgeon told me right off the bat that I had an inoperable colon cancer 9-12 months old. I knew I was a dead man. 10 days later I was told that no cancer but a bad diverticulite and a pelvian abcess. I got

a bad hiccup for twelve days that was only cured after I got home and rolled up a fat one :-].

Some people have marvel at my energy despite all my problem. Y2k gives me wings because I can feel it into my bones. Just a whisker from months of recriminations, impotence and fear.

But I have make a vow. If we ever go throught this with only minor bumps, I will not utter a sound for a long time and enjoy my endeavors. I am also willing to wear a dunce hat in public at all time :=]

It was likely that sympathy for Michel's troubles, as well as his humble style of communication, diminished the harsher criticisms aimed at other Doomers such as Mill and August.

9) Manny Brooks

Another libertarian and gun-rights advocate, Brooks might be described as Mill's right hand man. A virulent Doomer with little empathy or compassion for anybody, Brooks was responsible for a large share of the remarkably uncivil comments made in the newsgroup (one thread subject reads "Turn on the V Chip -it's Brooks!"). He seemed to hold a serious grudge against Richard T. MacNewsome, as is demonstrated in this post:

From: Manny Brooks

Subject: Re: The world ends in three days

Newsgroups: tech.problems.year2000

Date: 1999/06/04

Richard T. MacNewsome wrote:

>>> Yes, you are not doing anything to help overcome Y2k other than

>>> whine on this ng. I forget!

Brooks replies:

>> More slander from MacBankUS. You don't have the faintest

>> fucking idea about what I am or am not doing. Of course, true

>> to form, you cannot stop yourself from attacking. OCD must be a

>> bitch. You have my pity.

MacNewsome:

> Mr. Brooks, perhaps if you would stop capping each and every post > that I make to this ng with an attack of your own, my comments to

> you would decrease in good order.

...he rails, after stepping back two days in time to fetch an old post of mine to attack.

[flush]

Sorry, fuckley, I'm in no mood to entertain your terms of surrender.

Go piss up a rope.

Believing MacNewsome to have connections to the banking industry, Brooks nicknamed him 'MacBankUS' and 'MacShill'. Many of Brook's posts are 'oneliners', vindictive retorts often intended merely to get the last word. Brooks was largely reviled in the newsgroup.

10) Dan Westcreek

From his online curriculum vita, we discover that Westcreek was "born in Ayr in Scotland on 14th August 1952" and obtained 8 "O" levels and "3" A levels in England. "After 3 years at St. Andrews University, I joined British Airways in 1973, and have been freelance since 1976. I live in Largs with my wife Mable and our two young children, Dara and David, and can speak German and French." Westcreek is a programmer who worked on a very specific Y2k-related computer problem called time dilation, a problem with the real-time clock operation in some computers (in fact, the existence of time dilation, a.k.a. the Skatch-Joslin effect, was highly debated). Westcreek is a fierce defender of capitalism, rejecting claims that COBOL programmers who made money off of fixing Y2k problems were ethically suspect for doing so. Curiously, he also sells a variety of herbal products from Scotland on his website devoted primarily to distributing time dilation effect information. Here, Westcreek shares some personal day-to-day identity information (which grew more common as the newsgroup discussion matured):

From: Dan Westcreek

Subject: Re: (off-topic) Leeching, (was Re: Wanted: Peter M's

recommendations)

Newsgroups: tech.problems.year2000

Date: 1998/01/08

Steve Winny wrote:

>>> Yup, and antibiotics today are more effective than leeching was

>>> I'll take these Modern Times, any day.

I had a chest / throat infection the last 3 or 4 weeks. Not having had an antibiotic for nearly 4 years, I fought it the natural way. Just started an antibiotic on Tuesday and now the infection's gone already. What a waste of 4 bloody weeks.

Unfortunately with modern bugs made more resistant by misuse of antib's, we need stronger and more modern ones to fight the things.

> Same with willow bark tea for pain (asprin) and numerous other

> herbal treatments that gained popularity with the allopaths only

> when they could be refined and controlled by state-sponsored

> monopoly.

>Sorry, one of my hot buttons. . .

Mosquito bites or wasp stings? Take parsley, hyssop, sage and savory, crush in fingers/palm and rub into the puncture. Works wonders. You can also use a pestle and mortar, and bottle the juice in alcohol. Guaranteed. I'd reccommend not drinking the concoction though.

:Dan

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