The Amateur Computerist

Table of Contents

Introduction

The year 2022 marked the 25th Anniversary of the May 1, 1997 publication of the print edition of *Netizens: On the History and Impact of Usenet and the Internet* by Michael Hauben and Ronda Hauben. This issue is again part of the celebration of that Anniversary. All four articles are by Michael Hauben. The first three are Chapters 16 and 18 and the "Proposed Declaration of the Rights and Netizens" from the book. The last article, "Participatory Democracy From the 1960s and SDS into the Future On-line" was written in 1995. In these articles, Hauben examined the bigger context and significance of the Net, in particular its political and social dimensions.

The first article, "The Expanding Commonwealth of Learning: Printing and the Net," compares the emergence of the printing press to the emergence of the global computer network and demonstrates how the Net emerging in the 20th Century is continuing the important communication and social revolution that the printing press began in the 15th Century. Just as the printing press essentially replaced the hand-copying of books in the Renaissance, people using computers and computer networks in the last 30 years have been essentially creating a new method of production and distribution of creative and intellectual works. Both printing and computer networking foster an increase of enlightenment and intellectual ferment. Also, print shops and printing houses became social gathering places and social networks of scholars developed.

Similarly, the Net facilitates the formation of netizen social networks. The article traces many parallels between the printing and the computer networking developments five centuries apart. Those parallels should help us "understand why the printing press should be seen as the forefather of the currently developing computer networks."

The second article, "The Computer as a Democratizer" projects that computers and the Net may lead to more democracy. It does that by examining what James Mill phrased as freedom of the press, or liberty of the press. This "freedom of the press" or uncensored press makes possible the free flow and exchange of different ideas so all people can size up the issue and decide their own positions. Mill argues, as does Thomas Paine, that active participation by the populace is a necessary principle of democracy. The personal computer and the Net make possible more uncensored speech and more participation. The article concludes that, "this is an exciting time to see the democratic ideas of some great political thinkers beginning to be practiced." But it adds, hard work by many people aspiring for more democracy is still needed because there still must be the hard fight against tyranny.

The next article, "Proposed Declaration of the Rights of Netizens," was written by Michael Hauben as a New Year's message on January 2, 1994. It was a draft declaration and a request for other netizen contributions, ideas, and suggestions of what rights should be included. Netizens are due these rights, according to the author "in recognition that the net represents a revolution in human communications that was built by a cooperative noncommercial process" and as netizens are those who take responsibility and care for the Net. Inspiration for the Declaration was historic and current expressions of rights and "the current cry for democracy worldwide."

The last article, "Participatory Democracy From the 1960s and SDS into the Future On-line," connects

the 1960s student movement in the U.S. for more democracy led by SDS (Students for a Democratic Society) with the computer and network advances that developed in the 1970s and beyond. SDS analyzed the problem it was addressing in the Port Huron Statement as the lack of any real democracy in the U.S. They felt that the United States society is called a democracy, but had ceased being democratic after the early beginnings of American society. The SDS program included the understanding of the need for a medium to make it possible for a community of active citizens to discuss and debate the issues affecting their lives. While many people made their voices heard and produced a real effect on the world in the 1960s, lasting structural changes were not established. However, the computer movement of the 1970s made an important achievement. It created the personal computer and forced the corporations to produce computers that were affordable by many people. The author argues that the computer and network advances coupled with the availability of personal computers transformed the SDS goal of the 1960s of a direct or participatory democracy into an achievable goal for our times. "These new technologies present the chance to overcome the obstacles preventing the implementation of direct democracy."

[Editor's Note: The following article was posted on Usenet in fall 1963. A later version appeared as Chapter 16 of *Netizens: On the History and Impact of Usenet and the Internet* by Michael Hauben and Ronda Hauben published in 1997 by the IEEE Computer Society, on pages 291-304.]

The Expanding Commonwealth of Learning: Printing and the Net

by Michael Hauben

A revolution in human communications is happening. People around the world are connecting to each other via the new computer telecommunication networks now known as the Net. The Net, in a significant way, is a continuation of the important technological development of the printing press. The printing press might seem to be an unlikely choice for such a comparison considering the similarity that might be seen between the Net and, for example, television, the telephone, radio, or the news media. That is why it is important to compare the current networking developments with the history of printing to understand why the printing press should be seen as the forefather of the currently developing computer networks.

With the invention of the printing press in the second half of the fifteenth century, there arose print shops and printing trades. Printing and the distribution of printed works grew rapidly. In the last quarter of the twentieth century, a global computer network has emerged which gives users the ability to post and distribute their views and news broadly and inexpensively. Comparing the emergence of the printing press to the emergence of the global computer network will reveal some of the fascinating parallels which demonstrate how the Net is continuing the important social revolution that the printing press had begun.

The printing press developed out of a scribal culture surrounding the hand-copying of texts. This scribal culture could only go so far in furthering the distribution of information and ideas. Texts existed, but were largely unavailable for use by the common people. There were very few copies of books as each copy of a book had to be laboriously hand-copied from a previous copy. Relying on scribal culture for access to and distribution of knowledge caused many problems. Texts were often inaccurate as scribes made mistakes while copying them. Since a single scribe usually had access to only one copy of the text he was copying, he had no way to know if he was duplicating mistakes other scribes had made before him. The effect of copying mistakes, or non-exact copies, led to numerous "versions" of the same text. Also, scholars who wanted to use various texts had to travel in order to have a good variety of material to study. The majority of people could not afford, nor did they have the time to pursue scholarly pursuits. In her book, *The Printing Revolution in Early Modern Europe*, Elizabeth Eisenstein writes: "[one] needs to recall the conditions before texts could be set to type. No manuscript, however useful as a reference guide, could be preserved for long without undergoing corruption by copyists, and even this sort of 'preservation' rested precariously on the shifting demands of local elites and a fluctuating incidence of trained scribal labor … wear and tear … moisture, vermin, theft or threat."[1] Under such conditions, scribal efforts did not preserve many valuable texts. Plenty did not survive.

Just as the printing press essentially replaced the

hand-copying of books in the Renaissance, people using computer networks are essentially creating a new method of production and distribution of creative and intellectual written works today.

Around the same time that computer communications networks started to emerge from computer communications research communities in the early 1970s, the personal computer (PC) was developed by students, hobbyists, and proponents of the free-speech movement on the West Coast of the United States. The personal computer became widely available at prices many people could afford. The PC made the power of the multipurpose computer available to a wider cross section of people who otherwise would not have had access to time on a larger minicomputer or mainframe computer which were then owned by universities, businesses and the government. The personal computer movement made computers available to the mass of people in the United States. As computers are multipurpose, they can be used to accomplish many things. A PC can be made to duplicate the functions of a printing press, with the user having little or no professional printing experience. In the past, a skilled printer combined movable type and engravings (woodcut, or otherwise) to mass produce copies of a page combining varied images (text, graphics, etc). The personal computer brings this power from the master printer to the average individual – both in price and availability. The personal computer (e.g., Apple II family, Commodore, Atari, TRS-80, etc. leading to the IBM PC family, the Apple Macintosh family, Amiga, etc.) linked to an electronic printer (first dot-matrix and daisy-wheel, later laser printers) and even more recently to scanners which convert images into usable data – make the production and reproduction of information a common task available to all. Even if one does not own a PC, one can rent time on one in a store. Copy shops (in themselves part of the continual process that made publishing ubiquitous) have begun to have PCs available to rent time on. These advances make the act of publication immensely easier. The personal computer, printers and scanners, however, do not solve the problem of distribution.

The recent development, standardization and interconnection of computers via computer communications networks help to solve the problem of distribution. Examples of on-line utilities include file transfer (ftp), remote login to other computers (Telnet), remote execution of programs, electronic mail (e-mail), access to various information data bases (gopher, WWW),

other information searching utilities (archie, veronica, Lycos), real-time chat (irc), and a distributed news service which allows people to share information publicly and become citizen reporters (Netnews). The two utilities most relevant to this revolution in human communication are e-mail and Netnews (or Usenet). E-mail allows for the private and semi-private distribution of information and communications through messages to a particular person or persons, or to a designated set of people via electronic mailing lists. Netnews allows for the public dissemination of information, opinions and questions in an open forum. When a Netizen makes a contribution to any of the many defined subject areas (newsgroups), anyone from around the world who chooses to read that particular newsgroup will have a chance to read that message. Usenet's potential for inexpensive global distribution represents one major advance of Usenet beyond the printing press.

