

The Internet and its Improvements for Society

“SYN” says Computer A to Computer B. “SYN, ACK” replies Computer B. Finally, Computer A repeats back, “ACK...” and proceeds to deliver some data to Computer B. This is a handshake for the transport layer of the Internet, the basis on which information is delivered from any computer to another, perhaps thousands of miles apart. It enables programs running on computers to communicate with similar programs running on the other computers on the Internet, thus enabling human users of these programs to interact with each other. Many have argued that the rapid growth of the Internet and the amount of time people devote to using it will degrade human interaction and destroy society. I will argue that, in the long run, personal interaction and the ability of society to function as a true community will improve dramatically because of it.

The term ‘Internet’ was shortened from the notion of an internetwork which refers to the connection between many separate and independently managed networks of computers. This evolved from the world’s first computer network which was described as “a U.S. government-funded wide area network called the ARPANET that began its life in the late 1960s.”¹ Now anyone who has, at the least, access to a telephone line can access the Internet, although most people in developed countries have access to a permanent high-speed connection. Each computer on the Internet is provided with a unique address, which the tools in common use utilize in order to communicate. Such tools allow users of the Internet to reach different ends and, whilst they are many, there are a select few that are the most popular due to their uniqueness. The most common tool is one that allows for people to send messages directly to each other on a one to one basis, much like sending a letter by post, and is popularly called Electronic Mail, or E-mail for short. On the Internet of today, an E-mail message can often take under a second to reach its destination. Using such a technology, the Internet provides a much faster method of sending anything that can be digitally rendered from one person to another. However, technology that has dramatically changed the way that people interact is that which has provided for public exchange and discussion. One of the first popular systems that offered such a service over the Internet (amongst other kinds of networks) was one

¹ North, 1994 <<http://www.scribe.com.au/timn/thesis/chap2a.html>>

called Usenet news. In his thesis titled “The Internet and Usenet Global Computer Networks,” Tim North describes this service as one that “enables one’s messages (commonly called postings) to be read by a potential audience of millions of people.”¹ He likens the service to a “bulletin board,”¹ describing that “any message posted to the Usenet bulletin board [...] can be seen by [...] everyone else on the network.”¹ However, in my opinion, the difference between this and “a regular paper-and-thumbtacks bulletin board”¹ that North compares Usenet to is that it enables an unlimited amount of discussion not provided elsewhere, with only connection to the Internet as a limitation to participation. Another service provides for a stable place to publish information for anyone to see. Commonly referred to as the World Wide Web, it is a system of documents containing lines of code that instruct how a program called a Web Browser displays information. The first versions of these browsers could only display lines of text, some of which would command the browser program to display a document from a different location when certain keys on a computer were invoked by a user. Today, due to advances in the speed and capacity of the Internet infrastructure, the browsers are programmed to interpret code in the documents, called Web Pages, often within Web Sites, in many different formats, including pictures, movies, complex animations, and various interactive features which themselves can offer many forms of two-way communication, such as the ability to purchase items from a shop. Web Sites are, essentially, a place for anyone to publish any material on any computer connected to the Internet and viewable by every other computer (or even restricted to a select few) also connected to the Internet.

There is still another form of communication not addressed by the services I have already discusses and that is of one that provides real-time dialogue between people. Of course, in the technological world outside the Internet, this is provided by telephones. The telephone network is not so different from the Internet. Every piece of equipment on a telephone network also has a unique address – a telephone number. Whilst the telephone provides a successful link between what is usually two people at a time, the Internet can provide quite different experiences. Most current forms of real-time communication over the Internet involve dialogue in the form of text. The contrasting versions of this are those that are designed for multiple users to hold discussions at the

same time, and those designed for two person conversations. The difference between the former and discussion systems like Usenet is that with Internet Chat, as it is commonly called, the pace of conversation is generally much quicker, and individual contributions are much shorter, allowing for more natural conversation resembling that of a group of people in the same room. The most popular use of the Internet for inter-personal dialogue is by using programs that let you send short messages to people in a list of contacts, called Instant Messaging. As these conversations are often carried out in short lines of text, it enables people to have multiple conversations at the same time, or have dialogue in the background to another activity. Recently, usage of this type of communication has increased to become one of the most popular uses of the Internet, with 40.4% of Internet users taking part in it². Technology like this means that we can permanently be in intimate personal contact with others instead of only, for example when we have time to devote to a telephone conversation. Of course, if the situation requires it, the Internet also allows for more dedicated forms of dialogue similar to speaking with a telephone, or even enabling people to see each other whilst they are talking, using cameras. However, the telephone still continues to be an efficient way of communicating in this way.

