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# Technology philosophical assessment: some reasons for optimism

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## 1. Technology as an Alienating Force

Criticism of technology as a socially destabilising and hampering force which shallows human spirituality has a well-founded tradition in western philosophical and religious thought. In the past century alone, this tradition was associated with the names of Max Scheler, Oswald Spengler, Arnold Toynbee, Nikolai Berdyaev, José Ortega y Gasset, Martin Heidegger, Jacques Ellul, Ivan Illich, Neil Postmann and many others (cf. Schütz 2001; Zoglauer 2002). Fifty years ago Heidegger wrote:

Forces, which in the form of diverse technical installations and devices pose their demands on humans, hamper, oppress and drag them along in their tracks everywhere and at all times – these forces have long since outgrown the will of humans and their ability to decide, as it was not humans which called them into being (Heidegger 1959: 19).

Here "not humans" probably means those, whose fascination with technology deprived them of the ability to reflect on the essence of being. And precisely this, in Heidegger's opinion, decides about being human. What would Heidegger say today considering that in the years in which he said the words (going even as far as to complain about "the madness of technology") television, the motor car, the internet, cellular telephony and today's major discoveries in genetics, physics, medicine, electronics and IT were still in their fledgling phase?

The most radical enemy of technology among Polish ecological philosophers is Henryk Skolimowski, who believes that:

Technology is a tool of global barbarisation, a cup full of poison... Technology has immensely trivialised the sphere of human destiny and the destiny of the world around us. It has impoverished humans by systematically driving them towards the prosaic and distancing them from higher ideals like compassion, love, wisdom, inner peace... It has shown itself as an epicycle – the singular movement of a planet which has fallen out of its regular orbit to subsequently return to it... Technology has become a materialistic metaphysics offering a consumerist substitute of the essence of life... Together with positivistic science it has evolved into a blind force striving chiefly to multiply its own self (1992, p. 131; 1983 passim)

However, Skolimowski occasionally tempers such radicalism by milder words, saying he is not against science, technology or rational thought, only against their destructive effects on the environment and human life.

Critics of contemporary technology pose the following question: To what extend does it contribute to so-called moral progress understood as the improvement of human relations? Do science and technology even indirectly cause there to be more justice, friendliness and solidarity and less hatred, injustice and indifference in human social life than in, say, the Middle Ages? In other words – to what degree – if at all – has scientific and technological progress changed humans for the better?

Doubtless there is a striking disproportion in the evolution of these two civilisation spheres – in fact, there appear to be no connections between them at all. The 20<sup>th</sup> century, the age of air travel, radio, television, the Internet and momentous discoveries in genetics – in short, an age in which science and technology probably developed further than at any other time in history – was also a century which brought two world wars, concentration camps, organised crime and terrorism, and whose everyday life was marked by mounting aggression and increasingly vulgar language. Today our cars get better all the time, but the same can not be said about driver conduct. Do mobile phones and emails imbue culture into the gentle attitudes? The internet has given access to a multitude of scientific, philosophical and religious texts, but it has also become a cesspit of triviality, thievery and sabotage. In all, it appears that in changing human surroundings, technology has to a vast degree become these surroundings, albeit without changing human hearts for the better.

Doubts about whether scientific and technological progress went hand in hand with moral evolution have been, among others, voiced by the Church:

The human being is worth more because of who he is than because of what he possesses. Similarly, there is more value in all which humans do to attain greater justice, broader brotherhood and a more humane organisation of social ties, than in technological progress. This is so because technological progress can only supply the material for human betterment but in itself is unable to bring such betterment about (Constitution *Gaudium et Spes*, 1965, n. 35).

Also John Paul II said: "The development of technology and the development of contemporary civilisation under the rule of technology call for a proportionate development of morality and ethics. As matters stand, however, the latter unfortunately seems to be lagging behind." (*Redemptor hominis*, 1979, n.15).

