

As We May Think, Vannevar Bush

The article was written in the context of post World War by Bush, an engineer and mathematician who brought to light new concepts of scientific processes and inspired a lot of future creators of computer machines. The way he is organizing his article is captivating. A reader from the 21st century would be surprised like I was to feel the questions Bush is asking himself because it reflects the culture we are living nowadays and it shows that he was predicting human needs and science progress. He starts describing how science and the role of scientists evolved during the war, how they were in a transition stage where they are looking for new roles, and how humans started to ask for new relationship between thinking and knowledge. Then, he demonstrates that in the past, the world knew a period of frustration because of instability between research, knowledge and economics. Bush puts the accent on the fact that progress has come and at the time he is talking the world came to an age of cheap and complex devices. After describing different contexts, he brings up the idea of new ways to respond new human needs with new science. I felt amazed by how he is, by a very simple way of expression, making the world enter in a new path of operating and recording visuals, sounds, data. He doesn't seem really amazed and confident by what he is discovering because he doesn't realize the impacts of his vision will have. The Memex Machine he is describing will be an inspiration for all of what we are dependant nowadays: links between information, storage of it... therefore the composition and functioning of any electronic devices human are now born with.

How the atom bomb helped give birth to the Internet, Johnny Ryan

This article shows how political power have an influence on knowledge, progress, social culture of a country. In the context of the nuclear war, the need of a new effective way of communication apart from nuclear power and impacts (at this time, any actions could have bad effects on the radio communication or the telephonic network) encouraged the US state to widen research and development, and make calls at the population for helping it. At the beginning, this was with the aim of helping the American nation in building-up its defense and power, but it gave birth to the idea of a different way of communication and to the rise of an impactful and independent think tank (RAND). This is the proof that a very hierarchical and closed context can still have great impact on progress that will touch everybody. The project dealt with an inspiration from the neurological model: the human body is such a complex and clever anatomic being that anything that changes the world is inspired from how it works and how it is build. Indeed, Roosevelt said that the "technology is an alternative to manpower". Therefore, the new way of distribution of data works in a centrifugal one with no central point anymore: it gives more freedom and independency to the information involved. All of this new ideas brought also to light that progress is coming from collaboration between different sectors (mathematicians, engineers but also economists and social scientists work on it), and that impactful international progress not always comes from research on this specific subject, but from interlaced sectors (here for internet, the articles shows it comes from a political and military context); so people should always stay open minded.