The printing press developed sometime in the 1460s and spread quickly throughout Europe. The broad distribution of presses ended the age of the scribal culture and ushered in the age of printing. "Unknown anywhere in Europe before the mid-fifteenth century," Eisenstein writes, "printer's workshops would be found in every important municipal center by 1500."[2]

Eisenstein points out that the printing press dramatically increased the total number of books, while at the same time decreasing the number of hours of labor necessary to create books. She argues that this made the transition from hand-copied manuscripts to machine-produced books one of a revolutionary nature, and not evolutionary as claimed in much of the literature about this transformation.[3] Understanding how the printing press unleashed a communications revolution provides a basis to assess if the establishment of worldwide computer communication networking is the next communication revolution.

New communication technologies facilitate new ways of organizing information and of thinking. The invention of the printing press changed the way texts were handled. From its outset, the men who controlled the presses, the printers, experimented with ways to use the printing press to change texts. Textual techniques such as "graduated types, running heads … footnotes … table of contents … superior figures, cross references …"[4] are examples of the ways in which the press broke through some boundaries which had previously limited the production of books in

scribal culture.

Moreover, the new technologies changed the way books were written. The establishment of printing shops in the major European cities formed a common meeting place for scholars and authors from across the continent. The great number of printing presses and printing shops enabled more people to write books and produce works that would be duplicated by the presses. When these new authors traveled they would gather in printing shops to meet other writers and scholars. Thus the printing press facilitated the meeting of minds pursuing intellectual pursuits. The interconnection of people led to the quickening of the development of ideas and knowledge. These progenitors of the printing trade were in the forefront of the sweeping intellectual changes which the presses made possible.[5] Similar connections among people are taking place on the Net today at a much faster rate. And, just as the printers were in the forefront of the printing revolution, so today the developers of computer communications software and hardware and netusers are the first to experience the increased connectivity with other people around the world afforded by the computer networks.

As printing spread, publishers realized the value of utilizing input from readers to improve their product. Since the press could turn out multiple copies of a first edition quickly, many people would see the first edition and could send by letter their comments, corrections and criticisms. Publishers and authors could then use this feedback to write and print second, and third editions, and so on. Mistakes would be caught by careful readers, and printers thus "were also able to improve on themselves." Eisenstein explains that copied mistakes and mistakes in copying common with scribal copies now could be caught by the increasing number of readers. She writes, "the immemorial drift of scribal culture had been not merely arrested but actually reversed."[6]

The Net likewise provides a ready mechanism for the interaction between authors and readers. On the Net, people often keep track of knowledge, such as lists of a musician's records (discographies), or FAQ files of answers to Frequently Asked Questions. Authors of these works often act as both editor and compiler. People send further information, which the keeper of the file often adds. This makes for a communal base of information which is often available to anyone minimally connected to the Net by at least electronic mail. The constant updating of information on the Net continues the tradition of revising intellectual work introduced by the printing press.

Eisenstein's description of how communal information was gathered is similar to how such procedures work on the Net. She writes: "But others created a vast network of correspondents and solicited criticism of each edition, sometimes publicly promising to mention the names of readers who sent in new information or who spotted the errors which would be weeded out."[7] People who ask questions on the discussion sections of the Net (either Netnews or Mailing lists) often summarize the answers they receive and post this summary back to the Net. When doing this, many compilers include acknowledgments to the people who supplied the information. Also when people send in corrections to an FAQ, the keeper of the FAQ often makes a list at the end thanking these individuals.

Eisenstein details these networks of correspondence in an example of a particular text titled the "Theatrum."

By the simple expedient of being honest with his readers and inviting criticism and suggestions, Ortelius made his Theatrum a sort of cooperative enterprise on an international basis. He received helpful suggestions from far and wide, and cartographers stumbled over themselves to send him their latest maps of regions not covered in the Theatrum.[8]

On Usenet, too, making a contribution is an integral part of Netizen behavior. Netizens make a point of being helpful to others. Often the Net has made a positive difference in their lives and they return the favor by making their own contribution, perhaps by answering the questions of others or developing an archive. These individual and increasingly group contributions are what have built the Net from a connection of computers and computing resources into a vast resource of people and knowledge. People who use the Net have access to Net resources and can contribute to them. Thus the culture of the Net has been shaped by people actively contributing to the growth and development of the Net. The tale of the Theatrum shows there is a historical precedent in human nature for this "stumbling over oneself" in order to try and be helpful.[9]

The flow of information to the publishers of the Theatrum meant that at least 28 editions were published by the time of the publisher Ortelius' death in 1598.[10] In a similar way, Usenet is by its very nature constantly evolving. The basic element of Usenet is the post whose life is temporary. The Usenet software is

designed to "expire" or delete messages after a certain time period. Without constant new contributions from people to Netnews, there would be no messages to read or discussions to take part in. So there is a constant evolution of Usenet. But, also the material in the more permanent information depositories is often updated so they evolve as well.

During the early days of the printing press, publishers' requests for information led to people starting their own research and work. "Thus a knowledge explosion was set off," Eisenstein exclaims.[11] The Net follows in the tradition of the press, by having one set of people asking questions, leading to another set of people conducting research. In this sense the Net can serve the role as a thinktank for the ordinary person. So the advanced possibilities the printing press made possible in the sixteenth century is being replicated many times more by the Net today. It is important to recognize and value Netnews for its contribution to human society and the advancement of knowledge.

Eisenstein observed that the art of printing opened people's eyes to their previous ignorance. She quotes the German historian, Johann Sleidan, in his "Address to the Estates of the Empire" of 1542, describing the impact printing had in Germany, "[The] art of printing [has] opened German eyes even as it is now bringing enlightenment to other countries. Each man became eager for knowledge, not without feeling a sense of amazement at his former blindness."[12] This sentiment has been echoed by many Netizens on Usenet and in other on-line conversations. People have been amazed at what the Net made possible and how it was changing their lives.

Eisenstein comments in her book on the role of feedback to early authors and print publishers. She wrote that feedback helped to "define the difference between data collection before and after the communications shift. After printing, large-scale data collection did become subject to new forms of feedback which had not been possible in the age of the scribes."[13] Computer networks likewise make possible very easy and natural feedback. Once one reads a message (either public or private), a simple keystroke allows the composition of an answer or response, and another keystroke is often all it takes to send the response. This takes less effort than writing to a publishing house or calling a television station. Since responding to other messages becomes such a natural part of the on-line process, the procedure becomes almost automatic.

Many people who use Usenet find television dull rather than thought provoking. Doug Thompson, a user of Usenet, wrote "TV is so bloody tame and boring in comparison to Usenet." Others, too, have described how they have completely stopped watching TV and reading the newspaper because of Usenet.

Eisenstein refers to the process of constant improvement which printing made possible, as observed by the Scottish philosopher David Hume, "The Power which Printing gives us of continually improving and correcting our Works in successive Editions appears to me the chief advantage of that art."[14] Eisenstein expands on this idea adding, "The future seem[ed] to hold more promise of enlightenment than the past."[15]

This promise of a better future is also seen by those on the Net. People on-line are being enlightened by the interconnection of peoples around the world. The Net helps people to make social connections which were never before possible, or which were relatively hard to achieve. Geography and time no longer are boundaries. Social limitations and conventions no longer prevent potential friendships or partnerships. In this manner Netizens are meeting other Netizens from far-away and close by that they might never have met without the Net.

Eisenstein reports that the printing press too helped people interact with other people who they would not have met before its invention. "Vicarious participation in more distant events was enhanced," she writes, "and even while local ties were loosened, links to larger collective units were being forged."[16] Improvement of information about other parts of the world "by the output of more uniform maps containing more uniform boundaries and place names" helped people to know more of the facts of the world. "Similar developments affected local customs, laws, languages, and costumes."[17]

The Net similarly provides people with a broader view of the world by introducing them to other people's ideas and opinions. The Net makes it possible to access more and differing viewpoints than were normally available in a person's daily life.

Much as printer's houses in the sixteenth century served as places to stop when traveling, computers and phone lines connect people around the world as in our times. Eisenstein describes how such print shops, "point to the formation of polygot households in scattered urban centers upon the continent." She observes that during the sixteenth century, "such printing shops represented miniature 'international houses.' They provided wandering scholars with a

meeting place, message center, sanctuary, and cultural center all in one. The new industry encouraged not only the formation of syndicates and far-flung trade networks, similar to those extended by merchants engaged in the cloth trade, or in other large-scale enterprises during early modern times. It also encouraged the formation of an ethos which was specifically associated with the Commonwealth of Learning – ecumenical and tolerant without being secular, genuinely pious yet opposed to fanaticism, often combining outward conformity to diverse established churches with inner fidelity to heterodox creeds."[18]

The social networks made possible by Usenet and the emergence of the printing press are very similar. Even though Netnews has no official guiding body, Netizens have developed social rules which control and mediate the medium. As the forum is democratic, there will be people who have nothing intelligent to add, or only want to be disruptive or offensive. Others will often debate these troublemakers and through argumentation and the posting of opposite opinions help others to make up their own minds as to the value of the original postings.