Of course, there exists a great deal of cross-over between the different services that can be carried by the Internet. For example, discussion lists can be received by E-mail (each message would need to be sent to each subscriber), and E-mail can be viewed by way of a Web page. This often gives rise to new forms of communication that use various existing services, such as Web Logs, often shortened to one word and called 'Weblogs' or even (and perhaps more commonly) just 'blogs.' This phenomenon is described as "often-updated sites that point to articles elsewhere on the web, often with comments, and to on-site articles [...] a continual tour, with a human guide you get to know,"³ by Dave Winer, self-confessed writer of "the longest-running Weblog on the Internet."³

² Nielsen//Netratings, "Messaging Has Surfers Glued To Screen," (16th April 2004): <http://www.nielsen-netratings.com/pr/pr_040416_uk.pdf>

³ Winer, D., "The History of Weblogs", (Weblogs.com, 2002): <<http://newhome.Weblogs.com/historyOfWeblogs>>

With so many different forms of interaction available on the Internet, it is not surprising that 58.8% of the population in the UK and 67.6% of the population in the USA are users of the Internet.⁴ In the UK, people are on average spending over 24 hours a month using their computer for the Internet.⁵ In America especially, there is also a strong group, which account for about a fourth of all Internet users, that uses the Internet for more than 21 hours per week.⁵ With so much time spent ‘on-line,’ people have started to worry. The Stanford Institute for the Quantitative Study of Society performed the Study of the Social Consequences of the Internet and published its results in February 2000. After admitting that the Internet is taking time away from less electronic forms of communication, the most relevant point of this study is expressed as “The Internet could be the ultimate isolating technology that further reduces our participation in communities even more than did automobiles and television before it.”⁶ The basis for this seems to be the fact that the study shows that “Internet users spend less time in social activities.”⁶ This is represented by a graph which shows that 26% of Internet users spend less time talking to family and friends on the telephone, half that amount of people spend less time actually with friends and family and only 8% report attending fewer social events. This may well be true, but in my opinion is only an indicator that the Internet promotes change in social habits. Since the uses of the Internet are mainly for communication, it seems bizarre to equate more use of the Internet with social isolation. In fact, if one’s family and friends are on the Internet then using a service such as Instant Messaging which I have described above will surely increase the amount of social communication between such people. This is best put by the author of an article in reply to this study when she states, “[...] my 14-year-old son was ecstatic because he had finally gotten access to the chat room his school friends visit. Rather than sitting in front of the television [...] he happily chatted with his buddies.”⁷ The worrying statistic in the study, however, is in fact the 8% of users who attend fewer social events. Whilst this is much lower than the percentage of those who use the telephone less, showing us again that the Internet is a

⁴ Nielsen//Netratings, “NetView Usage Metrics”, (2004): <http://www.nielsen-netratings.com/news.jsp?section=dat_to>

⁵ Metafacts, Inc., “Online Hours Continue Growth”, (2003): <http://www.metafactsusa.com/pages/info/tup_dates/tupan03_online_hours.htm>

⁶ Stanford Institute for the Quantitative Study of Society, “SIQSS Internet Study Press Release”, (Stanford University: 2000): <http://www.stanford.edu/group/siqss/Press_Release/press_release.html>

⁷ Smith, J. M., “Online but Not Antisocial” *New York Times*, 18th February 2000: P.29

replacement for such communication, it is something that takes up our time, either through increased amount of communication with family and friends, which the study fails to acknowledge, or through experiencing some of the never ending content available, either as sources of information, or merely pure entertainment. However, even if this were the case, it would not have a negative effect on society. When Gutenberg's printing press was invented in 1452, the fact that it enabled many people to spend more time reading and less time taking part in social events was not a hindrance to society. In fact, it provided one of the biggest boosts to making society less isolated. For example, whilst it helped demolish some aspects that made communities unique, it made communication a lot easier, such as by evolving a common dialect, at least in England at the time.

It is my opinion that this extra time spent on the Internet is also time that enhances a person's participation in society. I shall support this argument with a case study of how an emerging system of communication, on the Internet, of Weblogs as described earlier, is changing the way many communities operate. Whilst some forms of Weblog exist that are formally run but have a sole purpose to emulate personal public relations⁸, most are of a personal nature, offering the author's comments on their daily life, providing links of interest to other places on the Internet or other people's Weblog entries, and providing an area where readers can comment and discuss each entry. Not only does this create an archive of a person's on-line life, but it also provides a central identity for that person on the Internet, giving a personality to the author's contributions in every aspect of the Internet for anyone to see and become acquainted with. Often, Weblog authors have taken to discussing the corporate side of their life, which, in some fields, has started to change the way people perform their jobs. This is especially apparent in creative industries, such as computer software development, where the discussion of ideas is so important. Technical communities are often the first to adopt new methods, and often set an example to which others follow. This becomes especially apparent when considering that it is the technical community that develops these systems, and therefore apt that it is the same people who first demonstrate their effective uses. For example, Microsoft, the

