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## On the Economy of the Person

### Work Environment Technology

## INTRODUCTION

In the last decade, the world of economy has 'promised' progress and freedom to men and women on this planet by virtue of the great technological advancement that characterizes the quotidian life. The size of techno-science, which "aims to get a form of life apart, endowed with own symbolic and value universe, a very precise delimitation of the cognitive scope of human reason",<sup>1</sup> has taken up more and more space intended as an epistemological solution. "The ideologically more disturbing element is constituted by the fact that science has ended up becoming a sort of ethical cover for all the distortions of trade and power. Scientist-managers aim to legitimize their every decision by the idea that the alleged purity and transcendence of scientific discovery eliminate, always and in any case, contingent manipulation caused by its use through trade"<sup>2</sup>. Furthermore, the power of the Internet seems to favor pluralism and the exchange of ideas. Actually, the transmission modules are the coordinates of space and time in use that modify the type of reading, reflection and verification, setting in motion an unconscious process of disinformation that tends to neutralize comparison and difference, where politics submits to the efficiency paradigm of technocracy. In the years of globalization, by the mutation of the political body into an economic corporation, we encountered a form of economic theology, understood as 'market fundamentalism', as a new form of fundamentalism. Economic corporations were the fortified institutions arising from consequence of a manifestation of the 'state of exception', which saw the weak 'political' giving way to 'advancing economic'. If political theology has secularized theological concepts, economic theology made political concepts functional for their purposes through a winning language marked by the times

<sup>&</sup>lt;sup>2</sup> S. Amato, Diritti fondamentali e "governo" della scienza [Fundamental Rights and the "Governance" of Science], in Scienza e Normatività. Profili Etici, Giuridici e Politico-Sociali 221 [Science and Normativity. Ethical, Legal AND Social-Political Profiles] (Scripta Web, 2006).



<sup>&</sup>lt;sup>1</sup> F. Viola, Identità culturali e religiose. Connessioni e distinzioni [Cultural and Religious Identities. Connections and Distinctions], in FILOSOFIA GIURIDICA DELLA GUERRA E DELLA PACE 259 [LEGAL PHILOSOPHY OF WAR AND PEACE], (V. Ferrari ed., Franco Angeli, 2008).

of advertising formats in the dual dimension of buying/selling. Starting from the deregulation of the 1980s, society is forced to slow down its impact in the face of the State's escape from its social commitments, with Welfare in a strong phase of rethinking throughout the Western world. Once again, the threat of economic fundamentalism looms in social and political history, by virtue of which society becomes prey for a faith of fragmenting consumerism, recognized in the profiles of ostentatious and empty communicative hedonism, significantly depriving the share capital. Faced with the obstinacy of economic fundamentalism, society suffers in formulating 'short relationships' that mark an index of proximity among social beings. Society, as an 'agency for representing needs' "capable of transforming individual problems into collective requests, has eroded its function. The intermediate forces that represented the backbone of the post-war democratic system are today increasingly being transformed into service structures"<sup>3</sup>. The modification of economic structures is simply preparatory to the formulation of a social recomposition, through which the pillars of democracy and participation are demolished in crescendo of regulation, such as to overturn from the foundations the strengths of civil coexistence. Just think about the attack on education, public health, and the philosophy of supportive inclusion of others, whoever they are. But the message that wins is 'there is nothing for everyone,' in a paradoxical reversal of Sartre's scarcity. A perverse sense of one-dimensional, instinctual, and shared belonging is strengthened, which fuels fragmentation. In the last twenty years the attempt at social recomposition has involved the demolition of the social. The residual part of the citizens escapes the productive and participatory circle in the name of a new and exclusive recomposition. It is the phase of 'painful but necessary cuts'. Anyone who remains outside the productive circle is guilty. The traditional values of private affirmation in framework of public legitimation are replaced by an ephemeral and expanded consecration of the citizen who takes shape as a 'consumer'. The public, the Welfare State, and the network systems of social solidarity are denounced as 'waste'. As Dahrendorf wrote, "Perhaps the most serious effect of the triumph of values linked to productivity, efficiency, competitiveness, and utility is the destruction of public services. I think about the destruction of public spaces and the decline of the service values they bring. Introducing pseudo-economic motivations and terms into public spaces means depriving them of their essential quality. And then the national health service, public education for all, and guaranteed minimum wages, whatever they are called, become victims of unbridled economism"<sup>4</sup>. The only source of resistance to the possible

