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Ecology, Economy, Technology, Pandemics: four pawns on the same game board

At the beginning of the XX century, the improvement of living standards caused by the Second Industrial Revolution led to an unconditioned faith in technological progress: the majority of Western philosophies strongly believed that science was the key to knowledge, success and power. The pathbreaking inventions in the military field transmitted a new sense of omnipotence that eventually fed nationalism and contrast between the major powers on Earth. Therefore, from a period of extraordinary prosperity, humanity fell in the cruelest wars it has ever took part in, and ended up losing confidence in itself. English literature has consigned to history the personal feelings, state of minds and experiences of the First World War: authors such as Wilfred Owen and Siegfried Sassoon improvised verses while living in the trenches, giving birth to an unconventional and painful form of poetry. They were the first ones to introduce the theme of cultural and spiritual crisis, which represents a steady feature of all the postwar literature. The cruelty of an unforgettable massacre inevitably led to a lack of any form of value and hope. In the end, not even science seemed to offer comfort and protection from despair. We call this new tragic period “the Age of Anxiety”.

We tend to look at the Age of Anxiety as an experience concerning our past, but the truth is we may not have learnt from our mistakes. Nowadays, after more than a hundred years, technology has gained the crucial importance it had in the past, and global economy is constantly focused on presenting new outstanding inventions, without caring about the influence mass production has on the environment.

We are blinded by progress.

However, this time our thoughtlessness is leading us to something much worse than a war: every single year almost 800 billion tons of ice melt, more than 1000 species disappear forever and the temperature of our planet goes up by 1.5 degrees. According to a study by the World Wildlife Fund (WWF), Earth’s population will be forced to colonize two planets within 50 years if natural resources continue to be



exploited at the actual rate. As if this was not enough, we are currently fighting against a terrible virus (COVID-19) that harms our respiratory system causing dangerous pulmonary infections. These may all seem separated elements of the same reality, but we are now going to understand how they are strictly connected to each other.

In philosophy, holism is an approach to understanding the reality we live in that focuses on looking at things as a whole. It is often contrasted with reductionism, which instead tries to break things down into their smallest parts. In order to understand why specific events happen, holism proposes that it is necessary to look at the entire system. Rather than focusing on just one aspect of the problem, it is necessary to recognize that various factors interact and influence each other. We may consider the human brain as an example: the brain contains millions of neurons, but just looking at each individual neuron will not tell you what the brain can do. It is only by looking at the brain holistically, by

understanding how all the pieces work together, that you can see how messages are transmitted, how memories are stored, and how decisions are made. The same approach can be applied to the environmental issues to help us understand how our behavior has serious consequences on planet Earth. Pope Francis gives us a clear example of this in the fourth chapter of his encyclical *Laudato si'*:

“Since everything is closely interrelated, and today’s problems call for a vision capable of taking into account every aspect of the global crisis, I suggest that we now consider some elements of an integral ecology, one which clearly respects its human and social dimensions”.

In this short quotation, Pope Francis mentions a particular term (*integral ecology*), which stands for a field of study that includes environmental ecology, economic ecology, social ecology, cultural ecology and daily life (human ecology). It is a fundamental tool to understand what is happening to our planet from a wider perspective and eventually predict the repercussions of our actions. In this regard, Pope Francis states:

“We need only recall how ecosystems interact in dispersing carbon dioxide, purifying water, controlling illnesses and epidemics, forming soil, breaking down waste, and in many other ways which we overlook or simply do not know about.”

Before humanity even knew about the existence COVID-19, the Pope already warned us about the unpredictable and dangerous effects of a change in the ecosystem. Not coincidentally, recent studies have confirmed that the massive ice melting may have released in the atmosphere bacteria and viruses that have been frozen for many years. Even though researchers are very far from understanding the actual origin of the pandemic we are currently facing, we cannot exclude the possibility that it actually derives from one of those viruses. This could explain why scientists were completely unaware of its genetical structure and are still struggling to find a vaccine.