⁸ Steve Jobs, "JustOneMoreThing – Steve Job's Weblog," (Kebawe.com, 2004):
<<http://justonemorething.com/>>

leading software developer in the world, dedicates part of their Web Site for providing links to nearly six hundred employee Weblogs. This in turn adds a human identity to corporations who otherwise are merely identified by the products they produce and what the mass media comments on. For example, one such employee of Microsoft expresses, “I’ve gotten E-mail from people telling me they have changed their attitude about Microsoft because of my blog [...] It helps me share the company’s beliefs.”⁹ This is taken even further to make the large corporation part of the community, much like a local firm would in a small village before the onset of globalisation. Keeping with the example of Microsoft, there are also some Weblogs that specialise in certain areas of software development. For example, one such Weblog by a Microsoft employee contains a post, which was inspired by a previous conversation, that proceeds to give a lengthy technical explanation of a feature in a product¹⁰ and continues to receive comments in the form of a discussion between various interested people. This therefore creates a dialogue between developers and customers, performing the opposite of what Nie, the principle academic for the study described above, would call social isolation. It is in fact integrating two functions of society and providing a more human form of dialogue between what has otherwise been isolated. However, technologies employed on the Internet are fast changing and research initiatives, for example one that says it will “explore how people share media and build conversations in the context of social networks,”¹¹ show that the ability of communities to form and individuals to participate will only be increased further by the Internet.

In his paper, *Cyberlibertarian Myths and the Prospects for Community*, Langdon Winner seems to think that what I have described above is only one aspect of community, and fails to provide for the essence of what a community needs in order to properly exist. He agrees that “along with feeling free and empowered by the new media, we can also be closely in touch with other people.”¹² However, he argues that Internet-connected

⁹ Baseline Magazine, “The Scobleizer versus Cerberus the Hound of Hades” (Ziff Davis Publishing Holdings, Inc., 2003): <<http://www.baselinemag.com/article2/0,3959,1357817,00.asp>>

¹⁰ Cameron Reilly, “Making Web Forms Easy With Infopath and Infoview” (April 16th 2004): <<http://blogs.msdn.com/cameronreilly/archive/2004/04/16/114297.aspx>>

¹¹ Microsoft Research, “Social Computing Group” (Microsoft Corporation, 2004): <<http://www.research.microsoft.com/scg/>>

¹² Winner, L., *Cyberlibertarian Myths and the Prospects for Community*, (1997): <<http://www.rpi.edu/~winner/cyberlib2.html>>

communities cannot impose social obligation on its members which is a necessity. He states, “most writings about on-line relationships blithely ignore the obligations, responsibilities, constraints, and mounds of sheer work that real communities involve.”¹² An example of such responsibility is provided when Winner suggests, “You know you are in a community when the phone rings and someone informs you that it is your turn to assume the burden [...] organizing this year’s fund raiser.”¹² However, we must make the distinction here between electronic communities formed by people who meet over the Internet, never having been related at all before communicating over the Internet, and those who have formed outside the Internet, but are using it to communicate. This kind of distinction makes it clearer to see that the Internet is merely a tool for communication, and cannot be the sole location where a fully formed community exists. It binds communities that already exist together, enabling increased involvement and participation, and therefore a stronger sense of social “duty,” as Winner puts it. Winner also gives us an example of a community which is initially formed by the Internet. “[...] most of the world’s skiing enthusiasts will participate in one electronic community or another [...]”¹² Such an example provides us with a response to Winner’s accusation that the Internet will not allow for the core components of a community. He describes that “Members of this community could get together to encourage each other and even work out at the same time.”¹² If this were now a community performing outside the Internet, formed by the friendships that only the Internet could have easily enabled, then surely it is one that the individual members would be subject to social responsibilities. Participation is one of the keys to a community. The communication that the Internet provides enables a much higher proportion of a community to experience this aspect and therefore feel more social responsibility towards their community. This is even proved by the fact that people who use the Internet are shown to be more politically active, both through voting and other activities such as signing petitions and writing letters to an elected official¹³. However, Winner’s next logical point concerning communities of this nature is that it will create “diversity achieved through segregation.”¹² My opinion is that he believes this due to the uncertainty of how easy it would be to access the information

¹³ Nielsen//NetRatings, “Web Surfers Are More Politically Active Than General Population,” (19th March 2004): <http://www.nielsen-netratings.com/pr/pr_040319.pdf>

of different “cyberniche[s]”¹² whereas it is apparent now that taking part in each cultural niche on the Internet is open to the interested general public. I have shown earlier how the existence of such interest-specific communities formed both in or outside the Internet, but using it to communicate, can benefit, but Winner here is arguing that such communities will segregate us, forcing us to ignore “ways for people of vocations, ethnic backgrounds, income levels, and social interests to mediate their differences and to stake out some areas of shared commitment.”¹² Winner fails to see that the Internet does not threaten our off-line existence, it merely exists as a potential to integrate within our lives as a tool to ensure that any type of society can function with the maximum amount of participation and access.

In this essay I have shown what the Internet provides and how it helps communities thrive. I have also shown how the way we do things has the potential to change dramatically because of the Internet, and that our on-line and off-line worlds are becoming integrated and enhanced by each other. In these ways, the Internet can only be a benefit to society, and a revolutionary one at that.

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