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## WHAT TECHNOLOGY CAN DO TO OUR LIVES?

*I fear the day when the technology overlaps with our humanity.  
The world will only have a generation of idiots.*

A. Einstein

**Abstract:** New knowledge has generated many new technologies which do affect human behaviour in many ways. One which might be the most important is relation of human spirituality and technology. Human spirituality has been changing true the time very slow, while technology is changing very fast thus never before in the past a human being has been so torn between what he does and what he feels.

**Key words:** *spirituality, technology, artificial intelligence*

### INTRODUCTION

We have been passing through changes we have never experienced in the history of civilization, both when it comes to their intensity and nature, and these are likely to lead to another type of civilization that will be based mainly on knowledge, a rapid flow of information, communications, and mobility. Globalisation, with which we already live, relies on the political imperative which recognizes the “global view” that unifies total human population, implying an increased and comprehensive integration into the system beyond national jurisdictions, rather disregarding human spirituality and yet recognizing technocracy as the most important element.

These changes will bring, among other things, many misunderstandings and uncertainties, and even political ones, such as:

- The building of *One world – many regions* and in particularly region-states versus nations-state. It is very questionable how such world will be made since knowledge does not imply the same meanings elsewhere and is not evenly distributed, thus, at different places, it does not affect personal and collective spirituality in the same manner;

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- the creation of a *New vision* of the global capitalism connected with the global market and private economic agents; “service economy”; a new way of democratization of international and supranational institutions; the globalisation versus anti-globalisation relationship; the “new” ethics and religion relationship; the issue of a common religion, and much more.

This inevitable transition gives rise to the gap between technological changes and cultural progress, i. e., between spirituality and knowledge produced by human brain, since each develop at their own pace. Never before in the past has a human being been so torn between what he does and what he feels.

Most of today’s problems in the world are due to both previous and existing technologies. The effects of technology are, inter alia, a lot of those things that are invisible or which we cannot clearly detect and recognize. Indeed, many phenomena pass through our thoughts without being correlated to accepted and already used technologies. So, at first glance, we do not connect technology; for example, with traffic accidents that kill more than a million people every year or increased food production and many other things, even much more simple things such as mobility, health issues and the like.

Some of the activities that affect human beings manifest through politics. Thus, today we can say that the vision of world capitalism is associated with the global open market and private economic agents, democratization of international and supranational institutions, globalism versus anti-globalization different qualities of ethnic localisms, often called nationalism and religion. The model of neoliberalism is primarily based on the materialistic world, with private economic agents as the key actors in the political system. The creators of such a system keep ignoring that human spirituality is neglected in such a system. Unlike human spirituality that slowly changes, political circumstances change rapidly. The ideal model of cosmopolitanism, which occurs as a result of human and other mobility and which is seen as the future, is based on the dominance of political shackles. Unlike traditional restrictions valid among human beings, cosmopolitanism recognizes the dominance of political and civil aspects as superior to other features of human life, in particular spirituality.

Anyhow, politics is not the only phenomenon that is nowadays, and will continue to do so even more in the future, conflicting human spirituality.

Similarly, we can consider the relationship between human beings and the environment since today, in a time when knowledge and technology are overwhelmed by daily changes, human s behaviour toward nature is not much different than way back in the past when problems of the modern civilization had not even be discerned.

Environment had existed on the planet Earth long before humans appeared. The relationship of man towards the environment was almost the same until the advent of the Industrial Revolution. Since then, and especially since the Cartesian Revolution, the intensity of this relationship has been changing rapidly, reaching such an extent today that the environment is significantly threatened by human activities that are not a result of human spirituality but based on knowledge and tech-

nology. Certainly, we must ask ourselves how is it possible to retain traditional spirituality in such circumstances.