## 2. Technology in the Service of Human Values

Optimists may point to positive changes in human relations, which are to a degree an effect of the development of science and technology. One example is humanitarian and social aid, which has never stood on such a high level as over the past fifty years. Alongside government and UN agencies, thousands of NGOs, like Doctors Without Borders, the Helsinki Foundation for Human Rights or Friends of the Earth International carry aid to people and nature on a global scale. Voluntary

humanitarian aid from all over the world flows on an unprecedented scale to sites touched by natural disaster, famine and other catastrophes. This would not be possible without modern transportation and telecommunication means. International law has been enriched by the crime against humanity concept and many found guilt of such crimes have been incarcerated by tribunals in Nuremberg or The Hague. There still exist hotbeds of ruthless national and tribal warfare but the Soviet communism, racism and many despot regimes have been abolished or impaired thanks to previously unknown bloodless "negotiated revolutions" – initiated by India's independence struggle under Mahatma Gandhi. Such revolutions would not have been possible without the fast and effective information flow ensured by radio, television, the internet or mobile telephony.

At the outset of the 20<sup>th</sup> century there were only six democracies in the world, today there are more than a hundred. Although they have many weak points it must be conceded that the world is progressing towards the empowerment of human societies and the replacement of authoritarian, force-based government by government founded upon law, persuasion and respect for human and civic rights. Also this process, which must be seen as a form of moral progress, would not be possible without the quantity and quality of information transmitted by books, television or telecommunication tools. An essential democracy factor is for society to have a sufficiently high level of knowledge and civic awareness. To sum up, the achievements of science and technology underlie (at least as a *conditio sine qua non*) many – and perhaps all – contemporary attainments in the moral sphere.

Probably no 20<sup>th</sup>-century philosopher underscored the positive role of scientific and technological progress as strongly as the French Jesuit Pierre Teilhard de Chardin. His optimism in this respect has been based on original philosophical premises. He maintains that science and technology are not in opposition to what is natural in human life but a natural evolution phase:

Technology has a role that is biological in the strict sense of the word: it has every right to be included in the scheme of nature. From this point of view, which agrees with that of Bergson, there ceases to be any distinction between the artificial and the natural, between technology and life, since all organisms are the result of invention; if there is any difference, the advantage is on the side of the artificial (*The Place of Technology* 1947: 159).

Teilhard de Chardin saw science and technology as especially crucial in the so-called noogenetic phase, in which human life attains organisation, complexity and concentration. From this rises the noosphere (from the Greek *nous* – spirit, thought), a sphere of thought which embraces the earth similarly to the biosphere. The normal mind sees individuals and species, but a biologist notices much more – their systemic character, the multifarious relations between species and the interdependence of the biosphere, geosphere and cosmosphere. The phenomenon of life on earth is a

complex system, a network of elaborate connections which are a constant field of research. Teilhard de Chardin suggests to take a similar view of the thought sphere – to see it not as a row of individual achievements but a complex system of interrelated experiences, discoveries and tools whose content, complexity and cohesion increases over history and to whom all human civilisations and generations contribute:

The billions of experiences which humans gather and compare constantly add to humanity's mental heritage, amidst which we are born, live and grow, usually even without the knowledge that this common way of feeling and seeing is nothing but our huge, collective and collectively organised past (*Człowiek* [Man's Place in Nature], 1950: 97).

At the core of Teilhard de Chardin's concept is the complexity-consciusness law which rules all cosmic evolution. Awareness, thought and spirit are born and evolve only on the fundament of well-organised matter. The universe contains no pure matter or pure spirit, only material-spiritual substance which gradually spiritualises in the course of evolution. The more perfectly this material is organised (i.e. the more elements concentrate around a central hub), the higher the awareness. For example humans owe the fact that their awareness is higher than that of animals to the higher centro-complexity of their brains. According to Teilhard de Chardin's theory the human individual is a cell of a global brain. However, just as we must distinguish the brain from its thoughts but at the same time take account of the inter-relation between them, so the global brain has to be set apart from the sphere of collective human thought – the noosphere. In our times the global brain, the material foundation of the noosphere, are the tools of science and technology, the economy, tourism, international laws, trade and ecological treaties – in short, all the pathways of globalisation. The fruits of scientific and technical evolution are multiplying and mounting human relations. And this is good, as the growth of awareness, both individual and collective, which these relations bring about, is a positive phenomenon.

