

I. ARTYKUŁY

CLIMATE CHANGE AND POSTGROWTH

The golden algorithm and the Tower of Babel versus freedom and democracy: the answer to biodiversity¹

I. We have recently faced two massive worldwide ‘stress tests’: the pandemic and Russia’s dramatic invasion of Ukraine, with all of the ensuing human suffering and social, economic, and geopolitical consequences. These tragic events impacted the European Union and its member States, including Poland and Italy. It is especially important in this scenario to consider the relationship between information and information technology, as well as the relationship between the environment and profit.

Among the greatest priorities of European politics, according to the President of the European Commission, is the need to create an innovative development model aimed at protecting the environment, health and human dignity; as well as tackling the climate emergency and the digital revolution. Because of the synergy between environmental awareness, digital information and communication technologies (ICT), it is now clear that all of these topics are intertwined, due to the digital coding of information, which includes computer science, cybernetics, electronics, and telematics.

Individuals, communities and countries are all involved in the topics mentioned above. Reflections – particularly scientific ones as well as the simpler and more accessible ones drawn from daily experience – emphasize the fact that we are experiencing a historic shift in the way we live, coexist, work, consume and produce resources, interact with others, learn, and research. The environment and development are both sources of expectations and hopes, but also fears and worries. Sustainable development must ensure a balance between them: it must embrace the benefits provided by technological progress and environmental reality, while also confronting the risks that they entail.

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In theory, the dissemination of information on the Web has allowed for a global awareness of the need for sustainable development. Suffice it to say that the problems related to ‘clean energy’ production, the gap between developed and developing countries, and the worries about – and sometimes even rejections of – the prospect of ‘happy degrowth’, are all present. The problem of the future will unfairly affect the next generation – that’s why it has been addressed by the recent reform of Article 9 of the Italian Constitution – although the usual perception is that the environment and ‘digital civilization’ are disjointed themes.

We define ‘digital civilization’ as the set of digital technologies and their economic, social and cultural consequences. It represents a new phase in economic, political and social life. It is a reality in rapid evolution, based on the collection, organization and exploitation – with different methods and purposes – of information expressed in digital form and disseminated electronically. Profit, power, culture, religion and politics are all competing purposes that can have a significant impact, for better or worse, on each person’s life. Digital technologies in this ‘civilization’ are so sophisticated that they can replace people in the performance of complex tasks. The fear is that they will soon replace humans in functions related to their identity and consciousness.

Regarding the environment, awareness and fear seem to prevail in the face of the first visible signs of a new ‘Great Deluge’, such as global warming and climate change. In the case of digital civilization, enthusiasm for progress appears to outweigh the (underestimated) risks that it may pose due to the unwillingness to renounce its acquired and indispensable advantages. Above all, we must question ourselves and our society about the organization of the economy, working and production methods (such as remote working), and the ways in which we communicate, live and interact with others. These are questions underestimated by many, who are unaware of the negative consequences of their poor management on human dignity and our founding values, as well as inviolable rights and fundamental duties (using the ever-present language of our and other Constitutions, including the Polish one).

We risk falling into a ‘social climate’ that could witness the rise of a new Tower of Babel and, even before that, a ‘golden algorithm’, heir of the ‘golden calf’ – which is mentioned in the wisdom of the Bible – built by Jewish people in the desert during the tiring march to the promised land.

II. When the market becomes ‘uncivilized’, that is, when it generates inequalities that lead to environmental degradation, or vice versa; when the market overwhelms democracies and sets the political agenda; when the market becomes a religion, a new golden calf, an idol, or a golden algorithm; when the economy ceases to be civil and at the service of the common good: then the market becomes a problem and a battlefield for all humanity.

Today, unfortunately, the market has ceased to be an instrument and appears to have become a goal in itself. For far too long, the environment fuelled profit indefinitely; eventually, we realized that profit had to feed the environment. We now risk returning to the past as a result of technology, with the ex-

cuse of environmental protection and fear of the future. We focused too much on the present, but a society trapped in the present has no memory of the past and is consequently incapable of planning for the future.