The printing press facilitated new cross-cultural networks which encouraged "forms of combinatory activity which were social as well as intellectual."[19] Differing ideas were more easily set against one another. The theories of Arabists were set against the theories of Galenists and those of Aristoteleans against Ptolemaists. Eisenstein writes: "Not only was confidence in old theories weakened, but an enriched reading matter also encouraged the development of new intellectual combinations and permutations. Combinatory intellectual activity … inspires many creative acts."[20]

The Net helps people communicate with each other who might not have communicated before. Strangers meet each other because of interest in each other's ideas and this leads to new intellectual collaborations and combinations.

The connection of differing ideas and people meant the first century of printing is recognized for "intellectual ferment" and by what Eisenstein writes was a 'somewhat wide-angled, unfocused scholarship.'"[21]

The new availability of different theories or opinions about the same topics led Eisenstein to conclude that the contribution a scientist like Copernicus was able to make was not that he produced a new theory, but rather he was "confronting the next genera-tion with a problem to be solved rather than a solution to be learned."[22] Lastly on this subject, Eisenstein equates the quickening of science toward a "cognitive breakthrough of an unprecedented kind."[23] The Net is continuing and accelerating that advance.

The lure of being able to produce numerous copies of books cheaply, was that an author's words could be spread around the world. This proved to be powerful. Eisenstein quotes Maurice Gravier on the power the press presented to the Protestant reformers: "The theses … were said to be known throughout Germany in a fortnight and throughout Europe in a month … . Printing was recognized as a new power and publicity came into its own. In doing for Luther what copyists had done for Wycliffe, the printing press transformed the field of communications and fathered an international revolt. It was a revolution. The advent of printing was an important precondition for the Protestant Reformation taken as a whole; for without it one could not implement 'a priesthood of all believers.' At the same time, however, the new medium also acted as a precipitant. It provided the 'stroke of magic' by which an obscure theologian in Wittenberg managed to shake Saint Peter's throne."[24] This idea is repeated by the English writer Daniel Defoe (1660-1732), whom Eisenstein quotes, when he wrote "The preaching of sermons is speaking to a few of mankind, printing books is talking to the whole world."[25] The Net has opened up a channel for "talking to the whole world" to an even wider set of people than did printed books.

A social role which grew to be crucial in this new world of printing was that of the master printer. His was the business of running a print shop, and finding and promoting potential authors. In the course of this work his workshop became a center of intellectual excitement. Eisenstein explains that the master printer's "workshop became a veritable cultural center attracting local literati and celebrated foreigners, providing both a meeting place and message center for an expanding Commonwealth of Learning."[26]

This development of an intellectual family started to bring the world closer together. "In the late sixteenth century," Eisenstein maintains, "for the first time in the history of any civilization, the concept of a Concordia Mundi was being developed on a truly global scale and the 'family of man' was being extended to encompass all the peoples of the world."[27] The hospitality which the printers provided to travelers and intellectuals helped to make this happen.

The Net continues in this tradition of uniting the world. It is easy to hold conversations and develop relationships with others from around the world. The Net speeds this transaction as the conversation is brought from the print shop into a Netizen's home. A major advancement which the personal computer and the Net make possible is accessibility of publishing. Anyone who owns a personal computer can develop and print their own books, pamphlets, signs, and so forth. The Net comes in to help with distribution.

Eisenstein talks about one result that standardization of printing brought about. "One might consider," she writes, "the emergence of a new sense of individualism as a by-product of the new forms of standardization. The more standardized the type, indeed, the more compelling the sense of an idiosyncratic personal self."[28] Similarly, because Usenet and mailing lists only present people via their ideas and writing styles, people have to write the way they want themselves to be viewed. Thus people develop their own styles. Reading posts can therefore at times be an enjoyable experience. A famous cartoon printed in the *New Yorker* magazine in 1993 show a dog at a computer. He says to another dog, "On the Internet, no one knows you're a dog." In fact, no one knows if you are white or black, yellow or purple, ugly or beautiful, short or tall. Discrimination based on appearance and visual impressions loses its basis. People can still be verbally harassed if they act stupid, or prove unhelpful to the Net. One problem, however, which has not yet been solved is harassment based on user name. For example, women with user names that are clearly identifiable as a woman's still receive some attention and sometimes harassment.

The printing revolution affected both tool making and symbol manipulation, which led to new ways of thinking. As Eisenstein notes, "The decisions made by early printers, however, directly affected both tool making and symbol making. Their products reshaped powers to manipulate objects, to perceive and think about varied phenomena." Computers, too, are in general directly affecting tool production and symbol manipulation. The tools on the Net are new tools – and thus lead to radical ways of thinking and dealing with information. People's thought processes can expand and develop in original ways. New ways of manipulating information, such as Unix tools, hypertext media and search engines for searching distributed data sources foster new means of intellectual activity.

Printing made consultation of various texts much easier – no longer did someone have to be able to be a "Wandering Scholar" to gain access to various information. With the development of the Net, information access becomes much more varied and widespread. The local public library, along with libraries around the world, other data banks and knowledgeable people are becoming accessible via the Net, for some netusers even from their homes. Only a few libraries currently offer electronic access to any of the actual texts of their holdings, but that is rapidly changing. Undertakings such as Project Gutenberg and various digital library initiatives are trying to make library resources available from any computer hooked into the Net.

Both the printing revolution and the Net revolution have been a catalyst for increased intellectual activity. Such activity tends to provide pressure for more democracy. When people have the chance and the means to start thinking, ideas of self-rule appear. Eisenstein describes how, "Puritan tradesman who had learned to talk to God in the presence of their apprentices, wives, and children were already on their way to self-government."[30] Many social and political questions are being discussed on Usenet newsgroups especially questions like censorship and Net access which affect the Net directly. Based on these discussions, Netizens are exerting pressure on their governments to form new democratic structures like the NTIA on-line conference.[31]

Mass production via printing makes it possible to have sufficient books so that everyone who wants a copy can borrow one from a library or buy one. Eisenstein presents Thomas Jefferson's view of this "democratizing aspect of the preservative powers of print which secured precious documents not by putting them under lock and key but by removing them from chests and duplicating them for all to see." According to Eisenstein, "The notion that valuable data could be preserved best by being made public, rather than being kept secret, ran counter to tradition, led to clashes with new censors, and was central both to early modern science and to Enlightenment thought."[32] The democratizing power and effect of the printing revolution, Eisenstein contends, is overlooked in most historical writings.[33]

With the advent of printing, the Law was affected by the onset of the ability to duplicate numerous copies of a single document cheaply. People saw that this capability would be helpful in making the Law available for the common person to read and understand, and therefore the common person would be able to

watch carefully if it was administered fairly. John Liburne, a person who lived in England during the Stuart Monarchy felt that legal documents should be freed from the confines of Latin and old French so that "every Freeman may read it as well as the lawyers." People like him also held that knowledge which had been esoteric, "rare, and difficult," should be transformed into a form where it could be useful to all. Eisenstein also quotes Florio, who made translations and dictionaries in English. He symbolized the democratic possibilities of the printing press saying, "Learning cannot be too common and the commoner the better … . Why but the vulgar should not know all."[34]

Legal decisions are now being made available on the Net so that anyone with a computer and modem and net connection will have access to them. Also there are legal newsgroups on Usenet like misc.legal where various laws are examined and discussed. This provides a helpful perspective for understanding the value of the Net. The culture that is currently characteristic of the Net supports the principle that much of it should be available openly for the rest of the world to use. There is a collective communal democratic aspect of it, too. The simple fact of the matter is that every single person who is connected to the Net and has Usenet access can make a post to Netnews and every net user can send electronic mail to any other person who is on-line.[35]

The scribal tradition restricted who made the choice of what was copied to the Church or those who had substantial property. "As long as texts could be duplicated only by hand, perpetuation of the classical heritage rested precariously on the shifting requirements of local elites."[36] With the spread of the printing press, the monopoly of these elites was broken. Netnews is a similar advance over today's mass media. In the 'traditional' forms of mass media, the content is decided by the national 'elites'. However, on Netnews there is no control over the whole and the content is contributed to by every single person who is active on the Net.