<sup>&</sup>lt;sup>3</sup> N. Pagnoncelli, *Disintermediazione* [*Disintermediation*], *in* Corpi intermedi. Una scommessa democratica [Intermediate bodies. A democratic bet] (Ancora ed., 2015).

<sup>&</sup>lt;sup>4</sup> R. Dahrendorf, Quadrare Il cerchio. Benessere economico, coesione sociale, e libertà politica 40 [Squaring the Circle. Economic Wealth, Social Cohesion and Political Freedom] (Editori Laterza, 2009).

flowering of critical thinking is struck. Work in its traditional forms loses its meaning. It becomes part of consumption as an ultimate purpose. "Our entire economy has become an economy of waste, in which things must be devoured and eliminated as quickly as they were produced"<sup>5</sup> writes Hannah Arendt. With disastrous results for the new generations. The generations of young citizens, with their eyes full of images of personal breakthroughs and successes but void of critical thought, now prey to the mystification of truth, and see their future waiting in the grip of the structural mutation of society.

#### 1. TWO FACES OF TECHNO-ECONOMICS

In a world where technology and economics meet and clash, in the search for a balance that we could define as the dimension of techno-economy, the conditions of the present must all be reviewed in the direction of possible reformist visions. Starting from central issues of the current economic and political debate in the search for a possible 'Good Economy'. As Cottarelli warns, "Our daily lives are increasingly influenced by powerful economic forces about which we know too little"<sup>6</sup>. Therefore, it is question of knowing these economic forces better to understand what distortion has been made in relation to issues considered central. As regards the cultural challenges that must be considered in the search for a 'good economy', technical issues are undoubtedly primary since they condition all the others. The algorithm is present in the formation of electronic money, which has been talked about for some time, such as cryptocurrencies. So technology frees individuals from the power of institutions; in fact, "the main element on which the creation of cryptocurrencies is based [is] the fact that people trust more in an algorithm they know nothing about rather than traditional financial intermediaries". As the crisis of 2008-09 demonstrated, the abnormal growth of the financial system has annihilated the real production system. The engineering of finance is found in the concentration of the banking system, which remains dangerously at risk for the world economy regarding liquidity. Regarding globalization, the impact of technology on the distribution of income, even in a world that is now substantially globalized and hardly thought about in reverse, has been devastating in terms of ever-widening inequality. As Yascka Mounk acutely writes, "moving the clock back is not a realistic option: populists delude themselves if they think they can bring us back to the world as we imagine it was thirty

<sup>&</sup>lt;sup>5</sup> H. Arendt, Vita Activa. La condizione umana 95 [Vita Activa. The Human Condition] (Bompiani, 2017).

<sup>&</sup>lt;sup>6</sup> C. Cottarelli, Chimere. Sogni e fallimenti dell'economia 11 [Chimeras. Dreams and Failures of the Economy] (Feltrinelli, 2023).

<sup>&</sup>lt;sup>7</sup> Id.