In the 1890s there was a major epidemic of smallpox in Siberia. One town lost up to 40% of its population. Their bodies were buried under the upper layer of permafrost on the banks of the Kolyma River. 120 years later, Kolyma's floodwaters have started eroding the banks, and the melting of the permafrost has speeded up this erosion process.

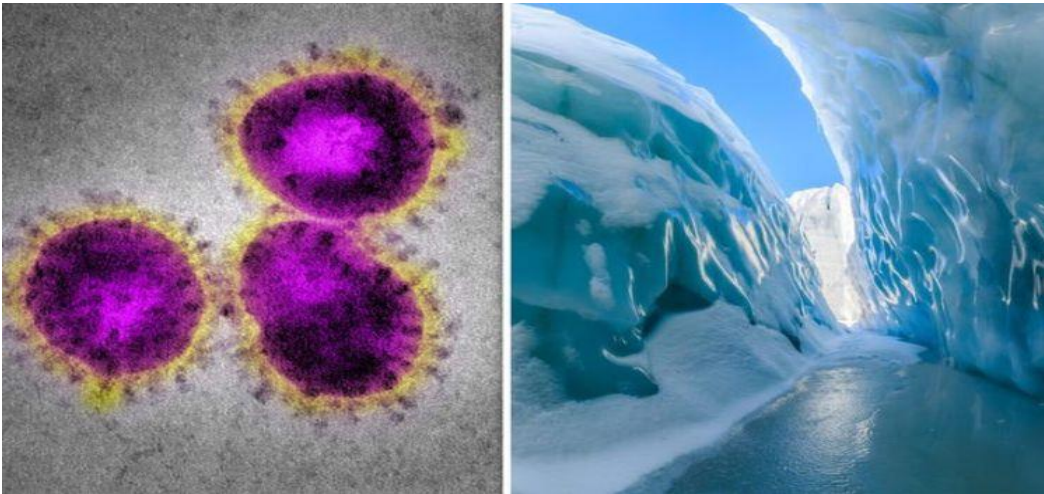
In a project that began in the 1990s, scientists from the State Research Center of Virology and Biotechnology in Novosibirsk have tested the remains of Stone Age people that had been found in southern Siberia, in the region of Gorny Altai. They have also tested samples from the corpses of men who had died during viral epidemics in the 19th Century and were buried in the Russian permafrost.

The researchers say they have found bodies with sores characteristic of the marks left by smallpox. While they did not find the smallpox virus itself, they have detected fragments of its DNA.¹

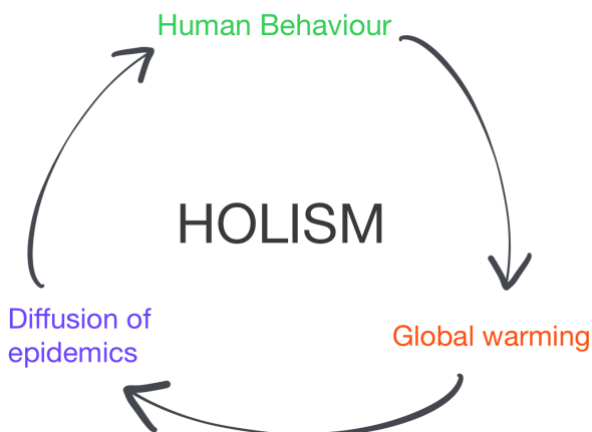
Years later, researchers were able to revive two viruses trapped in Siberian permafrost for 30,000 years. They were both "giant viruses": so big to be seen under a regular microscope. They were discovered 100 feet underground in coastal tundra. Once they were revived, the viruses quickly

¹ BBC.com, “There are diseases hidden in ice, and they are waking up” , Jasmine Fox-Skelly 04/05/2017

became infectious. Likely other viruses, which really could infect humans, might be revived in the same way.