Eisenstein compares this control of elites over what manuscripts were copied to the role of the printer and publisher who have it in their interest to unleash all sorts of books. Eisenstein writes: "The politics of censorship made [the printers] the natural opponents not only of church officials but also of lay bureaucrats, regulations and red tape. As independent agents, they supplied organs of publicity and covert support to a 'third force' that was not affiliated with any one church or one state. This third force was, however, obviously affiliated with the interests of early modern capitalists."[37]

These publishers were "the natural enemy of narrow minds," and "encouraged the adoption of a new ethos which was cosmopolitan, ecumenical, and tolerant without being secular, incredulous or necessarily Protestant … ."[38] The Net has offered a parallel encouragement by providing a new kind of public space separate from either commercial purposes or religious or political limitations or ideas.

The printing press provided a new way for people to challenge the status quo. Eisenstein asks the question, "Did printing at first serve prelates and patricians as a 'divine art,' or should one think of it rather as the 'poor man's friend'?"[39] She answers it might have served in both roles, but that literacy seemed more "compatible" with the life of a peasant than that of a noble or lord.[40]

We can pose the same question about the Net. Should one think about the Net as a 'poor man's friend'? If we think of the Net as an alternative to the current media of Television, Radio, and Newspapers and Magazines – the answer is yes. People who have a lot of money can afford to own a segment of the mass media described above, and control the content of that media, whereas the Net is controlled by the mass of people connected to it, so it is 'the poor man's' version of the mass media.

The printing revolution fostered the spread of education. Books were used by apprentices and students to learn more than was offered by their teachers. The Net similarly makes multiple resources available for people interested in learning. People can access more information resources and, even more important, other people. This increased accessibility of people to each other means we can all gain and learn from the interests and knowledge of others, more so than from any single teacher.

The impact of the new print technology on science was enormous. Collaboration and cooperation over longer distances were made possible by the power of print. In particular, Eisenstein refers to the impact on the science of Astronomy. The change she sees happened within Copernicus's lifetime. "Copernicus was not supplied, as Tycho's successors would be, with precisely recorded fresh data," she notes. "But he was supplied, as Regiomontaus's successor and Aldus Manutius's contemporary, with guidance to technical literature carefully culled from the best Renaissance

Greek manuscript collections, and for the first time, made available outside library walls."[41]

The progress of science is much faster because of the speed of communication afforded by the Net. - Articles to be published in scientific journals are often available as electronic preprints – and thus have wider distribution earlier than was the norm before the Net. An outstanding example of this increased speed of scientific activity occurred when researchers all over the world tried to reproduce the result of the two University of Utah researchers who had announced that they had achieved cold fusion. A newsgroup sci.physics.fusion was very quickly set up and researchers' questions and results and problems were posted regularly and feverishly. As a result, what might have taken years to retest and figure out was sorted out in a three or four month period. The physicists found the rapid exchange of data and results invigorating and encouraging and felt they were more productive and sharper in their work because of the Net. Also, they argued that the use of the Net saved much valuable research time which might have been wasted if the original claims had not been shown to have been faulty in such a short amount of time and to such a wide body of scientists.

The invention of the printing press, which led to many developments not possible before the power of printing, "laid the basis for modern science … and remains indispensable for humanistic scholarship." Eisenstein poignantly claims that printing is responsible for "our museum without walls."[42] As a storehouse of information and living information contained in other people, the Net could also be seen as a living "museum without walls." In her conclusion Eisenstein states that "Cumulative processes were set in motion in the mid-fifteenth century, and they have not ceased to gather momentum in the age of the computer printout and the television guide."[43] We, too, are in an age of amazing changes in communications technologies, and it is important to realize how these changes are firmly based on the extension of the development of the printing press which took place in the fifteenth and sixteenth centuries.

Notes

1. Elizabeth L. Eisenstein, *The Printing Revolution in Early Modern Europe*, Cambridge University Press, Cambridge, 1993, p. 78.
2. *Ibid.*, p. 12.
3. *Ibid.*, p. 13.
4. *Ibid.*, p. 22.
5. *Ibid.*, p. 45.
6. *Ibid.*, p. 73.
7. *Ibid.*, p. 74.
8. *Ibid.*
9. See "The Net and the Netizens," Chapter 1 in *Netizens: On the History and Impact of Usenet and the Internet*.
10. *The Printing Revolution in Early Modern Europe*, p. 74.
11. *Ibid.*, p. 75.
12. *Ibid.*, p. 150.
13. *Ibid.*, p. 76.
14. *Ibid.*, p. 77.
15. *Ibid.*, p. 78.
16. *Ibid.*, p. 95.
17. *Ibid.*, p. 56.
18. *Ibid.*, p.101.
19. *Ibid.*, p. 45.
20. *Ibid.*, p. 44.
21. *Ibid.*, p. 45.
22. *Ibid.*, p. 223.
23. *Ibid.*, p. 225.
24. *Ibid.*, p. 154.
25. *Ibid.*, p. 157.
26. *Ibid.*, p. 25.
27. *Ibid.*, p. 182.
28. *Ibid.*, p. 56.
29. *Ibid.*, p. 64.
30. *Ibid.*, p. 167.
31. See "The Net and the Future of Politics," Chapter 13 in *Netizens: On the History and Impact of Usenet and the Internet*.
32. *The Printing Revolution in Early Modern Europe*, p. 81.
33. *Ibid.*, Chapter 1, "An Unacknowledged Revolution."
34. *Ibid.*, p. 165.
35. See "The Computer as Democratizer," Chapter 18 in *Netizens: On the History and Impact of Usenet and the Internet*.
36. *The Printing Revolution in Early Modern Europe*, p. 125.
37. *Ibid.*, p. 178.
38. *Ibid.*, pp. 177-178.
39. *Ibid.*, p. 31.
40. *Ibid.*
41. *Ibid.*, p. 209.
42. *Ibid.*, p. 275.
43. *Ibid.*, p. 276.

The Computer as a Democratizer

by Michael Hauben

"… only through diversity of opinion is there, in the existing state of human intellect, a chance of fair play to all sides of the truth."
John Stuart Mill, "On Liberty"

"In a very real sense, Usenet is a market-place of ideas."
Bart Anderson, Bryan Costales, and Harry Henderson

Political thought has developed as writers presented the theoretical basis behind the various class structures from aristocracy to democracy. Plato wrote of the rule of the elite Guardians. Thomas Paine wrote why people need control of their governments. The computer connects to this democratizing trend through facilitating wider communications among individual citizens to the whole body of citizens.

James Mill, the father of John Stuart Mill, takes a look at democracy in his article "Liberty of the Press" from the 1825 Supplement to the *Encyclopedia Britannica*. He writes about the question of a government that works as it should – for the advantage and gain of the people instead of the advantage and gain for those in control. Mill sees the government necessarily being corrupted if the chance exists. Those in the position of rule, would abuse that power for their advantage. Mill describes, "If one man saw that he might promote misrule for his own advantage, so would another; so, of course would they all." (James Mill, "Liberty of the Press," p. 20) Mill says that the people need a check on those in government. People need to keep watch on their government in order to make sure this government works in the interest of the many. Mill thus concludes, "There can be no adequate check without the freedom of the press. The evidence of this is irresistible." (Mill, p. 18)

What Mill often phrases as freedom of the press, or liberty of the press, is more precisely defined as the uncensored press. The uncensored press provides for the dissemination of information that allows the reader or thinker to do two things. First, a person can size up the issue and honestly decide his or her own position. Second, as the press is uncensored, this person can make his distinctive contribution available for other people to consider and appreciate. Thus what Mill calls "freedom of the press" makes possible the free flow and exchange of different ideas.

Thomas Paine, in *The Rights of Man*, describes a fundamental principle of democracy. Paine writes, "that the right of altering the government was a national right, and not a right of the government." (p. 341) Mill also expresses that active participation by the populace is a necessary principle of democracy. He writes: "Unless a door is left open to the resistance of the government, in the largest sense of the word, the doctrine of passive obedience is adopted; and the consequence is, the universal prevalence of the misgovernment, ensuring the misery and degradation of the people." (Mill, p. 13)

Another principle Mill links democracy to, is the right of the people to define who can responsibly represent their will. However, this right requires information to make a proper decision. Mill declares: "We may then ask, if there are any possible means by which the people can make a good choice, besides liberty of the press? The very foundation of a good choice is knowledge. The fuller and more perfect the knowledge, the better the chance, where all sinister interest is absent, of a good choice. How can the people receive the most perfect knowledge relative to the characters of those who present themselves to their choice, but by information conveyed freely, and without reserve, from one to another?" (Mill p. 19) Without information being available to the people, the candidates for office can be either as bad as the incumbents or worse. Therefore there is a need to prevent the government from censoring the information available to people. Mill explains: "If it is in the power of their rulers to permit one person and forbid another, the people may be sure that a false report, – a report calculated to make them believe that they are well governed, when they are ill-governed, will be often presented to them." (Mill, p. 20)

