# Overview: beyond a utilitarian view of technology
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Reminiscent of Leonardo Da Vinci's painting, *Creation of Adam*, technology has become the finger of God touching that of man. Common views of technology included the utilitarian, where we were anxious to use technology for a purpose, howbeit a good purpose. In the history of technology, people responded to new technologies as dystopian, that it would be useless, on the one hand; or utopian, that many problems would be solved, on the other hand. Alternatively, many viewed technology as neutral: depending on how it was used in the hands of good men or bad men, there would be good or bad use of technology. Technology, it was said, had no life of its own and the results would be all up to how humans use it. What do you think of technology? Do you agree with any of the above views?

The applications of technology are ubiquitous. In education we used information technology and used measures to rank schools. In business we used big data for commercialization of products. In religion we used worship presentations and church websites. In communication we used digital storytelling. In medical practice, we spliced genes and offered genetic counselling. On a personal level, we used smart phones as a daily routine for work and communication. In urban planning we installed high-speed trains to remap the geography. All we were concerned with was the usage, the application, and the advancement of technology. Redeeming Technology as a Faculty Development Series could be the time to sit back and examine what technology is and its philosophical and metaphysical aspects.

First, does an invention of technology offer one thing and steal another? In the story by Plato of an inventor offering the invention of 'writing' to King Thamus, it made the King very sad. He could foresee that writing would take away our memory, externalize our collective history into words on a page, and we would suffer from amnesia. Another example would be Photoshop software: it stole our sense of wonder for any brilliant photographs in the future. All reality could be simulated and perfected. In the history of the invention of the atomic bomb, in the report of the scientists the day after the Hiroshima bombing, they admitted that they did not know the consequence of their own invention of the bomb. Technology is NOT neutral, it adds and subtracts us from certain qualities of life. We now live under the fear of the nuclear bomb.

Did technology shape our consciousness and culture? Marshall McLuhan proposed that 'the medium is the message', or the form of media dictates the content and itself becomes the content. Alvin Toffler in his trilogy of works, *Future Shock*, *Third Wave*, and *Powershift*, noted that the speed of change and the usage of information technology changed our psyche, social landscape and power structure. Harold Innis, the founding father of communication media studies, asserted that communication forms shape human consciousness, society and culture. Walter Ong explored human psychology and social order in the prevalent use of orality or literacy. Elizabeth Eisenstein learned in childhood from her teacher that 'language helps us to express and think, but language also limits our expression and thinking.' She went on to pioneer the study of the spatial order of the word in sequential arrangement of the printing press, which limits our consciousness into logical thinking rather than associative thinking. Martin Buber praised verbal storytelling that could incur a healing effect. In the light of all these ideas, we need to be more sensitive in our application zeal for online education, social media communication, and business data analysis. We use technologies and they in turn will shape our character.

Neil Postman, in his book *Technopoly: surrendering of culture to technology*, warned us that initially we used technology as a tool, and we tried to incorporate it into our culture. However, eventually with more powerful and advance technologies, they disrupted or dictated our culture or became the culture. Jacques Ellul examined technology from sociological and theological perspectives. He took it that technology had a life of its own, he called it *la technique*. It was the bias of technology toward the most efficient, effective, maximization of impact, and would eventually marginalized humanity. In the information age, the information bits of digital technology fragmentized human culture into the moment, the brief, the spontaneous, the visual and the scattered.

Parker Palmer, in his book *To Know as We Are Known*: *education as a spiritual journey*, asked the question - where should we draw the line in order not to play God? Is it true that anything that can be done, should be done? Jeremy Rifkin in his *The Biotech Century* offered the same warning. Is human technological advancement a black-hole eventuality that we should pursue at all costs? Human cloning, eugenics, euthanasia, gene cracking, and other technological advancements: would they endanger human dignity? Who should judge the 'good and evil' of a technology and its use?

Is there a gender bias in technology? Not only were there fewer females in technological research and critical analysis, most technological advancement focused on excellence, military, speed, and power. Very little research was done on gardening and culinary technologies. Stephen Monsma proposed the concept of *responsible technology*: the design, application, context and other aspects of technology need to be brought to focus.

Ivan Illich proposed the idea of *convivial tools.* These were tools that encourage participation and celebration, rather than alienation and demarcation. He suggested that the postal service would be a convivial tool. The same goes for bicycling. He contrasted bicycles with automobiles and highways that tended to be alienating.

