

# Chapter 4

## The World of Usenet

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During the past several decades there have been important technological breakthroughs. The personal computer, a science fiction dream for generations, is now available as a household appliance in a way that the typewriter or TV were just a few years ago. Also, a public conferencing network called Usenet transported via physical networks like the Internet, UUCP, and others, encourages public discussion and the free exchange of ideas on a world wide scale.

Usenet is a world wide public conferencing network that makes it possible for computer users around the world to have public discussions, raise questions or problems so they can get help, or send e-mail to each other often instantaneously. One user explains that it is like a newspaper where “everyone’s letter to the editor is printed.”<sup>1</sup> Usenet has also been described as a series of electronic magazines. “These magazines, called ‘newsgroups,’ are devoted to particular topics, ranging from questions about UNIX, programming languages, and computer systems to discussions of politics, philosophy, science, and recreational activities.”<sup>2</sup> Usenet has been compared to an electronic town meeting of the world or to a series of electronic soap boxes. Others have observed that “It’s now as if everyone owns a printing press” or even better “a publishing house.”

Computer users with access to Usenet can read articles on a broad range of topics. They can contribute their responses or post articles of their own on any subject in an appropriate newsgroup. Their submissions are then copied electronically to computers around the world which are also part of the Usenet network. Usenet demonstrates what happens when people are encouraged and allowed to develop computer technology.

An important element, according to Gregory G. Woodbury, who has written an account of the early days of Usenet, is that the Usenet software was created under the conditions of the academic Unix license which then provided that the program be put into the public domain. And since everyone involved at the time was working in an academic environment (including Bell Labs which Woodbury notes was “academic really”) where information was shared, the emphasis was on communication, not on copyright or other proprietary rights. “Everyone wanted to be on the Net,” he notes, “and it was clear they were cooperating in doing so.”<sup>3</sup>

The phenomenal growth of Usenet during the early 1980's was an acknowledgment that it was a superior means of dealing with the growing mailing lists on various subjects that had developed on the early ARPANET network. The original script files had been rewritten in C by Steve Bellovin for use at “unc” and “duke”, according to Gene Spafford’s history of the period. Stephen Daniel, Spafford explains, “did another implementation in C for public distribution.”<sup>4</sup> After Tom Truscott made modifications in this program, the software became known as the A News release of Netnews.

“Under the strain of being an international network,” Woodbury explains, “with several new machines being added daily, certain limitations in the basic assumptions made themselves painfully obvious.” The continuing expansion led to a rewriting of the software in 1981 by Mark Horton, a graduate student at the University of California at Berkeley, and Matt Glickman, a high school student. This version was released to the public as B News, version 2.1 in 1982. Then in 1985, the still ever expanding nature of Usenet led Henry Spencer and Geoff Collyer at the University of Toronto to set to work on what is now known as C News which they released in 1989. Spencer and Collyer paid very careful attention to the performance aspects of C News. The result is that the software was able to handle the phenomenal expansion of Usenet.<sup>5</sup> A subsequent version of the Netnews software known as INN was created and used to transport Usenet.

The administration and coordination of this world wide network depends to a great extent on the cooperation and diligent work of the system administrators at the participating sites. In the early development of Usenet, some of these administrators knew each other and worked together to establish a series of general procedures for processes like adding newsgroups. Known as the “backbone cabal”, this group worked together to hash out ways to deal with problems that threatened the voluntary, cooperative nature of the Net.

Those who were part of this informal structure would contact new site administrators who joined the Net. The character of the Net as a voluntary association of people who posted because they wanted to communicate was conveyed. And the fact that posts were entered into the “public domain” was established as an essential principle of the Net.<sup>6</sup>

Usenet is now made up of thousands of newsgroups organized around different topics. The number of groups is constantly growing as there is a procedure established to provide for new groups. If 100 more users vote for a new group than vote against it, the group can be started.<sup>7</sup> This procedure governs new groups in what is known as the “Seven Sisters” hierarchy, which was the collection of the seven newsgroups at one point known as Usenet. Some people have defined Usenet as those sites receiving the seven main groups; comp, misc, news, rec, sci, soc, and talk newsgroups, and the group news.announce.important. Others have defined Usenet as those sites that receive at least one of the newsgroups that appears on the list of Usenet newsgroups. There are also alternate hierarchies which includes alt, gnu, bit and others. A more informal procedure is used for creating for example an alt newsgroup than that used to create a newsgroup in one of the “Seven Sisters” hierarchies. The guidelines provide for posting a proposal or charter for the new newsgroup to the alt.config newsgroup. The proposal is discussed and then the newsgroup can be set up as an alt group when a new newsgroup control message is posted to the control newsgroup.

