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The Technological Society

In *The Technological Society,* Jacques Ellul defines Technique and describes the depth to which it has affected our science, technology, and society. Technique is limiting factor in this world; it allows advancements in science, new discoveries in technology, and transforms whole societies. In strives for efficiency, it converts everything it touches into a machine. During the process, it removes humans from its decisions given that all possible problems has been predicted, solved in advance in the most effective way, and documented in a big procedural manual. A person is no longer able to make decisions and becomes an extension of Technique.

Let's start with the definition of Technique in mind. It seems that Technique, at least in Ellul's mind, is a term easily confused with technology. In the opening of his book, he explicitly states that Technique is not technology and emphases the fact repeatedly. He seems to have an unfounded fear that most readers of his book would mistake Technology for Technique, perhaps a fear which is founded in French as it was the book's original language. He offers a definition of Technique as "the totality of methods rationally arrived at and having absolute efficiency in every field of human activity". (Ellul xxv) It refers to any method, process, or technology which tries to make a pre-existing process more efficient. There are two basic types of techniques. The first is human technique. This type of technique tries to perfect the usage of pre-existing tools, widely used into earlier times. The craftsmen in these early times practices vigorously to improve their mastery over their tools. They "regarded technical progress as a relative instrument rather than a god." (Ellul 66) Their paradigm views people as capable being

whose skills are able to overcome the defects of their tools. The problems arise when a person finds himself at the pinnacle of his skills and no longer able improve his skills any longer. The next logical step then becomes a task of improving his tools, which leads to improvements in instrumental techniques. As our tools improve, the skills required to use them drop. This trend has lead to an emphasis on instrumental techniques and a de-emphasis on human techniques. We can clearly see that this trend is still continuing to accelerate as we continue to strive for improvements in our tools.

Science depends on Technique rather than Technique depends on science. Most people believe the new technique we acquire is a result of new discoveries in science, but Ellul points out the opposite is true. It is often the case that science lags behind technique. People often discover and implement techniques first by trail and error. Science plays catch-up with technique by offering explanations to the amazing discoveries centuries earlier. Many of our inventions and discoveries were accidental or were based on observations of nature: Benjamin Franklin wasn't looking for a source of power when he discovered electricity in 1752, nor did researchers looking for a way to improve efficiency of our lives when research started looking to produce an electric light source in 1841. At the time of these inventions, science knew nothing about the existence of these phenomena and could not offer any plausible explanations. Although widely in use at the time, science wasn't able to solve the mystery of electricity until 1897 when JJ. Thomas started his experiments with cathode rays. Likewise, the photon wasn't discovered by Albert Einstein until 1905. It is actually technique which enables science to advance. The reason researcher weren't able to discover the existence of DNA earlier was because they did not process the necessary tools to enable them to look into the chemical

composition of the human cell. Nuclear physics like-wise would haven't been able to advance to today's state without first having access to the technologies which enabled them to build complex particle accelerators.

Technique transforms everything in its reach into a machine. Despite the different types of technique, they all have a tendency to transform everything within its reach into a machine. This machine doesn't have the ability to make its own decisions, doesn't adapt to its users, requiring the user to adapt to it instead, nor does it require a very complex set of skills and knowledge from its users. In turn, it transforms the user into a simple replaceable unit.

Technique in its purest form is technology, which is a form of instrumental technique. Their sole purpose of existence lies in the optimization of pre-existing processes by converting everything it sees into machines compatible with its usage. There is generally no debate about the implications of technology on our society. The car transformed many rural cities into concentration of great slums and business centers. The plow and the tractor transformed the labor intensive chore of farming into one requiring only few men at the controls. These inventions didn't adapt to the pre-existing users. Instead, it adapts all the users to itself by transforming cities and farms across many nations.

Organization technique, a human technique which transformed our world, is still having wide ranging effects today similar to those it has made in the past. One of its greatest achievements is its ability to take a society made up of highly skilled people and transformed it into one which requires virtually no skills. The new society is made up of highly specialized units which fit into the organizational structure of the new human

machine. The assembly line is one such example of the new machine. Cars are no longer built in the realm of highly trained professionals. The invention of the organizational techniques has converted the once highly complex task of making an automobile into a series of very simple process that anyone with a few days of training has the ability to do. As a result, the manufacturing of cars has changed from a highly skilled profession to a place where unskilled human robots repetitively screws in the nuts and bolts, something perhaps machines could do better in our place. In fact, we see this mechanization process happening to every other industry; radio stations are no longer run by actual people but are controlled remotely by a central station, and trains could run by themselves with almost no human intervention except in emergencies. It is slowly transforming humans into an extension of the machine, making us into more efficient human robots.

Instrumental technique takes away the element of human choice as it replaces human technique in the modern society. The state of modern technique leaves its users with little or no control over their everyday actions. Our approach to problem solving had been largely transformed by technique. The task of a problem solver is no longer to come up with a new solution; Technique has already provided our solution long in advance, the task of the problem solver becomes the process of seeking the most efficient tool amongst those available. While some might argue that we still have a choice amongst the many different solutions, the choice is merely an illusion. We can no longer choose a previous technique which has been proven less efficient than another.

These restrictions of choices are due to our wide deployment of instrumental techniques such as the organization techniques and technological techniques previously discussed. These techniques have set in place numerous scenarios and their appropriate

procedures. These phenomena can be observed through the huge volumes of behavioral manuals in the workplace which details every likely and unlikely situation and tells you exact procedures. These manuals take away the choice of management and employers leaving them with a sense of detachment. This sense of detachment is further enhanced by the management structure created by the organizational and other human techniques which tries to push the human efficiency further along. The end result is nothing more than a conversion of humans into a simple mechanical unit in a socially structured environment being made to repeat the same tasks over and over with no sense of accomplishment because each part of the whole is insignificant in itself; anyone which almost no skills could have done it. Thus, humans become an extension of technique efficiently carrying out our small meaningless tasks in a robot-like manner.

I would like to add that this trend could lead to the elimination of large portion of humans as the direst consequence, in relation to one of the other articles we have read in class. As technique advances, it doesn't seem implausible for these human machines to be replaced by actual machines for these repetitive tasks. In the best case, humans will still be replaced by actual machines. With them performing every function in our society, we are then able to move onto more intellectual topics machines could not perform and our world could become a better place to live. But the most likely consequence, in my opinion, would be one where humans start to rebel against the mechanization of their society and impose restriction of techniques put into use. We have already seen some backlash to RFID, concerns regardless the use of the internet and anxieties toward the loss of moral in the workplace as a result of the worker's disassociation.

Sources

Ellul, Jacques. The Technological Society. New York: Alfred A. Knopf, Inc. and Random House, Inc., 1964

American Revolution – Benjamin Franklin and Discovery of Electricity. 27 Oct, 2003 <http://www.americanrevolution.com/BenjaminFranklinElectricity.htm>

Invention of the Light Bulb. 02 May, 2004. <http://www.ideafinder.com/history/inventions/story074.htm>

The Discovery of the Electron. 15 May, 2004. <http://www.aip.org/history/electron/>

Photons. 12 Jan, 1996. <http://zebu.uoregon.edu/~soper/Light/photons.html>