## 1. SPIRITUALITY AND TECHNOLOGY

As a special and prevailing issue today, and even more so in the future, is the relationship between human spirituality and technology, that is, a man and machines created by the human brain, especially in the case when these machines use artificial intelligence. Technological civilization is programmed on the principle: if a machine is technologically possible, it has to be made even if it damages humanity. Thus, there is no doubt that smart machines occur in time faster than we think, that the way we handle this problem is not adequate, which causes many misunderstandings. Namely, the purpose of smart machines is basically to *replace human being* but there is also a possibility of *eliminating human being*. When we talk about them as the replacement for human beings, than we primarily mean the substitute for human labour of any kind, which from an economic standpoint of today's neo-liberal system means economic growth, that is, greater profit. Thus, it would be difficult to accept that today, for example, we would have to walk from Podgorica to Vienna instead of travelling by plane although we are to spend 120 or more human power/day, to tip the mallet and dig, not to use the Google cloud, and much more. Such examples can be found in all human activities. At the same time, we tend to overlook the fact that the existing technology and those that are yet to emerge strive to dominate our behaviour and as such significantly monopolizes our activities. Technology is slowly becoming the global force beyond human control that will have no borders. It can and will cause a lot of misunderstanding and frustrations.

Conventional wisdom does not deploy any counterbalance to prevent technology to usurp all available space on the planet and thus create a ecumenopolis (a planet-sized city) similarly to the fabricated Trenton in the Isaac Asimovs sci-fi movie or the planet Coruscant in Lucas's film *The War of the Worlds*. Many people think differently, and one should be afraid they are being too facile and do not understand what technologies bring and do, that much before technologies create such monsters, they will disappear leaving behind depleted the Earth's natural resources.

Namely, since a machine is capable of performing a certain task, we let it do it, even if it does so in a rather modest way at the beginning. Although we make machines for a specific task, later on they impose new agendas on us. As Neil Postman wrote: "But once the machine is built, we discover sometimes to our horror, usually to our discomfort, always to our surprise that it has ideas of its own it is not only capable of changing our work, but even more dangerously, our habits of thought." Thus a human being becomes, as Karl Marx said, "an appendage to a machine."

Around 10,000 years ago, human beings had crossed a critical point in behaviour by becoming capable to modify the biosphere, which is much more than the ability of the Planet to change us. It was the beginning of the technological era that is now accelerating at unprecedented speed. Now, this technology even has a greater ability to change us than vice versa, and we are often not aware of this fact.

Technology is not, as many think, a series of individual artefacts or devices that are sold and bought. Technology, as Kaczynski says, is a dynamic holistic system. It is not just hardware – it is much more like a living organism. It is not inert, passive, but on the contrary, it seeks new space and resources in order to expand. It has its own “selfish” agenda. It is not only a result of human design and a sum of human actions; it actually transcends human actions and desires and makes up a system. So Kelly writes: “The system cannot exist to satisfy human needs. In fact, it is the opposite: human behaviour is the one that must be modified in order to satisfy the system.” It has nothing to do with political or social ideologies that naively pretend to dominate and manage technologies. On the contrary, the characteristic of the existing and even more of tomorrow’s technology is that it leads the system, and not as many think wrong – that the system is led by an ideology. One thing that is disregarded here is that these machines bring about many social problems of which unemployment is currently the prevailing one. So much for the machines as means to replace human beings.

When we, however, think of eliminating human beings, we think of artificial intelligence of those machines that, and this is likely, may overcome human intelligence, which in turn means restricted freedom and thus restricted spirituality of humans. Many, too credulously, consider this to be science fiction. This is a separate topic and there is no time or space to discuss it here, but it only takes to recall the existing machines such as drones or artificial dolls to realize that this is far from science fiction but reality that is becoming crueller by the day.

## 2. ARTIFICIAL INTELLIGENCE AND SPIRITUALITY

The question is what kind of relationship these smart machines, artificial intelligence, and human beings will have in the future? Are we going to face with what we now call “artificial spirituality”, namely, a new spirituality that will not be too much based on the traditional and currently practiced? One should also wonder whether and to what extent will intelligent machines be the solution that will meet the spiritual life of people in the globalized world where more and more of human live in isolation, relying in communication solely to social networks and phone calls, living a kind of virtual reality? What kind of relationships can we expect between machines with artificial intelligence and human beings, both at individual and collective levels? Partnership or domination of one of them although, and it could be absolute truth, machines will be more aggressive? It is still early to assume that there will be such smart machines with emotions of their own or those which will be “belonging to the same religion”. Some people think that the only thing that will differentiate a human being from such machines will be machines inability to have own emotions. We should not be fully convinced of that!

