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Technological Influence on Decision and Autonomy

As we immerse ourselves in a tech-driven world, technology has slowly become inseparable from our daily lives, whether that is how we communicate, work, or make decisions. From house cleaning robots to artificial intelligence, many people have overlooked the effects that technology has on human autonomy and the way we live. This raises a critical issue: How much should we allow technology to take over our lives? Should we rely on technology to make decisions? If so, how much control do we dare to give it?

The book *This is Technology Ethics: An Introduction* by Sven Nyholm, a professor at the Ludwig Maximilian University of Munich, discusses various aspects of technological influence on decision and autonomy, and we will explore a few of his ideas in this paper.

One of the major concerns with the increasing dependence on technology is its impact on personal autonomy, or the ability to have control over making informed and independent decisions. However, technologies such as social media, artificial intelligence-driven applications, and behavior-modifying technologies may undermine our autonomy. For example, while it is true that social media has brought human connections closer together and allows information to be more accessible, it also has its drawbacks on our self-autonomy. Social media fosters social comparison, influencing how we shape our values. Although our environment indeed influences our values, social media tends to be a place where people exhibit themselves in ways that they want others to see them, appearing to have idealized lifestyles. It is not often that you see people sharing their vulnerabilities or lowest moments of their lives on social media platforms. The algorithms behind these platforms are designed to keep our eyes

mindlessly glued to the screens, but we often do not notice how the algorithm is part of the issue. We may blame ourselves for lacking self-control, but in reality, these platforms exploit cognitive biases to keep us scrolling. Algorithms are specially designed to keep our attention fully on the screen to maximize engagement and monetization for tech companies. We have lost control over digital media, not only are we mass fed content the algorithm wants us to see, but also have our behavior controlled by algorithms.

Beyond social media, behavior change technologies such as smart watches and fitness and habit tracking applications present a complex dilemma. On the surface, they aim to motivate users by monitoring daily productivity, health, and behavior. However, these tools also gamify daily activities. These technologies may have been developed to monitor and encourage discipline, but they also influence our minds to transform ordinary behaviors into leaderboard-driven competition, since what these apps display are numbers and data comparisons. These behavior tracking applications often come with rankings and leaderboards that allow the user to compare themselves with others, in hopes of motivating the user. But as we are constantly comparing with one another, users treat daily activities with a gaming mindset, focused on the competition and ranking at the top. Users are also guided towards actions through the algorithm unconsciously, something they may not have agreed upon. This weakens our autonomy as it can influence not only our behaviors, but also our minds psychologically in a negative way. Users may develop anxiety or unexpected stress from these technologies due to not reaching their goals.

Tech companies also gain profit from tracking user data, whether that is by using the data for other applications or selling data to other tech companies. Ethics and morality are usually not among many companies' goals in developing their products. This emphasizes how companies would prioritize any means for profit, rather than the autonomy of their users.

An example the book mentions is smart watches, which the user may use to track exercise patterns, but the company "might want the technology to influence the user's consumer behaviors as well" (Nyholm, 122). This may not be apparent to the user, but

many applications within the watch may be geared towards taking your data, without the user knowing what it may be used for.

Various philosophical theories offer ideas on how we should evaluate the role of technology in our lives. From a consequentialist perspective, the morality of relying on technology depends entirely on the outcomes it produces. In this sense, if the consequences of using technology are beneficial and not harmful, it is considered morally acceptable. Utilitarianism, a specific form of consequentialism, evaluates actions based on the ability to maximize overall happiness for the greatest number of people. From this viewpoint, if technology is able to help millions of people across the world become connected and experience greater happiness, it would be morally good. Since a Utilitarian would focus more on people as a whole, sacrificing some self-autonomy is acceptable as compared to a widespread increase in happiness in society. On the other hand, critics also argue that there are long-term negative effects of technology. For example, the psychological harms like jealousy, anxiety, and depression from social media are a result of the loss of autonomy and algorithmic manipulation for the larger population. Such widespread harms would be an issue from a utilitarian perspective as the consequences outweigh the benefits.

Hedonism is an ethical theory that categorizes pleasure as an intrinsic good, and pain or suffering is inherently bad. In a hedonistic perspective, the moral value of technology would be evaluated by the extent of pleasure it brings to the individual. Technologies like social media can bring pleasure to some users, but as they consume more and more biased content fed by algorithms through mindless scrolling, they are on a hedonic treadmill. This is a psychological theory that people's standards for happiness will increase when they slowly adapt to the current state of happiness. With more technological stimulation, it may initially increase happiness, but the satisfaction bar would move higher and higher as we adapt to the change. Many users may not be aware of what technology is doing to us mentally, but technology use and reliance should be used in moderation, to balance out the intrinsic good of pleasure and the "bad" of suffering. When the technology causes anxiety or stress to the user, use should be reduced.