Many of the people using and contributing to Usenet are people who work with computer technology. Many of these people have a need for Usenet to help with problems they encounter with computer technology. One of the early functions of Usenet was to help identify bugs in new technology and to identify and propagate ways to deal with such problems.<sup>8</sup>

My experience using Usenet has been inspiring. I was interested in discussions involving

economics and the history of economic thought. When I first got onto Usenet, I couldn't figure out where such discussions would take place. I managed to get access to the misc.books.technical newsgroup. I didn't know what the other newsgroups were or how to find out. Not knowing how to proceed I entered the following post:

From: au329@cleveland.Freenet.Edu (Ronda Hauben)  
Newsgroups: misc.books.technical  
Date: 10 Jan 92 07:48:58 GMT  
Organization: Case Western Reserve University, Cleveland, Ohio, (USA)  
Nntp-Posting-Host: cwns9.ins.cwru.edu

I am interested in discussing the history of economics -- i.e. mercantilists, physiocrats, adam smith, ricardo, marx, marshall, keynes etc. With the world in such a turmoil it would seem that the science of economics needs to be reinvigorated.

Is there anyplace on Usenet News where this kind of discussion is taking place? If not is there anyone else interested in starting a conference .economics and how would I go about doing this. This is my first time on Usenet News.

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One of the many responses I received said: "Start discussing on sci.econ. We're all ears."

I received several other responses via e-mail also pointing me to the sci.econ newsgroup or indicating interest in the topic. Also, a computer user from California sent me e-mail with a list of all the newsgroups that existed. Another user from Scotland wrote telling me the name of the news file which listed the names of all of the other newsgroups. It is considered good NETIQUETTE (i.e. Network Etiquette) to help new users and many of the experienced users are very willing to do so.

A few users suggested that I might want to try to start a newsgroup for the history of economics, but that it would probably be a wise idea to either wait awhile until I got used to Netnews before trying to initiate a group, or suggesting I try to get a user with more experience to help.

The list of newsgroups posted on Usenet in newsgroups like news.misc contains descriptions of each group. For example, the newsgroup "sci.econ" is described as "the science of economics."

I have found the discussions in sci.econ very valuable. There are often debates over important economic questions. Many of the questions discussed concern broad social issues – for example, the development of different social forms of society, whether economics is a science, whether the so called "free market" has ever existed to regulate production, etc. There has been discussion of a variety of economic and political issues – like social security, rent control, strikes in Germany, national health care reform, the need for shorter hours of work, plant closures, taxes, the economic

programs of presidential candidates, the role of markets in setting prices, the economic program of Henry George, etc.

Many newsgroups on Usenet are related to computers and computer subjects. There are newsgroups where one can ask questions regarding access to Usenet or about books that are recommended for people who want to learn more about Unix or any other area of computer usage, etc. It is also possible to write to someone who has posted a question and ask them to forward a copy or summary of the responses they receive so the post doesn't have to be duplicated. There are also newsgroups dealing with political issues, social issues, current events, hobbies, science, education, etc.

When a critique of GM plant closures was posted after GM announced that it would lay off 70,000 people, several people sent e-mail saying that it was good to see the post. Thus when someone makes an interesting post, it is possible to send e-mail to the person and begin to correspond, or just encourage the user to continue.

Also, there are political components being developed. For example, there was an announcement that a vote was in progress to determine whether or not there should be a classics newsgroup. If one wrote voting "yes" or "no", the user would then be told to verify that the vote was accurately recorded when the list was posted announcing the final totals. Thus a procedure has been worked out on Usenet acknowledging that votes can't be by secret ballot, but must be open and posted, with the person voting having the ability to verify the outcome.

Unfortunately, there are also frustrating aspects of Usenet. The great variety and number of posts can take considerable time to survey and it is often difficult to keep up with the volume. A variety of software readers have been created, to help deal with this problem.<sup>10</sup> Though these readers have been copyrighted, many are freely available as long as they are being used for personal use, not for profit. Despite the difficulty keeping up with the volume of posts and other problems that have developed in the course of building the Netnews network<sup>11</sup>, many of the users on Usenet are willing to be active participants in the development and working out of the content and form of the network. Many people send e-mail or post public responses when they have something to say about a post. In this way, communication is encouraged, as one person builds on another's contribution, and all become more knowledgeable through the process of democratic discussion and debate.

Usenet has thus evolved a functioning governing structure that is democratic and open in ways that have only been dreamed of in the past. Many of the details of the copying, distribution and propagation of Usenet are done via automatic machinery and programs which require that the system administrators who make the system function work together to solve their common problems. This same kind of cooperative relationship has been encouraged by these system administrators among the users of Usenet and this cooperative standard of activity is known as Netiquette.