While Neil Postman, Parker Palmer, Jacques Ellul, and Ivan Illich did have some background in Judeo-Christianity, Colin Gunton as a theologian examined the creation of God as a subject of media and technology. God used voice to create light, dust to create man, rib to create woman, tree to create fruit, and so on. He claimed that God prefers to co-create through mediation in His creation efforts. God also commissioned humans to till the ground, to watch the Garden of Eden, and to fill the earth with offerings. But in revolt against God, the Tower of Babel spirit was to converge rather than spread out geographically, freeze the time to the present rather than future time, and it tried to be as high as God in competition. The Tower of Babel could symbolize the spirit behind many of human technologies that were invented and employed. According to Gunton, creation would be an ongoing process for all things to be fulfilled, and becoming what God intended them to be from the beginning. This would include technology.

Science fiction books and films exemplified vividly the utopian and dystopian versions of technology. We had Ridley Scott's *Alien* series and *Blade Runner*, all focused on cloning and hybridizing of human with extraterrestrials. Stanley Kubrick depicted the takeover of a human space mission by a super computer in *2001: Space Odyssey*. Fritz Lang's *Metropolis* depicted the machine culture in its extreme, in which humans are driven as cogs. Newer films such *as Ghost in the Shell* examined the potential of cyborgs, *Her* looked at a computer dating a human, and *Inception* considered dream and subconscious implantation. All these films were prophetic in their visions of the power of technology in the human world.

So how do we redeem culture besides a critical understanding of technology, as suggested by Martin Heidegger that we should 'question technology'. Emergent technology is not only dystopian or utopian, it takes away certain aspects of human culture and dominates it. We need to understand that the form and the content are intertwined in technology. Habitual use of technology would condition us into a certain kind of machine culture. For example, in social media the immediate, sound bites, visual orientation, and narcissism. Walter Brueggemann in his *Prophetic Imagination* deemed that God's sovereignty and human dignity were the two non-negotiables in any human efforts. Will technology respect God's sovereignty or put priority on human self-sufficiency and the desire to be like God? Will this technology dehumanize us? We need to scrutinize our technological design, policy, usage, application, and effect according to these priorities. E. F. Schumacher proposed the ideas of "intermediate technology" and "appropriate technology" rather than the frantic drive for newest and most advance technology. The failure of the Concorde as an airplane would be a case in point. If technology encourages community, respects and enriches traditional culture, expands our cultural depth, we may consider them as culture-making.

**Synopsis of Readers for the First Session:**

1.  Neil Postman's chapter on *Technocracy.* As individuals express their life, so they are. In other words, our use of language conditions us to become our rhetoric. Historians were limited when they used tools to portrait different stages of history as the Stone Age, the Bronze Age, and so on. Humans were much more than mere-tool makers or users. Humans created, imagined, painted, worshipped, celebrated, told stories, and so one. Mere tool using was only a small aspect of human civilization. When tool-using enriches our culture, things can rightly be called tools. But when technology disrupts or replaces our culture, we needed to take warning. That was the situation for technocracy and technopoly.

2.  Lewis Mumford's chapter on *Tool Users vs Homo Sapiens and the Megamachine* warned of our bias towards the mathematical, physical science, regimentation, certainty, prediction, and control. These were all the characteristics of the machine culture. We started as tool-using, later moved to mastery over nature, and soon divorced ourselves from the natural habitat. We became a gigantic machine. In history, through the military force of the monarch that claimed divine endowment, human labor acted as a 'megachine' to create monuments of gigantic size and precision. Humans were reduced to a narrow-band of development and oppressed life. We need to restore all the rich potentials of human civilization and humanity. Humans are primarily symbol makers, relational community, religious beings, and life-making workers.

3.  Selinger and Engström's chapter on *Moraotirum on Cyborgs: computation, cognition, and commerce*, warned of our tendency of reduce all human faculty into mathematicization as if the mind was synonymous with computation. Human was treated as a machine. If that was the case, then the commercialization of machine would offer an upgrade of the human faculty in the form of a cyborg, in the spirit of evolution. Actually the human mind would be more than mere computation and logic. Humans could reflect, feel, choose good or evil, and create culture. A poem would be more than mere words and it is not value-free. Machine culture is not value free. Humans would seek identity, substance, dignity, character, and all things beyond the machine culture.