After electing their representatives, democracy gives the public the right to evaluate their chosen representatives in office. The public continually needs

information as to how their chosen representatives are fulfilling their role. Once these representatives have abused their power, Paine's and Mill's principle allows the public to replace those abusers. Mill also clarifies that free use of the means of communication is another extremely important principle: "That an accurate report of what is done by each of the representatives, a transcript of his speeches, and a statement of his propositions and votes, is necessary to be laid before the people, to enable them to judge of his conduct, nobody, we presume, will deny. This requires the use of the cheapest means of communication, and, we add, the free use of those means. Unless every man has the liberty of publishing the proceedings of the Legislative Assembly, the people can have no security that they are fairly published." (Mill, p. 20)

Ignorance, Thomas Paine calls the absence of knowledge and says that man with knowledge cannot be returned to a state of ignorance. (*The Rights of Man*, p. 357) James Mill shows how the knowledge man thirsts after leads to a communal feeling. General conformity of opinion seeds resistance against misgovernment. Both conformity of opinion and resistance require general information or knowledge. Mill explains: "In all countries people have either a power legally and peaceably of removing their governors, or they have not that power. If they have not that power, they can only obtain very considerable ameliorations of their governments by resistance, by applying physical force to their rulers, or, at least, by threats so likely to be followed by performance, as may frighten their rulers into compliance. But resistance, to have this effect, must be general. To be general, it must spring from a general conformity of opinion, and a general knowledge of that conformity. How is this effect to be produced, but by some means, fully enjoyed by the people of communicating their sentiments to one another? Unless the people can all meet in general assembly, there is no other means, known to the world, of attaining this object, to be compared with freedom of the press." (Mill, p. 18)

In the previous quote Mill places his championing of the freedom of press as a realistic alternative to Rousseau's general assembly, which is not possible most of the time. Mill expands on the freedom of the press by setting the rules. An opinion cannot be well founded until its converse is also present. Here he sets forth the importance of developing your own opinion from those that exist. Mill writes: "We have then arrived at the following important conclusions, – that

there is no safety to the people in allowing anybody to choose opinions for them; that there are no marks by which it can be decided beforehand, what opinions are true and what are false; that there must, therefore, be equal freedom of declaring all opinions both true and false; and that, when all opinions, true and false, are equally declared, the assent of the greater number, when their interests are not opposed to them, may always be expected to be given to the true. These principles, the foundation of which appears to be impregnable, suffice for the speedy determination of every practical question." (Mill, p. 23)

The technology that is the personal computer, international computer networks, and other recent contributions embody and put into practice James Mill's theory of liberty of the press. The personal computer makes it affordable for most people to have an information access station in their very own home. There are international computer networks that exist which allow a person to have debates with other people across the world, search for data in various data banks, or even play a computer game.

If a person is affiliated with a university community, works at a business which pays to connect to the Internet, or pays a special service fee, he or she can connect to a network of computer networks around the world. A connection to this international network empowers a person by giving him access to various services. These services include electronic mail, which means the ability to send private messages electronically to people across the world who also have electronic mail boxes. The public alternative to this is a service called Usenet. This service is an example of James Mill's democratic principles.

Usenet consists of many newsgroups which each cover a broad, but yet specific topic. People who utilize Usenet typically pick certain newsgroups or topics to focus on. Every group has several items of discussion going on at the same time. Some examples of newsgroups include serious topics such as talk.politics.theory, – people "talking" about current issues and political theory, sci.econ – people discussing the science of economics, soc.culture.usa – people debating questions of United States society; and recreational topics (which might also be serious) such as alt.rock-n-roll – discussing various aspects of rock music, rec.sport.hockey – a discussion of hockey and rec.humor – jokes and humor. The discussions are very active and provide a source of information that fulfills James Mill's criteria for both more oversight over

government and a more informed population. In a sense, what was once impossible, is now possible; everyone's letter to the editor is published. (Hauben, Interview with Staff Member, *The Amateur Computerist*, vol. 4 no. 2-3, p. 14) What is important is that Usenet is conducted publicly, and is uncensored. This means that everyone can both contribute and gain from everyone else's opinion.

The importance of Usenet also exists in that it is an improvement in communications technology from that of previous telecommunications. The predecessors to computer networks were the Ham Radio and Citizen Band Radio (CB). The computer network is an advance in that it is easier to store, reproduce and utilize the communications. It is easier to continue a prolonged question and answer session or debate. The newsgroups on Usenet have a distribution designation which allows them to be available to a wide variety of different size areas – local, city, national, or international. This allows for a variety of uses. The problem with the Internet is that in a sense it is only open to those who either have it provided to them by a university or company that they are affiliated with, or who pay for it. This limits part of the current development of the computer networks.

An example of a public enterprise, however, is a computer service called Freenet in Cleveland, Ohio. Freenet is operated by Case Western Reserve University as a community service. Anyone with a personal computer and a modem (a device to connect to other computers over existing phone lines) can call a local phone number to connect to Freenet. If members of the public do not own computers, they can use Freenet at the public library. Besides Usenet, Freenet provides free access to a vast variety of information databases and community information. Freenet is just one example of the computer networks becoming much more readily available to broad sectors of society. As part of its databases, Freenet includes Supreme Court decisions, discussion of political issues and candidates, and debate over contemporary laws. Freenet is beginning to exemplify Mill's principle that democracy requires the "use of the cheapest means of communication, and, we add, the free use of those means." (Mill, p. 20)

This is an exciting time to see the democratic ideas of some great political thinkers beginning to be practiced. James Mill wrote that for government to serve the people, it must be watched by the people utilizing an uncensored press. Freedom of the press

also makes possible the debate necessary for the forming of well-founded opinions by the people. Usenet and Freenet are examples of the contemporary electronic practice of the uncensored accessible press required by Mill. These networks are also the result of hard work by many people aspiring for more democracy. However, they still require more help from those dedicated to the hard fight against tyranny.

Bibliography

Anderson, Bart, Bryan Costales, and Harry Henderson, *Unix Communications*, Indiana, 1991.

Hauben, Michael, "Interview with a Staff Member," *The Amateur Computerist*, Vol. 4 No. 2-3.

Mill, James, *Essays on Government, Jurisprudence, Liberty of the Press, and Law of Nations*, reprint, Kelley Publishers, New York, 1967.

Mill, John Stuart, "On Liberty" in *Three Essays*, Oxford, 1975.

Paine, Thomas, "The Rights of Man" in *Two Classics of the French Revolution*, Anchor Books, Doubleday. New York, 1989.

Watkins, Beverly T, "Freenet helps Case Western fulfill its Community-Service Mission," April 29, 1992, *Chronicle of Higher Education*, p. A21.

This article is online at: http://www.columbia.edu/~hauben /ronda2014/democratizer.pdf

---

Proposed Declaration of the Rights of Netizens

We Netizens have begun to put together a Declaration of the Rights of Netizens and are requesting from other Netizens contributions, ideas, and suggestions of what rights should be included. Following are some beginning ideas.

The Declaration of the Rights of Netizens

In recognition that the net represents a revolution in human communications that was built by a cooperative non-commercial process, the following Declaration of the Rights of the Netizen is presented

for Netizen comment.

As Netizens are those who take responsibility and care for the Net, the following are proposed to be their rights:

• Universal access at no or low cost.
• Freedom of Electronic Expression to promote the exchange of knowledge without fear of reprisal.
• Uncensored Expression.
• Access to Broad Distribution.
• Universal and Equal access to knowledge and information.
• Consideration of one's ideas on their merits.
• No limitation of access to read, to post and to otherwise contribute.
• Equal quality of connection.
• Equal time of connection.
• No Official Spokesperson.
• Uphold the public grassroots purpose and participation.
• Volunteer Contribution – no personal profit from the contribution freely given by others.

Protection of the public purpose from those who would use it for their private and money making purposes.

The Net is not a Service. It is a Right. It is only valuable when it is collective and universal. Volunteer effort protects the intellectual and technological common-wealth that is being created.

DO NOT UNDERESTIMATE THE POWER OF THE NET and NETIZENS.

Inspiration from: RFC 3 (1969), Thomas Paine, Declaration of Independence (1776), Declaration of the Rights of Man and of the Citizen (1789), NSF Acceptable Use Policy, Jean Jacques Rousseau, and the current cry for democracy worldwide.

[Editor's Note: The following was written in 1995 as a paper for the Columbia University course "Radical Tradition in America." It can be seen online at: http://www.columbia.edu/~hauben /ronda2014/sds.txt. The year 2022 marked the 60th Anniversary of the *Port Huron Statement* which was issued on June 15, 1962.]