It is very likely that machines will have a greater chance to dominate human. The reason may be in the “artificial spirituality” that will not be designed by their human but “learned” by themselves, relaying on machines ability to decide and react certainly much faster, as well as due to their “nonhuman emotion”. Many ques-

tions remain without simple answers. Of course, the essential question is how much the issue will be complex and whether we will be able to control this complexity or would it get out of the domain of human control?

Intelligent robots will create, together with other agents, a completely different type of society and they will challenge the way we think about machinery in general. Robots will be designed to do more work and maybe even to have some kind of emotions. We do it all wishing that consequences are acceptable to human. The question is whether machines will surpass what we want from them or not? In any case, it is difficult to predict how all of that will affect the relationship with human beings. Robots will certainly contribute to the development of society but they will also give rise to many misunderstandings such as what will be the social norms in the human interaction with robots? Certainly, the question is also what ethics will robots practice, namely, once they reach a considerable level of artificial intelligence, will human be able to treat them as machines or not? In this regard, one of the questions is what is the possibility that one day robots will stand up to humans? Is the “robotic revolution” science fiction? We humans have rules that we often disregard so why would we then expect that, for many reasons and some possible errors in the design of robots or their ability to adapt, the same will not happen with robots?

While it seems likely that with new knowledge and technology development in some time to come, yet not so far away in the future, we will live among humanoid robots, which might look like some terrifying science fiction scenario, it is already the reality how humans will handle and control advanced robots, which are going to be very complex and subtle. One might think that this should be possible only under the impression of science fiction, but we should be reminded that one of the biggest new EU projects, the Human Brain Project, envisages, among other things, the testing of robots that will have a brain. So, “bearing in mind the fact that we can make a brain, why we will not be able to make a human being?” is the question asked by Danica Kragic.

### 3. TECHNOLOGY AND FUTURE

All this imposes a need for an entirely different attitude towards technology. In fact, there is no doubt that a successful acceptance of technology must also imply a cognitive, emotional and contextual relationship and not unreserved acceptance as it usually happens nowadays.

We are often unable to look clearly into the future, even the near one. This is, whether we agree or not, owing to technology that puts us in a dilemma: what is it that we can imagine and what is that we can do? The question is whether technology makes the future better or worse for the human beings? “Emotional” intelligence of the humans is equally, if not even more, important than our “intellectual” intelligence. Since science is a result of our “intellectual” intelligence and as it exponentially changes and grows, we can present it in time, somewhat as a vertical change, whereas “emotional” intelligence changes slowly what we can present almost as horizontal in time. Thus, these two types of intelligence grow apart over

time, which results in many unknowns and certainly unpredictable consequences in which it is difficult to anticipate who will govern, whether “intelligent” intelligence or “emotional” intelligence, that is, whether human or some new spirituality?

What is going to happen, considering the enormous complexity of technological systems that allow even more technology as self-sufficient systems? Namely, modern technologies are systems in which all the parts are interdependent. Thus, it is not possible to get rid of poor parts of technology and retain only the good ones. And many laws, such as Moor’s law, point to the acceleration of technology whose system complexity threatens to outstrip the ability of human beings to control it. It is hard to say will this be our future, as many scientists predict, and which many, especially decision-makers, overlook. However, it is certain that technological changes, new technologies and technological systems, which are becoming more intelligent by the day and increasingly dominating our lives becoming threatening, no matter how much good they are bringing at the same time. Thus, there is need that the basics of human existence and their spirituality must be approached in a completely different manner.

We should not either neglect that the arrogance of human beings along with science knows no frontiers. Thus, if scientists of the 21<sup>st</sup> century are to be guided by envy, individualism, and uncontrolled technological competitiveness, there is little hope, considering how technology can achieve destructive dimensions that we will survive without jeopardizing the lives of billions of people, and even the earth itself. In fact, as human beings today we are faced with a dilemma on how to choose the path of our existence, as well as whether this is even possible.

At the end, let us remind to the words of the US President John F. Kennedy: “Our problems are manmade – therefore, they can be solved by man. And man can be as big as he wants. No problem of human destiny is beyond human beings. Man’s reason and spirit have often solved the seemingly unsolvable – and we believe they can do it again.”

And here one should add: hope is man’s best virtue.