Today, we are beginning to deal with the damage that ‘presentism’ has caused in so many aspects of our society: politics, economic agendas and environmental protection, with significant negative impacts on the latter as well as cities, the countryside and forests; as well as on the importance and hierarchy of our values and way of living. This ‘presentism’ is a dark evil of contemporary mankind founded on immediacy and efficiency, and it threatens to legitimize a modern form of slavery. The pandemic forces us to reconsider this approach, considering both the past and, most importantly, the future.

Tomorrow is about how we will be able to redevelop our cities and rethink our forests and countryside. It passes through a more worthwhile dialogue between them: cities represent profit, while forests and countryside represent the environment. And while they are all important places in our lives, even when they are close to each other, they are still metaphorically distant.

The relationship between the environment and profit pervades these spaces (first and foremost the cities, then forests and the countryside); our future will be played out in a path that goes from one to the other and vice versa, depending on this balance (or, more precisely, on this unbalance) and how we deal with it. This path previously led people from the forest to the city (urbanization), and it now suggests a future escape from the city and a return to the forest, through villages and the countryside. Cities are one of the representations of this widespread crisis, as well as the many contradictions that have emerged as a result of the actual health, social and economic emergency. When we think of the city, we must consider the current meaning of citizenship, the concept of the city, and the meaning of life in it, without losing sight of the human and social bonds that form a community.

During pandemics, the community dimension is severely reduced, but not completely suffocated. The ‘us’ has frayed, at times becoming a rhetorical showoff, a mask of power, selfishness, and private interests, a digital connection only, or primarily. Corruption, pollution, privatization of public spaces, a decrease in urban greenery, constant deterioration of life quality (especially in the poorest places), indifference, and discrimination against ‘freaks’ have all had a profound impact on the city’s soul. Today, this soul is wounded, disoriented, and lost. The pandemic has magnified the problems caused by its development: overcrowding; fear; degradation in the material, economic, social, cultural and value-based conditions of megalopolises; and inability to face crises.

Similarly, forests, with their multifunctional nature, represent one of the most important environmental bets for the future; they are essential for identifying a point of balance between different functions: natural and economic-productive. Finally, humanity’s destiny is at stake in the countryside due to a variety of issues, including food resources, depopulation, new cultivation, and agricultural production technologies.

For many years in Italy, an old environmentalist vision has resulted in complete immobility, harming the very environment it was supposed to pro-

tect; this cultural perspective was the unavoidable reaction to a season of unrestricted looting. We now realize that man's intervention in the forest and agriculture cannot be ignored. Not to plunder them, but to help them in following their natural course; however, human dynamics, particularly law, continue to impede these activities.

III. Article 9 of our Constitution² emphasizes a link between the past and future through the promotion of culture. Furthermore, it proposes a fundamental premise for following the path 'from information-to-information technology' and the inevitable transition to a digital society from a constitutional and juridical point of view. This is even 'more fundamental' now that we all hope for the end of the stress tests represented by the pandemic – with all of its implications and consequences for the environment, information and human relationships – and, most importantly, by the nightmare of war. As a result, Article 9 of the Constitution must be read in a way that, in addition to paying special attention to history and the environment, takes technological progress into account. This is needed to gather, if possible, some reassuring indicators about our future in light of our past.

This indication comes from our Constitution's foresight and wisdom, as well as the Book of Books, the Bible. Beyond its religious significance, the Bible represents the hope in the human skill to overcome the fear of a new 'Great Deluge'. However, it also expresses the hope that we will not succumb to the euphoria of technological development. And the hope of avoiding the danger of a new 'Tower of Babel', as well as the danger of a civilization 'ruled' by machines rather than humans, or at least a civilization 'trapped' in a conflict that, sooner or later, will overturn their relationship: not the machine as a tool for humans, but humans as an instrument for machines.

Someone recently proposed a computer for the Nobel Prize because of its calculation capabilities, which are unthinkable for humans. Such a machine is said to be capable of almost anything; indeed, the right algorithm combined with limitless computing power can provide a glimpse of our civilization's future. A civilization that some still refer to as the 'civilization of machines', in the hope (or illusion) of overcoming human limits. I believe that the term 'machine civilization' is neither acceptable nor admissible. I cannot imagine a machine civilization opposing human civilization. I believe (along with many others) that machines are extremely useful tools; however, I also believe (along with a few others) that the human being and its ability to evolve through relationships with others should remain at the centre of our universe.

