Critical Analysis Paper #1: The Future of the Internet

In the late 1960s, Len Kleinrock and his research team at UCLA did the unimaginable; they created the Internet. The team began by creating a system that connected just a few computers around the United States, then turned it into a dynamic system that linked millions of computers all over the world. On September 2, 1969, about twenty people gathered in Kleinrock’s lab to watch as two computers passed meaningless data through a 15-foot gray cable (Jesdanun, p. 1). The Internet has transformed a great deal in the last forty years, it began as a way to share data between computers across the United States and turned into an open network for information sharing, online shopping, communicating, and even a new way to play games. The Internet is currently generative, allowing any user to freely post and create anything they desire. This freedom has allowed the Internet to become one of the world's most popular inventions, connecting people across the globe. With the enormous growth of the Internet came people trying to exploit it using viruses and other attacks. Some people would argue for a reconstruction of the modern day internet in order to fend off these attacks. This reconstruction is unnecessary because of the companies dedicated to warding off attacks and the negative effect it would have on the creativity, usefulness and freedom of the internet.

According to Zittrain (2008), “On November 2, 1988, many of these computers started acting strangely. Unusual documents appeared in the depths of their file systems, and their system logs recorded activities unrelated to anything the computers’ regular users were doing” (p. 36). This was the world’s first internet worm. It was created by twenty-three-year-old Robert Tappan Morris Jr., a graduate student from Cornell University. This worm demonstrated that the Internet is both a generative technology and a security threat. When this worm was first detected about twenty years ago the researchers diffusing the worm saw it more as a curiosity rather than a security threat, and more as a challenge and overall not something to be threatened by. Twenty years ago the Internet was able to sustain against the threats of that time and I believe the Internet today will be able to sustain against any new threats.

In the forty years that the Internet has been alive there has only been one major threat, the Lovebug worm. This infamous worm was released in May 2000 and caused the most damage to the PCs connected to the internet (Zittrain, 2008, p.44). Although there were moments of panic when these two major worms were found, software engineers seemed to remain calm and fix the problem in a short amount of time. Many people in the world would argue for a reconstruction of the modern day internet in order to fend off these attacks but this reconstruction is unnecessary. There are companies around the world dedicated to warding off these attacks. Most new computers now come with some type or anti-virus or malware software that helps defend against threats and attacks previously mentioned. Worrying over viruses and worms seems mundane and useless. I do believe internet security is an important fact but not severe enough to restructure the Internet and take away from the Internet’s freedom, the one aspect of the Internet people love and flock to.

The Internet was created as a generative technology, allowing its users to tinker and invent new code and create new software. According to O’Reilly (2005), the web was created as a platform, a starting base for people to create new sites and collaborate with others. Because of this the Internet can be seen a melting pot, a mixture of anything and everything you can ever want on your own personal computer. In theory restructuring the Internet would cause the amount of threats and viruses to decrease and increase the security level; however millions of people would be losing one of the only generative technologies in the world. If the Internet were to be restructured who would undergo this task and how strict would the new policy be? Restructuring the Internet would cause the people of the world to lose part of their freedom of speech, freedom to be creative, and freedom to experiment. This is what Zittrain meant as the generative dilemma. Do we as citizens of the world give up our social media sites, music, and art just so the Internet can improve its security? Having a generative piece of technology like the Internet allows a person to create new software or works of art, or read a book, or even communicate with a family member across the world. Kleinrock stated, “Allow that open access, and a thousand flowers bloom. One thing about the internet you can predict is you will be surprised by applications you did not expect” (Jesdanun, 2009, p.2).

According to Berners-Lee (1994), “The World-Wide Web (W3) was developed to be a pool of human knowledge, which would allow collaboration in remote sites to share their ideas and all aspects of a common project” (p. 792). When Berners-Lee and his fellow colleagues wrote this article about the World-Wide Web in 1994, this was the only definition that expressed the only purpose for the Internet at this time. In today’s world this definition is still correct however the Internet has evolved into a much greater fixation. It is no longer restricted to only scholars and researchers, it is a commercial product used by all types of people, allowing them to be innovative and imaginative in a way all their own. The Internet is currently generative, allowing any user to freely post and create anything they desire. This freedom has allowed the Internet to become one of the world's most popular inventions, connecting people across the globe. With the enormous growth of the internet came people trying to exploit it using viruses and other attacks. Some people would argue for a reconstruction of the modern day internet in order to fend off these attacks. This reconstruction is unnecessary because of the companies dedicated to warding off attacks and the negative effect it would have on the creativity, usefulness and freedom of the Internet.

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