Anastasia Lalamentik CS6501 F19 - Reading Response 1 "As We May Think" by Vannevar Bush

As I was going through the paper, my mind kept on making connections in between the systems that Bush was describing in his paper and the technologies that are already well-developed and embedded to our daily lives these days. Before reading this paper, I was unaware of the brilliant ideas that people in the past came up with that fueled the advancement of technology. It makes me feel fortunate that there were intellectuals such as Vannevar Bush who took the first step into discovering the unknowns and thinking about the world in such a futuristic manner, to the point where his ideas were able to propel technology in such a positive direction and enable us to live more conveniently and efficiently.

In this article, Bush expressed his concern about human beings' inability to make the most out of the massive surge of information growingly available at the time. He envisioned a system where human beings can easily build trails of information from a huge array of seemingly random sources, annotate them, save the trails for later consultation, and even share them with others. Although there were file storage systems in place at the time, they did not work in favor of the way human brains are set up. They employed indexing mechanisms where files are sorted numerically or alphabetically, whereas human brains work through association. He came up with an idea of a device called the "memex", which allows people to scan copious amounts of reading resources into the machine, scroll through the pages and build information trails by tying multiple items together using a combination of a code book, a keypad, buttons and levers. This made me think of the way we interact with computers these days. Scanners and cameras let us save important information as is, our keyboard design is intuitive and versatile that we can now merely press arrow buttons to navigate through pages instead of using levers, our mouse allows use to be more selective in what information we want to copy and paste and our touch screen capabilities are far better equipped for annotating digital documents.

He also mentioned a speech-controlled typewriter, now known as voice control, a technology implanted in the various systems we use on a daily basis. One last thing he mentioned that I found interesting is the card selecting machine system to filter factory employees based on some characteristics. This reminds me of Excel, database management systems and query languages. He was correct about his prediction that selection devices would soon be speeded up. I was amazed at how his ideas came to life throughout decades of research. Bush is definitely a pioneer in advancing technology with how he has inspired so many people in the area of computer science and specifically human-computer interaction. I was looking for more information on Bush and found that Douglas Engelbart was influenced by his article in his invention of the mouse, and I have no doubt that many other computer scientists were too. I would like to end with a quote from his article that I find highly relevant to this class, "All our steps in creating or absorbing material of the record proceed through one of the senses—the tactile when we touch keys, the oral when we speak or listen, the visual when we read. Is it not possible that some day the path may be established more directly?"