In terms of information technology and knowledge transmission, we must look to the past to plan for the future. This is the warning given by Article 9 of

² The original text of Article 9 had two paragraphs: 'The Republic promotes the development of culture and of scientific and technical research. It safeguards natural landscape and the historical and artistic heritage of the Nation.' In 2022, with a very vast majority, the Parliament approved a new final paragraph: the Republic 'protects environment, biodiversity and ecosystems, also in the interest of future generations. Ordinary law shall establish ways and forms to protect animals.'

the Constitution regarding the relationship between the past and the future, between the protection of historical-artistic heritage and the protection of the landscape (more accurately: the environment), and also in the interests of future generations.

The theme of digitization has been rediscovered in the effort to escape the pandemic by relaunching (or, more precisely, launching) our country's progress in fundamental topics of social coexistence. And this rediscovery occurred by the European Union's indications (or, more precisely, under its conditions) for obtaining economic aid and concrete solidarity.

Digitization is recognized as a fundamental issue that will reorganize various sectors of social coexistence: first and foremost, there is the economy, chronic problems and delays which were exacerbated during the COVID-19 pandemic. Things became worse after the latest storm in the ongoing war started with Russia's invasion of Ukraine, which has tragically heavy human, geopolitical, economic and social losses. To this end, it is critical to rediscover links between memories of the past and future projects, because the identity of the individual who becomes a person is defined by three elements:

- relationships with any kind of others: cultural, political, social, economic, and, most importantly, emotional; an individual becomes a person through relationships with others. The Constitution reminds us of this when it declares in Article 2 that inviolable rights and fundamental duties are like two faces of the same coin; and also when it declares that social formations are where human 'personality occurs';

- the spatial dimension: a person has the right not only to an individual virtual space but also to a real and shared one; this area must include a common space accessible to all, overcoming the (traditional and juridical) opposition between 'open' public space and private space;

- the temporal dimension of the past, present and future: the fruits of experience and individual and collective memory of the past are means for understanding the present and future.

At this point, we must consider the human and nature relationship, as well as the relationship between urban, forestry and agricultural ecosystems. Cities, forests and the countryside should coexist peacefully. These three components cause significant changes in their respective environments, which have both positive and negative consequences. The latter is (almost entirely) the result of human behaviour and technological development: global warming, climate change, pollution and biodiversity disappearance, and ecosystem imbalance...

These thoughts lead to another issue: the relationship between nature and technological evolution has quickly given us unexpected and useful achievements, but it has also presented us with unknown, unforeseeable and difficult-to-solve problems. We have an explicit reference to biodiversity in this context. It has also been made in conjunction with the reference to future generations by the German Constitutional Court (in 2021) and other juridical initiatives in various countries, including the recent reform of Article 9 of the Italian Constitution.

IV. There is currently a lack of awareness of the need for a scientific and IT culture. Previously, economic resources were scarce (at least until the arrival of European funding for the recovery plan approved after the sharpest phase of the pandemic). There was (and still is) a lack of understanding of the need, capability, and benefits of expanding beyond the traditional entrepreneurial vision, which is conditioned by the perplexity – and sometimes fear – of information technology’s potential as a tool for personal and social liberation. Digital technology innovations and their mass diffusion have met with numerous forms of ideological and cultural resistance in our country.

The first Internet connection in Italy dates back to 1986. It came after a long journey and marked the beginning of the personal computer and IT markets, as well as their diffusion in universities and business. All in the perspective of the ‘new economy’. As a result, the evolution of communications and internet services; the shocking bubble of the ‘new economy’; and, finally, the recovery and launch of start-ups, along with the expansion of connections and networks, including social ones. However, too often, the invocation of the ‘digital flag’ was used to mask the reality and was insufficient to solve problems: we saw this when some tried this approach to solve the crisis in the justice system. The ‘libertarian revolution’ of information technology has been perceived as an expression of free thought. However, its costs have been underestimated: the need for investment and infrastructure; the need for competitiveness and international confrontation with the web giants; the need for overall country development and widespread IT culture.