or fifty or a hundred years ago. However, although it is naive to aspire to return to an idealized past, it is certainly possible to find concrete ways to respond to the growing sense of economic frustration"<sup>8</sup>. Nevertheless, the information revolution, artificial intelligence, in particular technologies, should have freed humanity from the need to work also by increasing productivity. Actually, labor productivity has slowed The vision of a profound faith in the continuous scientific and substantially. technological development that has marked the last centuries and that should, regardless of contingencies, continue on the same path, has failed. However the slowdown in growth that was mentioned occurred despite the indisputable advances in technology, especially ICT with the development of AI and robotics. Why? Paradoxically, the results obtained from new technologies are inferior in terms of the impact of those of the second industrial revolutionor less human intelligence behind the slowdown, but it is probably too early to express a definitive judgment. Just as it falls within the category of cultural challenges that can no longer be postponed, that relates to limits of economic growth in relation to environmental problems such as global warming or the necessary decarbonization for the well-being of future generations. The dream of endless growth, well-being, and wealth for all humanity comes to terms with the limitation of resources, with pollution of no longer renewable sources, and consequently with global warming. Decarbonization is not a choice but a responsibility to the extent that all countries, each with their own needs and specificities, beyond further protocols, understand while being aware "that no action will be easy, politically and economically. But the alternative of doing nothing or not doing enough is even worse"<sup>9</sup>. These are the themes that are intertwined in the correlation between technology, work, and environment in the post-global framework and which are united in the hope of a better world by virtue of the vision of the economy on the right side of history or the vision of the well-being of people.

<sup>&</sup>lt;sup>8</sup> Y. Mounck, Popolo VS. Democrazia. Dalla cittadinanza alla dittatura elettorale 212 [Population VS Democracy. From Citizenship to Electoral Dictatorship] (Feltrinelli, 2018).

<sup>&</sup>lt;sup>9</sup> Cottarelli, *supra* note 6, at 168.

#### 2. LABOR ISSUES

Regardingthe vision of the Good Economy, the relationship between work and the technological revolution cannot only concern the productivity category. We know that the absence of work has a dangerous impact on the structural and functional balance of the community as it does not allow the person who lives and works in this context to pour his vitality into work for the transformation of things and for the building of society<sup>10</sup>. Poverty translates precisely into the impossibility of the person to acquire skills and transform his value into cultural impulses capable of enriching the political horizon of society. The new unemployment characterized by scarcity, due to third industrial revolution linked to global computerization processes, requires, in order to be addressed, in an already tested environmental context, a new conception of activity that allows the unemployed and the unemployed who have fallen into the cone of shadow of the post-industrial society to find one's place of social identity, through a pre-work educational process for the satisfaction of real needs, such as "the adoption of legal instruments that serve to concretely promote cohesion and inclusion social such as, for example, the citizen's right to continuous professional training and income replacement benefits in the transition from one job to another"<sup>11</sup>. Bauman writes, "while the level of consumption necessary for biological and social survival is stable by its nature, that of consumption necessary to gratify the other needs that consumption promises, hopes and demands to satisfy is, again due to nature of these needs, intrinsically destined to increase. The satisfaction of those additional needs does not depend on the maintenance of stable standards but on the speed and degree of their rise. Consumers who turn to the market in search of satisfaction for their moral impulses and fulfillment for their duties of self-identification (i.e., self-commodification) are forced to find continuous gaps between values and volumes, and therefore this type of 'consumption demand' is an overwhelming and irresistible factor in the upward push. [...] Once set in motion and maintained by moral energy, the consumer economy has no limit other than the sky"<sup>12</sup>. Technique is the rule. There has been talk of the end of the work society for some time. The criticism of the reality of functional work, which produces the deterioration of authentic politics, recalls the impoverishment of existence where man, as written by Arendt, is reduced to animal laborans. "The danger is that such a society, dazzled by the

<sup>&</sup>lt;sup>10</sup> G. Capozzi, Forze, leggi e poteri. I sistemi dei diritti dell'uomo 64, 104 [Forces, Laws and Powers. Human Rights Systems] (Satura editore, 2005).

<sup>&</sup>lt;sup>11</sup> E. Ales, Dalla politica sociale europea alla politica europea di coesione economica e sociale [From European Social Policy to European Economic and Social Cohesion Policy], in LAVORO WELFARE E DEMOCRAZIA DELIBERATIVA 366 (Giuffrè editore, 2010).