We now know that technology and algorithms have all sorts of adverse effects on users. Many of these technologies want to influence our behavior so that we do the things that the programmers want. But what if we simply decide to let these algorithms make decisions for us? We could give away our autonomy to the machines, but is this beneficial to us?

Nyholm and many other technology ethics researchers discuss the outcomes of machines as moral agents. Moral agents are persons or objects that are able to make decisions which affect others and the real world around them. A machine that is a moral agent is generally classified as an autonomous machine, and is able to perform tasks and function without human input or control. The most classic example of such a machine is the self-driving car, a vehicle that can drive, obey traffic laws, and operate under emergency situations, such as in a car accident. These self-driving vehicles have no human driver, and are programmed to protect their passengers and keep their driving as safe as possible, especially when in a situation where there is a possibility of a crash.

Ronald Arkin, a computer science and ethics researcher at The Georgia Institute of Technology, stands on the opposite side of most people when they are asked whether autonomous machines are moral. He argues that autonomous machines with the ability to reason and rationalize, but have no human motions, are indeed moral, and have the potential to be more moral than humans, especially when in war (Nyholm, 177). He gives an example, stating that machines that have appropriate programming that follows the laws of war would not pillage overtaken villages or rape villagers when used in violent conflicts. This is true, since these machines are generally not equipped with sensations of pleasure or violence. However, though Arkin does not specify, by this argument, overtaking villages is good, and killing villagers is presumably moral.

Who assumes responsibility for a self-driving car in the case of an accident is often and highly debated. For example, if it had to decide which lane to swerve to to avoid a crash, Arkin would argue that whichever choice the self-driving car made would be the most moral, assuming that it has the capability to rationalize. Whether it swerved into a barrier, a semi truck, or a motorcyclist would not matter, as the algorithm would have instantaneously weighed all three and chosen the most moral option. Now let's

take an autonomous military drone as an example. Suppose it had a task to take over a village, and the villagers are putting up a resistance. Should this drone kill all the resisting villagers, attempt to negotiate (assuming it had this capability), or take over the village in a non-violent way? Surely the drone would have the weaponry to overpower a few dozen poorly armed villagers. Killing would be an easy task. Also, is it fair in war for one side to have modern and destructive weapons, and the other to have primitive tools? Arkin would argue that this rational drone would follow the laws of war and take the most moral action. However, another issue with his stance is that machines will always be made by people, and people have internal biases, whether we know it or not. These machines would have to serve their makers, and because of this, there will never be a neutral course of action for an autonomous machine. If there were a truly neutral machine that abided by some code of morals, we might not like the actions that these machines take. For example, if we want our drone to get rid of a village that has natural resources under it to be mined, a neutral drone might refuse, if it has that capability, or kill, or possibly relocate villagers against their will. It could be said that a truly neutral machine conflicts with our interests and is no longer a faithful servant to its user. It seems that an idealized, moral, and rational machine is incompatible with what we want it to do.

Of course, an autonomous military drone may be an extreme example, but we already have algorithms in a similar vein that make these decisions today. For example, companies employ algorithms that scan through possibly thousands of resumes in a day and decide whether the applicant may get a job interview in an instant. The slightest mistake could lead to a rejection without a recruiter ever seeing the resume. People have resorted to “gaming” the algorithms in hopes of getting a job offer. Is it ethical for a company to reject someone just because their resume scanning algorithm decides so?

The egoist might believe that a moral and rational machine would be in his best interest, no matter what it did. To further his own goals, the egoist doesn’t care that the machine might reject someone’s job application or otherwise put others in a bad position. As long as the drone’s actions result in good for him, nothing else matters. In contrast, Kant would say that the intention of the egoist is selfishness, and thus immoral.

Kantian ethics also brings up another point: Can a machine itself be moral? Or do the actions of a machine reflect the morality of the creator and user? Kant believes that there must be an external "Good Will" that directs our actions. Under the theory of Good Will, using an algorithm to sort resumes into the categories of pass and fail would not be good, because the intention in using this technology would be to expedite the hiring process and cutting costs, leading to jobs being taken away from human recruiters. However, Kant would also say that any mistakes in accepting or rejecting an applicant would not be the company's fault and that it was simply an unfortunate error in the machine's construction.

In conclusion, technology may have made our lives easier and interconnected, but it has also brought significant threats to our self-autonomy and decision-making. Whether that is through our daily consumption of social media or increasing reliance on algorithm-driven machines, they have made an undetectable yet substantial influence on our values, behaviors, and perspectives in life. Some companies may use them to reduce costs, while others may use them to replace human involvement. One may argue that algorithms could make the decisions and work under pressure to be moral in a way a human never could. While some may argue that autonomous machines could be more ethical than humans in warfare or decision making, we should keep in mind the biases and interests behind the creators of these machines, and consider if it is in everyone's interest to use them.