Mass digitalization and new technologies continue to raise new ethical, social, cultural and philosophical issues. Consider the use of Big Data; the right to be remembered and the right to be forgotten; the boundaries of artificial intelligence and robotics, as well as our relationship with machines; and the human relationship with nature, others and society, the market, and public authorities.

However, among other topics, culture and the development of technology have raised a fundamental question today: the relationship of the ‘individual’ with the ‘person’, that is, with himself and his limits. Perhaps the most important question tomorrow will be about the relationship between humans and machines. Today, we must remember some classic warnings: the prohibition to eat the fruits of the tree of knowledge established in the earthly Paradise; Ulysses’ urged his companions towards the unknown: ‘fatti non foste a viver come bruti, ma a seguir virtute e canoscenza’ (in Canto XXVI of Dante’s ‘Inferno’; which is translated as ‘you were not made to live as brutes, but to follow virtue and knowledge’); and Immanuel Kant once said: ‘the starry heavens above me and the moral law within me’.

Technological progress, which means speed, the elimination of distance, and new ways of communicating, leads to a reduction of space and time in human relationships, and exaggerated competitiveness. This new reality requires continuous courage, attention and experimentation; it requires sensitivity and adaptability; it appeals to the experiences of the past to obtain – without any conditioning – indications for the future.

The ability to achieve this goal is questionable. Will we be able to wisely value our potential and opportunities, which have too often been underused or ignored in the past? Will we be able to identify, and respect, the limits of those potentials? These are some of the challenges – and certainly not the least important ones – that the pandemic and sustainable development pose to us in the present and especially the future. We hope and believe that we will be able to overcome them.

The reference to biodiversity in the recent reform of Article 9 of the Italian Constitution has a profound meaning because it refers not only to plant and animal species but also and first and foremost to the human species (and not to the human *race!*). After all, this species is an expression of the variety of life on this planet. Moreover, biodiversity – together with solidarity – is somehow one of the most important parameters to balance the implementation of everyone's equality with the respect for the diversity of each one (especially the most fragile ones) without falling into discrimination and the oppression of those once called 'freaks'.

This thought stems from the fact that biodiversity in the human species develops from two interconnected perspectives: biological and cultural. Religions, languages, philosophies, traditions, and medical sciences are among the cultural aspects of the various and numerous human societies and communities.

This is a reflection based, above all, on the conclusions of an Amazon survey promoted by Pope Francis in 2019. The territory of this region is shared by nine Latin American countries; it has 20 per cent of the world's unfrozen freshwater, 34 per cent of primary forests, 30–40 per cent of fauna and flora, 1/3 of the world's rainfall, 390 different populations, 240 languages, and 33 million inhabitants.

It is a diverse group of people with different languages, cultures, rites and traditions; it is a unique source of plant, animal and human biodiversity, as well as cultural diversity.

The Amazon and its natural resources, indigenous populations and traditional communities, and its customs are threatened by the systematic violence of environmental exploitation; by the contrast between that violence and the fundamental rights of both individuals and communities; by deforestation and predatory economic interests; and by the contrast between ecological robbery and natural beauty.

The current conditions of that source were known and denounced by Pope Francis, an 'ecologist' Pope, in the 2020 post-synodal apostolic exhortation *Querida Amazonia* (Beloved Amazon) the epilogue of which is built around a proposal of four ecological 'dreams': in defence of the rights of the needy, of cultural heritage, of natural beauty; and finally, the translation and implementation of the Christian ecclesial message of the peaceful coexistence of religions.

Beyond religious beliefs and opinions, the first three forms of ecology represent for each and every person a strong and urgent commitment to a global social, cultural and ecological approach to responding to the serious problems

of inequality, pandemics, war, and environmental, geopolitical and economic crises. These issues affect us all, not only globally, but also nationally and personally.

For this purpose, the ecosystems mentioned in the new text of Article 9 of the Constitution are of critical importance: it entails the protection of different systems, among which we can and must include – alongside culture – the balance between peace and war, nature and profit/power, past and future, equality and diversity.

I believe this is the most essential hope that could be pinned on the reformed Article 9: may it be able to respond to the ‘rainbow covenant’ that welcomed Noah when he left the ark after the first Great Deluge; that it once again encourages the language of flowers, fruits, trees, and earth described by Francesco of Assisi in his Canticle of the Creatures.

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