Participatory Democracy From the 1960s and SDS into the Future On-line

by Michael Hauben

The 1960s was a time of people around the world struggling for more of a say in the decisions of their society. The emergence of the personal computer in the late 70s and early 80s and the longer gestation of the new forms of people-controlled communication facilitated by the Internet and Usenet in the late 80s and today are the direct descendants of 1960s.

The era of the 1960s was a special time in America. Masses of people realized their own potential to affect how the world around them worked. People rose up to protest the ways of society which were out of their control, whether to fight against racial segregation, or to gain more power for students in the university setting. The *Port Huron Statement* created by the Students for a Democratic Society (SDS) was a document which helped set the mood for the decade.

By the 1970s, some of the people who were directly involved in student protests continued their efforts to bring power to the people by developing and spreading computer power in a form accessible and affordable to individuals. The personal computer movement of the 1970s created the personal computer. By the mid 1980s they forced the corporations to produce computers which everyone could afford. The new communications media of the Internet grew out of the ARPANET research that started in 1969 and Usenet which was born in 1979. These communications advances coupled with the availability of computers transforms the spirit of the 1960s into an achievable goal for our times.

SDS and The Need for Participatory Democracy

The early members of SDS found a real problem in American society. They felt that the United States was a democracy that never existed, or rather which was transformed into a representative system after the constitutional convention. The United States society is called a democracy, but had ceased being democratic after the early beginnings of American society. SDS felt it is crucial for people to have a part in how their society is governed. SDS leaders had an understanding of democratic forms which did not function democratically in the 1960s nor do they today. This is a real problem which the leaders and members of SDS intuitively understood and worked to change.

An important part of the SDS program included the understanding of the need for a medium to make it possible for a community of active citizens to discuss and debate the issues affecting their lives. While not

available in the 1960s, such a medium exists today in the 1990s. The seeds for the revival of the 1960s SDS vision of how to bring about a more democratic society now exists in the personal computer and the Net. These seeds will be an important element in the battle for winning control for people as we approach the new millennium.

The *Port Huron Statement* and Deep Problems With American Democracy

The *Port Huron Statement* was the foundation on which to build a movement for participatory democracy in the 1960s. In June 1962, an SDS national convention was held in a UAW camp located in the backwoods of Port Huron, Michigan. The original text of the *Port Huron Statement* was drafted by Tom Hayden, who was then SDS Field Secretary. The Statement sets out the theory of SDS's criticism of American society. The Port Huron convention was itself a concrete living example of the practice of participatory democracy.

The *Port Huron Statement* was originally thought of as a manifesto, but SDS members moved instead to call it a "statement." It was prefixed by an introductory note describing how it was to be a document that should develop and change with experience: "This document represents the results of several months of writing and discussion among the membership, a draft paper, and revision by the Students for a Democratic Society national convention meeting in Port Huron, Michigan, June 11-15, 1962. It is presented as a document with which SDS officially identifies, but also as a living document open to change with our times and experiences. It is a beginning: in our own debate and education, in our dialogue with society." (*Port Huron Statement* in Miller, p. 329)

This note is important in that it signifies that the SDS document was not defining the definite solution to the problems of society, but was making suggestions that would be open to experiences toward a better understanding. This openness is an important precursor to practicing participatory democracy by asking for the opinions of everyone and treating these various opinions equally.

The first serious problem inherent in American society identified by the *Port Huron Statement* is the myth of a functioning democracy: "For Americans concerned with the development of democratic societies, the anticolonial movements and revolutions in the emerging nations pose serious problems. We need to face the problems with humility; after 180 years of constitutional government we are still striving for democracy in our own society." (*Port Huron Statement* in Miller, p. 361)

This lack of democracy in American society contributes to the political disillusionment of the population. Tom Hayden and SDS were deeply influenced by the writings of C. Wright Mills, a philosopher who was a professor at Columbia University until his death early in 1962. Mills' thesis was that the "the idea of the community of publics" which make up a democracy had disappeared as people increasingly got further away from politics. Mills felt that the disengagement of people from the State had resulted in control being given to a few who in the 1960s were no longer valid representatives of the American people. In his book about SDS, *Democracy is in the Streets*, James Miller wrote: "Politics became a spectator sport. The support of voters was marshaled through advertising campaigns, not direct participation in reasoned debate. A citizen's chief sources of political information, the mass media, typically assaulted him with a barrage of distracting commercial come-ons, feeble entertainments and hand-me-down glosses on complicated issues." (Miller, p. 85)

Such fundamental problems with democracy continue today in the middle of the 1990s. In the *Port Huron Statement*, SDS was successful in identifying and understanding the problems which still plague us today. This is a necessary first step to working toward a solution. The students involved with SDS understood people were tired of the problems and wanted to make changes in society. The *Port Huron Statement* was written to address these concerns: "… do they not as well produce a yearning to believe there is an alternative to the present that something can be done to change circumstances in the school, the workplaces, the bureaucracies, the government? It is to this latter yearning, at once the spark and engine of change, that we direct our present appeal. The search for a truly democratic alternatives to the present, and a commitment to social experimentation with them, is a worthy and fulfilling human enterprise, one which moves us, and we hope, others today." (*Port Huron Statement* in Miller, p. 331)

Describing how the separation of people from power is the means used to keep people uninterested and apathetic, the *Port Huron Statement* explains: "The apathy is, first, subjective – the felt powerless-

ness of ordinary people, the resignation before the enormity of events. But subjective apathy is encouraged by the objective American situation – the actual structural separation of people from power, from relevant knowledge, from pinnacles of decision-making. Just as the university influences the student way of life, so do major social institutions create the circumstances which the isolated citizen will try hopelessly to understand the world and himself." ("The Society Beyond" in the *Port Huron Statement*, in Miller, p. 336)

The Statement analyzes the personal disconnection to society and its effect: "The very isolation of the individual – from power and community and ability to aspire – means the rise of democracy without publics. With the great mass of people structurally remote and psychologically hesitant with respect to democratic institutions, those institutions themselves attenuate and become, in the fashion of the vicious cycle, progressively less accessible to those few who aspire to serious participation in social affairs. The vital democratic connection between community and leadership, between the mass and the several elites, has been so wrenched and perverted that disastrous policies go unchallenged time and again." (*Port Huron Statement* in Miller, p. 336)

The Statement describes how it is typical for people to get frustrated and quit going along with the electoral system as something which works. The problem has continued, as we now have all time lows in voter turn-outs for national and local elections. In a section titled "Politics Without Publics," the Statement explains: "The American voter is buffeted from all directions by pseudo problems, by the structurally initiated sense that nothing political is subject to human mastery. Worried by his mundane problems which never get solved, but constrained by the common belief that politics is an agonizingly slow accommodation of views, he quits all pretense of bothering." (*Port Huron Statement* in Miller, p. 337)

Students in SDS did not let these real problems discourage their efforts to work for a better future. They wanted to be part of the forces to defeat the problems. The *Port Huron Statement* contains an understanding that people are inherently good and can deal with the problems that were described. This understanding is conveyed in the "Values" section of the Statement: "Men have unrealized potential for self-cultivation, self-direction, self-understanding, and creativity. It is this potential that we regard as crucial and

to which we appeal, not to the human potential for violence, unreason, and submission to authority. The goal of man and society should be human independence: a concern not with the image of popularity but with finding a meaning in life that is personally authentic; a quality of mind not compulsively driven by a sense of powerlessness, nor one which unthinkingly adopts status values, nor one which represses all threats to its habits, but one which easily unites the fragmented parts of personal history, one which openly faces problems which are troubling and unresolved; one with an intuitive awareness of possibilities, an active sense of curiosity, an ability and willingness to learn." (*Port Huron Statement* in Miller, p. 332)

Participatory Democracy

Those participating in the Port Huron convention came away with a sense of the importance of participatory democracy. This sense was in the air in several ways. The convention itself embodied participatory democracy through the discussion and debate over the text of the Statement as several people later explained. The *Port Huron Statement* called for the implementation of participatory democracy as a way to bring people back into decisions about the country in general, and their individual lives, in particular. One of Tom Hayden's professors at University of Michigan, Arnold Kaufman, came to speak about his thoughts and use of phrase 'participatory democracy.'