Many on Usenet call the structure which functions anarchy. But, Jean Jacques Rousseau, in *A Discourse on Political Economy*, explains that the best laws are those which the population

implements voluntarily rather than via force. “Netiquette” is a system of rules or standards that users on the Net are encouraged to follow. Also, throughout the development of Usenet, commercial traffic and commercial uses of Netnews have been strictly limited and circumscribed for several reasons. Among these have been the need since the early days of Usenet to keep commercial traffic from both escalating the phone costs and the noise (i.e. proportion of useless information to useful information) of Usenet. When the Internet became one of the major transport mechanisms of Usenet traffic, the prohibitions against commercial traffic arising from the public funding of the NSF backbone became a factor.<sup>12</sup> This restriction of commercial purposes has resulted in the open communication and cooperation which commercial agendas make difficult. Thus the governing laws (Netiquette) and structures (cooperative and helpful) are the demonstration that more democratic government is now possible and can achieve significant social advances. On the Net, participants gain from being active and from helping each other. People who post or send e-mail are contributors to the culture and all gain from each other’s efforts. A vibrant and informative bottom up, interactive grassroots culture has been created and a broad, worldwide, informative and functioning telecommunications network is the product of their labors.

Because those who are able to connect to Usenet are connected to people all around the world, an exciting world of people and computers is available to a user who has access to Usenet.<sup>13</sup> Also, the achievement of Usenet demonstrates the importance of facilitating the development of uncensored speech and communication – there is debate and discussion – one person influences another – people build on each other’s strengths and interests, differences, etc.

Traditionally, it would require the labor of many people, much paper, ink, and other supplies to accomplish such a massive communication network via traditional means of newspapers or magazines, etc. With Usenet, however, this communication among people and computers is accomplished via a high degree of automation. By participating in Usenet, millions of people and their computers are connected into – the global telecommunications network. Also, Usenet makes it possible for people to print up their own copies of what is available online, without using all the paper or ink that has traditionally been required for a press. So welcome to the World of Usenet – something very special is happening and it is one of the important achievements of the 20<sup>th</sup> Century.

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#### Notes for Chapter 4

1. See “Interview with Staff member,” *Amateur Computerist*, Vol. 4 no. 2/3, Winter/Spring, 1992, p. 10.
2. *Unix Communications*, by Bart Anderson, Brian Costales, and Hart Henderson, Camel, Indiana, 1991, p.213.
3. Gregory G. Woodbury, “Net Cultural Assumptions,” reprinted in *Amateur computerist*, vol. 6 no. 2/3, Winter/Spring, 1994-5. But he does take note of the concern of some people at Bell Labs that AT&T’s rights in and to Unix source code and proprietary information be protected. Greg however emphasizes that individual posters were concerned with the ability to communicate, not with copyright protection.
4. Gene Spafford, “Usenet Software: History and Sources”.
5. Details are described in the article “News Need Not Be Slow”, by Geoff Collyer and Henry Spencer, USENIX

Conference Proceedings, Winter 1987.

6. Gregory Woodbury's article "Net Cultural Assumptions" describes how the 'public domain assumption' changed when the U.S. government revised its copyright law and became a Berne signatory in the late 1980s. The implications of this change have been debated on Usenet in the past year.

7. But whether the new newsgroup will be carried has traditionally depended upon the system administrators of the largest systems and the new group's inclusion in the list of newsgroups.

8. Conversation in August, 1992, with Henry Spencer about the early days of the Net.

9. E-mail from Adam Grossman.

10. See Gene Spafford's "Usenet Software: History and Sources" for a history and description of many of the software readers now available.

11. Various problems have developed that users need to deal with. Some involve the efforts to impose copyright restrictions on posts on Usenet which would make the copying and propagation impossible; there are some users who try to intimidate people who post by attacking them (called 'flaming'), etc. But these problems must be looked at in the context of the significant advance that this Netnews network represents.

12. The National Science Foundation (NSF) had an Appropriate Use Policy (AUP) governing what was allowed to be transported across the nets that it funded with public moneys. It limited usage basically to research and education activities. As Usenet was transported across the NSFNet backbone, this policy of the NSF helped Usenet to develop as an educational rather than commercial network. (It is questionable whether a commercial network could have been developed, given the secret and proprietary activities of commercial enterprises.) However the AUP restriction is being challenged now by the growing commercial use of networks like ANS (Advanced Networks and Services) a company founded by MCI and IBM that is now part of the MERIT, NSF, ANS organizational chain, which is opening up access to commercial traffic endangering the development and education and research function that the net thus far has achieved. Also, many large corporations, though seemingly restricted in their use of the net to educational and research purposes, are also the backbone sites along which Netnews is transferred. Some corporations use Usenet for their research and educational functions, but run a separate private net alongside of their Usenet operation for their commercial purposes.

13. For a discussion of the value of Usenet, see for example, the article "Interview with a Staff Member" which appeared in the *Amateur Computerist*, Vol. 4 no. 4, Summer, 1992, p. 22.

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