Teilhard de Chardin died in 1955, at a time when cybernetics, IT, genetics and television were still in their fledgling phase. But he welcomed their arrival with enthusiasm in the hope that they would intensify thought exchange between "human particles" and thus raise humanity's "psychological temperature" – in the same way as the mobility of their particles raises the temperature of objects. If he lived today he would probably consider the discoveries made over the six decades since his death in genetics (evolution which becomes self-evolutionary), electronics and computer science (notably the Internet) as decidedly positive as they speeded up human globalisation (which he called *prise en bloc de l'Humanité*) in an unprecedented degree. For Teilhard de Chardin globalisation is a further phase of the "involution on itself of the stuff of the cosmos", a process which cannot be halted as its driving-force is cosmic.

Especially positive in Teilhard de Chardin's view is the globally raised flow of ideas and information, today owed chiefly to the Internet, television, mobile telephony and all equipment which enhances human mobility. Today McLuhan's conclusion that the media have made the world a global village in which everyone knows everything about everyone else is rather commonplace. Through the prism of Teilhard de Chardin's philosophy this phenomenon belongs to the mainstream of universal evolution. All that connects people (at first only externally) is good as it is a sowing of a more internal, hence slower-paced, unity of human hearts. "Sooner will the earth cease to revolve than humanity as a whole ceases to organise and unite" (*Wiara w pokój*, [Faith in Peace] 1947: 233).

Processes which unite humanity are good because they raise awareness – both collective and individual. Successive generations come into an increasingly better world in this respect as the matrix of knowledge at their disposal is ever richer. The importance of knowledge, in turn, is of key importance for the essence of life, as "to be more is, first of all, to know more". In his 1924 essay *My Universe* Teilhard de Chardin outlined the metaphysical axioms of his vision of reality, concluding among others that "conscious being is a greater good than unconscious being" and that "higher awareness is a greater good than lower awareness". If so, then science and its technical tools as knowledge generators are not mere supplements to natural human life but elevate this life to a higher level, to a "life plus".

Science and technology not only increase the resources of knowledge but also the resources of free human energy, as they progressively liberate human labour from physical effort in favour of mental effort. Unhampered arms and free time offer new openings to the spiritual sphere of humans, who to an increasing degree live to think instead of thinking to live. The future of humanity should lie in creativity and contentment with the achievements of science, philosophy and art. Whereas religion has the task of motivating to this life model, among others by inspiring the spirit of science instead of presenting a kind of parallel knowledge: *religion animatrice* instead of *duplicatrice* (*Réflexion et co-réflexion*, 1955: 428).

The vision of science and technology as a successive evolution phase and evolution as the elevation of human consciousness onto ever-higher planes is an optimistic but not uncritical vision. The French philosopher realised, that not all evolutionary trends are positive and that evolution in fact moves in two directions – upwards and downwards. Upward evolution, i.e. evolution towards higher spirituality and unity of its elements, is accompanied by a downward trend towards the diffuse, less aware and more material. An example is military spending, which continues to be much higher than outlays for research on higher quality of life. Wars still occur as a barbarous discharge of human energy. Religion still aids itself with a static, pre-scientific vision of the world and appointments of

priests and scientists differ in almost every way. Huge resources of the human energy freed by scientific and technological process are still being wasted – in a sense burnt up by unemployment, strikes, lack of cooperation and dejection. Teilhard de Chardin would agree with a lot of what the opponents of scientific and technological progress say. But at the end of the day he would – as always – say *eppour si muove* – and yet it moves. Nothing can stop the world, not terrorism nor any civilisational wars that may erupt in future. Its fundamental contemporary trends are positive: scientific/technological progress, the globalisation of human relations and bonds, the rising flow of ideas and information, and the increase in political, economic and other inter-relations between humans and countries. Civilisations come and go but the flame of universal consciousness moves from hands to hands and shines ever brighter. "Beyond all nations and races, the inevitable taking–as–a-whole of mankind has already begun" (The Phenomenon of Man: 1939: 305).

Teilhard de Chardin maintained that his vision of universal evolution had a scientific rather than a metaphysical character. However, as we could see, it does contain metaphysical assumptions (e.g. that conscious being is better than unconscious being). Moreover, it carries a sound dose of faith in the intelligence and good will of humans – or at least their ruling elites. Faith in humanity's unification under the leadership of science, technology and renewed religion may remain unfulfilled, but the same may be said of disbelief in this process. Similarly to Pierre Teilhard de Chardin, the author of this text believes that the better philosophy is the one which more effectively reinforces the will to live and build a better world. Pessimism can be constructive but critical optimism seems to be a more effective means towards this end.

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