Taken into account all these information, we may now understand how holism perfectly describes the situation we are facing in this very moment: the way we have altered the ecosystem of our planet through pollution and mass production has caused the temperature to rise. Global warming, in turn, was able to revive ancient forms of potentially dangerous bacteria and viruses. The uncontrolled diffusion of a virus has led the world into chaos, seriously harming our economic and social life: governments of nations from all over the world have closed their borders and forced citizens to a prevention quarantine (Italy and China are the most evident examples of this unreal situation).



Holism is not just an overview of a particular issue: it can help us find the tools to overcome a difficult situation like the one we are currently living. The cycle does not have an end: it repeats itself continuously, eventually leading to much worse catastrophes. However, if we manage to intervene on one of the elements of this cycle, we might actually be able to turn the tide. Since we still do not have the possibility to stop the virus or global warming, a change in human behavior is our only hope: we need to make sure that social solidarity replicates faster than the virus. As Pope Francis remembered in his encyclical:

“Every violation of solidarity and civic friendship harms the environment.”

Thankfully, Italy and China are receiving priceless demonstrations of love and compassion from all over the world: skyscrapers in Dubai and New York shine with the colors of our nation, humanity is held together by the sentence “It’s gonna be alright!”.

However, when it comes to medical and economic assistance, the situation is completely different. Last month, when COVID-19 began spreading rapidly in Italy, the country appealed for help via the Emergency Response Coordination Centre. So far, not a single EU member state has sent to Italy the needed supplies. That is tragic for a country with 28710 coronavirus infections and 2978 deaths as of March 14, and with medical staff working under severe shortages of supplies. Moreover, for the first time ever, All Schengen Area Member States have approved a plan proposed by the EU Commission which foresees the closure of the external borders of the territory, for at least a period of 30 days, as the most extreme measure taken by the block to halt the further spreading of the COVID-19. This may help EU to control the diffusion of the virus, but on the other hand it eliminates every possibility of exchange of medical supplies between the nations. We still have a lot to learn as global citizens and human beings.

In the history of human beings, philanthropy has never been just a consolation: it also represents a warning: it cautions us that if we let ourselves be controlled by the “progress fetish”, we may forget what it actually means to be humans. The most direct way to communicate this message is undoubtedly literature.

Technological dystopian literature is a genre of fictional writing used to explore social and political structures in a future completely dominated by scientific progress. Dystopian novels have a negative point of view: they talk about human beings completely deprived of their own freedom and identity.

In George Orwell's *1984*, the main character Winston Smith wrestles with totalitarian oppression. Technological inventions are a frightening instrument of control: telescreens constantly monitor people’s behavior, eliminating the concept of privacy; the speak-write system (a machine that automatically transcribes human speech) obliges everyone to express orally every intellectual activity, prohibiting hand-writing; the Thought Police controls the citizens’ minds, eventually reporting and condemning any sort of unconventional thought; mass media constantly fuel hatred and immorality.

On the other hand, Aldous Huxley’s *Brave New World* explores the dehumanizing effects of technology describing the futuristic society of World State. In this society, marriage, family, and procreation have been eliminated, and babies are genetically engineered and grown in bottles. Citizens are programmed to be productive and complaisant through a combination of biological manipulation, psychological conditioning, and a drug called soma. Human beings are completely deprived of autonomy, free will and real happiness.

Both Orwell and Huxley lived in the XX century, and their dystopian view is clearly influenced by the Second World War and totalitarianism: these authors saw in technological progress a threat to freedom of speech, thought and political association. Nowadays we know that the uncontrolled advancement of science has actually led to different consequences (which we have previously analyzed). However, we certainly cannot underestimate the precious warning dystopian novels contain. Their contribution to the formation of a more prudent and thoughtful global community still represents a unique treasure for human culture. We have the duty to learn from our previous mistakes



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and lead the advancement in technology with consciousness, improving the quality of our life and at the same time taking care of the only place we can all call home.