Miller writes that in a 1960 essay, "Participatory Democracy and Human Nature," Kaufman had described a society in which every member had a "direct responsibility for decisions." The "main justifying function" of participatory democracy, quotes Miller, "is and always has been, not the extent to which it protects or stabilizes a community, but the contribution it can make to the development of human powers of thought, feeling and action. In this respect, it differs, and differs quite fundamentally, from a representative system incorporating all sorts of institutional features designed to safeguard human rights and ensure social order." (Miller, p. 94)

"Participation" explained Kaufman, "means both personal initiative – that men feel obliged to help resolve social problems – and social opportunity – that society feels obliged to maximize the possibility for personal initiative to find creative outlets." (Miller, p. 95)

A participant at the Port Huron Conference, Richard Flacks remembers Arnold Kaufman speaking

at the convention, "At one point, he declared that our job as citizens was not to role-play the President. Our job was to put forth our own perspective. That was the real meaning of democracy – press for your own perspective as you see it, not trying to be a statesman understanding the big picture." (Miller, p. 111)

After identifying participatory democracy as the means of how to wrest control back from corporate and government bureaucracies, the next step was to identify the means to having participatory democracy. In the "Values" section of *The Port Huron Statement*, the means proposed is a new media that would make this possible: "As a social system we seek the establishment of a democracy of individual participation governed by two central aims: that the individual share in those social decisions determining the quality and direction of his life; the society be organized to encourage independence in men and provide the media for their common participation." (*Port Huron Statement* in Miller, p. 333)

Others in SDS further detailed their understandings of participatory democracy to mean people becoming active and committed to playing more of a public role. Miller documents Al Haber's idea of democracy as 'a model, another way of organizing society.' The emphasis was on a charge to action. It was how to be out there doing. Rather than an ideology or a theory." (Miller, pp. 143-144)

Tom Hayden, Miller writes, understood participatory democracy to mean: "number one, action; we believed in action. We had behind us the so-called decade of apathy; we were emerging from apathy. What's the opposite of apathy? Active participation. Citizenship. Making history. Secondly, we were very directly influenced by the civil rights movement in its student phase, which believed that by personally committing yourself and taking risks, you could enter history and try to change it after a hundred years of segregation. And so it was this element of participation in democracy that was important. Voting was not enough. Having a democracy in which you have an apathetic citizenship, spoon-fed information by a monolithic media, periodically voting, was very weak, a declining form of democracy. And we believed, as an end in itself, to make the human being whole by becoming an actor in history instead of just a passive object. Not only as an end in itself, but as a means to change, the idea of participatory democracy was our central focus." (Miller, p. 144) Another member of SDS, Sharon Jeffrey understood "Participatory" to mean "involved in decisions." She continued, "And I definitely wanted to be involved in decisions that were going to affect me! How could I let anyone make a decision about me that I wasn't involved in?" (Miller, p. 144)

It is important to see the value of participatory democracy as a common understanding among both the leaders and members of SDS. While the *Port Huron Statement* contained other criticisms and thoughts, its major contribution was to highlight the need to more actively involve the citizens of the United States in the daily political process to correct some of the wrongs which passivity had allowed to build. Richard Flacks summarizes this in his article, "On the Uses of Participatory Democracy": "The most frequently heard phrase for defining participatory democracy is that 'men must share in the decisions which effect their lives.' In other words, participatory democrats take seriously a vision of man as citizen: and by taking seriously such a vision, they seek to extend the conception of citizenship beyond the conventional political sphere to all institutions. Other ways of stating the core values are to assert the following: each man has responsibility for the action of the institutions in which he is embedded … ." (Flacks, pp. 397-398)

The Need for Community for Participatory Democracy

The leaders of SDS strove to create forms of participatory democracy within its structure and organization as a prototype and as leadership for the student protest movement and society in general. Al Haber, the University of Michigan graduate student who was the first SDS national officer, describes the need for a communication system to provide the foundation for the movement: "The challenge ahead is to appraise and evolve radical alternatives to the inadequate society of today, and to develop an institutionalized communication system that will give perspective to our immediate actions. We will then have the groundwork for a radical student movement in America." (Sale, p. 25)

He understood the general society would be the last place to approach. There was a need to start smaller among the elements of society that was becoming more active in the 1960s or the students. Haber outlined his idea of where to start: "We do not now have such a public [interaction in a functioning community] in America. Perhaps, among the students, we

are beginning to approach it on the left. It is now the major task before liberals, radicals, socialists and democrats. It is a task in which the SDS should play a major role." (Miller, p. 69)

The *Port Huron Statement* defines 'community' to mean: "Human relations should involve fraternity and honesty. Human interdependence is a contemporary fact; … . 'Personal links between man and man are needed.'" (*Port Huron Statement* in Miller, p. 332)

Prior to his full time involvement with SDS, Hayden wrote an article for the *Michigan Daily* describing how democratic decision making is a necessary first step toward creating community. Hayden's focus was on the University when he wrote, "If decisions are the sole work of an isolated few rather than of a participating many, alienation from the University complex will emerge, because the University will be just that: a complex, not a community." However, this sentiment persisted in Hayden's and others thoughts about community and democracy for the whole country. (Miller, p. 54)

This feeling about community is represented in the *Port Huron Statement*'s conclusion. The Statement calls for the communal sharing of problems to see that they are public and not private problems. Only by communicating and sharing these problems through a community will it be a chance to solve them together. SDS called for the new left to "transform modern complexity into issues that can be understood and felt close-up by every human being." The statement continues, "It must give form to the feelings of helplessness and indifference, so people may see the political, social an economic sources of their private troubles and organize to change society … .'" (*Port Huron Statement* in Miller, p. 374)

The theory of participatory democracy was engaging. However, the actual practice of giving everyone a say within the SDS structures made the value of participatory democracy clear. The Port Huron Convention was a real life example of how the principles were refreshing and capable of bringing American citizens back into political process. The community created among SDS members brought this new spirit to light. C. Wright Mills writings spoke about "the scattered little circles of face-to-face citizens discussing their public business." Al Haber's hope for this to happen among students was demonstrated at Port Huron. SDS members saw this as proof of Mills' hope for democracy. This was to be the first example of many among SDS gatherings and meetings. Richard

Flacks highlighted what made Port Huron special. He found a "mutual discovery of like minds." Flacks continued, "You felt isolated before, because you had these political interests and values and suddenly you were discovering not only like minds, but the possibility of actually creating something together." It was also exciting because, "it was our thing: we were there at the beginning." (Miller, p. 118)

The Means For Change

SDS succeeded in doing several things. First, they clearly identified the crucial problem in American democracy. Next, they came up with an understanding of what theory would make a difference. All that remained was to find the means to make this change manifest. They discovered how to create changes in their own lives and these changes affected the world around them. However, something more was needed to bring change to all of American society.

Al Haber understood this something more would be an open communication system or media which people could use to communicate. He understood that, "the challenge ahead is to appraise and evolve radical alternatives to the inadequate society of today, and to develop an institutionalized communication system that will give perspective to our immediate actions." (Sale, p. 25) This system would lay the "the groundwork for a radical student movement in America." (Sale, p. 25) Haber and Hayden understood SDS to be this, "a national communications network" (Miller, p. 72)

While many people made their voices heard and produced a real effect on the world in the 1960s, lasting structural changes were not established. The real problems outlined earlier continued in the 1970s and afterwards. A national, or even an international, public communications network needed to be built to keep the public's voice out in the open.

Members of SDS partially understood this, and put forth the following two points in the *Port Huron Statement* section on "Toward American Democracy":
 – "Mechanisms of voluntary association must be created through which political information can be imparted and political participation encouraged."
 – "The allocation of resources must be based on social needs. A truly 'public sector' must be established, and its nature debated and planned." (*Port Huron Statement* in Miller, p. 362)

International Public Communications Network – or The Net

This network and the means to access it began developing toward the end of the 1960s. Two milestones in the genesis were 1969 when the first ARPANET node was installed and in 1979 when Usenet started. Both are pioneering experiments in using computers to facilitate human communication in a fundamentally different way than already existing public communications networks like the telephone or television networks. The ARPANET, which was a prototype for today's Internet, and Usenet, which continues to grow and expand around the world, are parts of the Net, or the worldwide global computer communication networks. Another important step toward the development of an international communication network was the personal computer movement, which took place in the middle to late 1970s. This movement created the personal computer which makes it affordable for an individual to purchase the means to connect to this public network.

However, the network cannot simply be created. SDS understood that "democracy and freedom do not magically occur, but have roots in historical experience; they cannot always be demanded for any society at any time, but must be nurtured and facilitated." (*Port Huron Statement* in Miller, p. 361)

Participants on the ARPANET, Internet and Usenet inherently understood this, and built a social and knowledge network from the ground up. As Usenet was created to help students who did not have access to the ARPANET, or a chance to communicate in a similar way, they came to it in full force. In "Culture and Communication: The Interplay in the New Public Commons," Michael Hauben writes that the on-line user is part of a global culture and considers him or herself to be a global citizen. This global citizen is a net citizen, or a Netizen. The world which has developed is based on communal effort to make a cooperative community. Those who have become Netizens have gained more control of their lives and the world around them. However, access to this world needs to spread in order to have the largest possible effect for the most number of people. In addition, as some efforts to spread the Net become more commercial, some of the values important to the Net are being challenged.

A recent speech I was invited to present at a conference on "the Netizen Revolution and the Re-gional Information Infrastructure" in Beppu, Japan helps to bring the world of the Netizen into perspective with the ideas of participatory democracy: "Netizens are not just anyone who comes on-line, and they are especially not people who come on-line for isolated gain or profit. They are not people who come to the Net thinking it is a service. Rather they are people who understand it takes effort and action on each and every ones part to make the Net a regenerative and vibrant community and resource. Netizens are people who decide to devote time and effort into making the Net, this new part of our world, a better place." (Hauben, Hypernetwork '95 speech)

The Net is a technological and social development which is in the spirit of the theory clearly defined by the Students for a Democratic Society. This understanding could help in the fight to keep the Net a uncommercialized public commons (Felsenstein). This many to many medium provides the tools necessary to bring the open commons needed to make participatory democracy a reality. It is important now to spread access to this medium to all who understand they could benefit.

The Net brings power to people's lives because it is a public forum. The airing of real problems and concerns in the open brings help toward the solution and makes those responsible accountable to the general public. The Net is the public distribution of people's muckraking and whistle blowing. It is also just a damn good way for people to come together to communicate about common interests and to come into contact with people with similar and differing ideas.

The lack of control over the events surrounding an individual's life was a common concern of protesters in the 1960s. The *Port Huron Statement* gave this as a reason for the reforms SDS was calling for. The section titled "The Society Beyond" included that "Americans are in withdrawal from public life, from any collective efforts at directing their own affairs." (*Port Huron Statement* in Miller, p. 335)

Hayden echoed C. Wright Mills when he wrote, "What experience we have is our own, not vicarious or inherited." Hayden continued, "We keep believing that people need to control, or try to control, their work and their life. Otherwise, they are without intensity, without the subjective creative consciousness of themselves which is the root of free and secure feeling. It may be too much to believe, we don't know." (Miller, p. 262)

The desire to bring more control into people's daily life was a common goal of student protest in the

1960s. Mario Savio, active in the Berkeley Free Speech movement, "believed that the students, who paid the university to educate them, should have the power to influence decisions concerning their university lives." (Haskins and Benson, p. 55) This desire was also a common motivator of the personal computer movement.

The Personal Computer Movement

The personal computer movement immediately picked up after the protest movements of the 1960s died down. Hobbyist computer enthusiasts wanted to provide access to computing power to the people. People across the United States picked up circuit boards and worked on making a personal minicomputer or mainframe which previously only large corporations and educational institutions could afford. Magazines, such as *Creative Computing*, *Byte* and *Dr. Dobbs' Journal*, and clubs, such as the Homebrew Club, formed cooperative communities of people working toward solving the technical problems of building a personal and inexpensive computer.

Several pioneers of the personal computer movement contributed to the tenth anniversary issue of *Creative Computing* Magazine. Some of their impressions follow: "The people involved were people with vision, people who stubbornly clung to the idea that the computers could offer individuals advantages previously available only to large corporations … ." (Leyland, p. 111) "Computer power was meant for the people. In the early 70s computer cults were being formed across the country. Sol Libes on the East Coast and Gordon French in the West were organizing computer enthusiasts into clubs … ." (Terrell, p. 100) "We didn't have many things you take for granted today, but we did have a feeling of excitement and adventure. A feeling that we were the pioneers in a new era in which small computers would free everyone from much of the drudgery of everyday life. A feeling that we were secretly taking control of information and power jealously guarded by the Fortune 500 owners of multimillion dollar IBM mainframes. A feeling that the world would never be the same once 'hobby computers' really caught on." (Marsh, p. 110) "There was a strong feeling [at the Homebrew Club] that we were subversives. We were subverting the way the giant corporations had run things. We were upsetting the establishment, forcing our mores into the industry. I was amazed that we could continue to meet without people arriving with bayonets to arrest the lot of us."

The Net and Conclusion

The development of the Internet and of Usenet is an investment in a strong force toward making direct democracy a reality. These new technologies present the chance to overcome the obstacles preventing the implementation of direct democracy. Online communication forums also make possible the discussion necessary to identify today's fundamental questions. One criticism is that it would be impossible to assemble the body politic in person at a single time. The Net allows for a meeting which takes place on each person's own time, rather than all at one time. Usenet newsgroups are discussion forums where questions are raised, and people can leave comments when convenient, rather than at a particular time and at a particular place. As a computer discussion forum, individuals can connect from their own computers, or from publicly accessible computers across the nation to participate in a particular debate. The discussion takes place in one concrete time and place, while the discussants can be dispersed. Current Usenet newsgroups and mailing lists prove that citizens can both do their daily jobs and participate in discussions that interest them within their daily schedules.

Another criticism was that people would not be able to communicate peacefully after assembling. Online discussions do not have the same characteristics as in-person meetings. As people connect to the discussion forum when they wish, and when they have time, they can be thoughtful in their responses to the discussion. Whereas in a traditional meeting, participants have to think quickly to respond. In addition, online discussions allow everyone to have a say, whereas finite length meetings only allow a certain number of people to have their say. Online meetings allow everyone to contribute their thoughts in a message, which is then accessible to whomever else is reading and participating in the discussion.

These new communication technologies hold the potential for the implementation of direct democracy in a country as long as the necessary computer and communications infrastructure are installed. Future advancement toward a more responsible government is possible with these new technologies. While the future is discussed and planned for, it will also be possible to use these technologies to assist in the citizen participation in government. Netizens are watching various government institutions on various newsgroups and mailing lists throughout the global computer communications network. People's thoughts

about and criticisms of their respective governments are being aired on the currently uncensored networks.

These networks can revitalize the concept of a democratic "Town Meeting" via online communication and discussion. Discussions involve people interacting with others. Voting involves the isolated thoughts of an individual on an issue, and then his or her acting on those thoughts in a private vote. In society where people live together, it is important for people to communicate with each other about their situations to best understand the world from the broadest possible viewpoint.

The individuals involved with SDS, the personal computer movement and the pioneers involved with the development of the Net understood they were a part of history. This spirit helped them to push forward in the hard struggle needed to bring the movements to fruition. The invention of the personal computer was one step that made it possible for people to afford the means to connect to the Net. The Internet has just begun to emerge as a tool available to the public. It is important that the combination of the personal computer and the Net be spread and made widely available at low or no costs to people around the world. It is important to understand the tradition which these developments have come from, in order to truly understand their value to society and to make them widely available. With the hope connected to this new public communications medium, I encourage people to take up the struggle which continues in the great American radical tradition.

Bibliography

Felsenstein, Lee. "The Commons of Information." In *Dr. Dobbs' Journal*. May 1993

Flacks, Richard. "On the Uses of Participatory Democracy." In *Dissent*. No. 13. November 1966. Pp. 701-708. Reprinted in *The American Left*. Edited by Loren Baritz. Pp. 397-405.

Freiberger, Paul and Michael Swaine. *Fire in the Valley: The Making of the Personal Computer*. Osborne/McGraw-Hill. Berkeley. 1984.

Haskins, James and Kathleen Benson. The *60s Reader*. Viking Kestrel. New York. 1988.

Hauben, Michael. "Culture and Communication: The interplay in the new public commons – Usenet and Community". Online in 1995. http://www.columbia.edu/~hauben/CS/usenet-culture.txt

Hauben, Michael and Ronda Hauben. *Netizens: On the History and Impact of Usenet and the Internet*. 1994. http://www.columbia.edu/~hauben/netbook/

Hauben, Michael. "Netizens and Community Networks." Presentation at the Hypernetwork '95, Beppu Bay Conference. November 24, 1995. Beppu Bay, Oita Prefecture, Japan.

Leyland, Diane Asher. "As We Were." In *Creative Computing*. Vol. 10 no. 11. November 1984. Pp. 111-112.

Marsh, Robert. "1975: Ancient History." In *Creative Computing*. Vol. 10 no. 11. November 1984. Pp. 108-110.

Miller, James. *Democracy is in the Streets*. Simon and Schuster. New York. 1987.

Sale, Kirkpatrick. *SDS*. Vintage Books. New York, 1974.

SDS. *Port Huron Statement*. As found in Miller. Pp. 329-374.

Terrell, Paul. "A Guided Tour of Personal Computing." In *Creative Computing*. Vol. 10 no. 11. November 1984. Pp. 100-104.

This article is online at: http://www.columbia.edu/~hauben/CS/netdemocracy-60s.txt