<sup>&</sup>lt;sup>12</sup> Z. Bauman, Danni collaterali. Diseguaglianze sociali nell'età globale 89, 90 [Collateral Damages. Social Inequalities in the Global Age] (Editori Laterza, 2013).

abundance of its growing fecundity and absorbed in the full functioning of a process, is no longer able to recognize its own futility"<sup>13</sup>. It is worrying as work should be interpreted as a negative factor that must be eliminated. Work allows human beings to be free in the relationship between active citizenship and social rights. The question that needs to be reformulated is the following: is it the right way to free oneself from work? Undoubtedly, it is an attractive proposal, but the danger that by getting rid of work, we get rid of a fundamental part of us seems evident to the extent that the very meaning of the training and educational value inherent in work which has always saved man would fall into oblivion. There are other ways. In 2019, the Judge of the Constitutional Court, Giulio Prosperetti, published his work under the significant title Rethink the Welfare State, through which we aim to analyze the welfare crisis, starting from the evident difficulties of satisfying the constitutional principles with current forms of the Welfare State. Furthermore, it is a question of addressing the issue of income redistribution in its direct relationship with the issue of work, which today more than ever can be integrated with increasingly present volunteering and civil service activities, in the name of a conviction: "Why not finance work instead of sterilely assisting unemployment?"<sup>14</sup>. To implement the principle of financing work and not unemployment, we should first react to social dumping by guaranteeing the worker an income integrated by general taxation. There is no doubt, as Piketty writes, that "modern remuneration is built around a logic of rights and a principle of equal access to a certain number of goods considered fundamental"<sup>15</sup>. In order to be guaranteed regardless of the economic context, social rights need to be conceived in their essence as immediate protection of the person and not mediated by the intertwining of the various economic and fiscal policies, which are the basis of employment and labor interventions and regulation interventions of the market. This finds its fulfillment within communities given that, in the global world, individual States are not able to offer definitive solutions. In recent years, therefore, the debate around the prospect of a jobless society in the near future has become increasingly popular. In 1995, Jeremy Rifkin wrote The End of Work. This scenario was feared in this essay, which would become well known beyond academic circles: "Everywhere people are worried about their future. Young people have begun to vent their frustrations and anger with increasingly antisocial behavior. Older workers, caught between a prosperous past and an uncertain future, appear resigned and always feel trapped by social forces over which they have little or no control. The sensation pervades

<sup>&</sup>lt;sup>13</sup> Arendt, *supra* note 5, at 96.

<sup>&</sup>lt;sup>14</sup> G. Prosperetti, Ripensiamo lo Stato sociale 13 [Rethinking the Welfare State] (Wolters Kluwer, 2019) https://legacy.ipsoa.it/Marketing/shopwki/pdf/9788813381448.

<sup>&</sup>lt;sup>15</sup> T. PIKETTY, IL CAPITALE NEL XXI SECOLO 744 [CAPITAL IN 21ST CENTURY] (Bompiani, 2018).

the whole world that an unstoppable change is underway, so broad in scope that it is almost incapable of hypothesizing its impact. Life, as we know it, is being modified in its fundamental aspects"<sup>16</sup>. Rifkin's analysis undoubtedly proved to be substantially correct. But did the end of the work really take place? Or is the labor society under accusation? Or would it be necessary to say that it is, above all, the work society that is coming to an end? Honneth writes, "However, there is no doubt that the intellectual tendencies aimed at abandoning the world of work do not correspond at all to the atmosphere that reigns among the population. Despite all those prognoses in which there has been talk of an end to the work society, in the world of social life there has not been a loss of relevance of work at all: as in the past, the majority of the population continues to anchor its social identity in first and foremost to the role played within the organized work processes"<sup>17</sup>. The words of the German philosopher draw a very clear line on the hypothesis of the end Undoubtedly, the world of work has changed rapidly due to the of work. ever-accelerating advance of technology. And with it the law that follows social changes with difficulty, starting, in this case, from the emptying of the meaning of work. But we believe that there is neither the end of work nor the end of the work society. Yet, there have been many changes that have affected society and work. The attack on work and its rights comes in particular from a certain liberal horizon which has strongly "promoted and managed the dismantling of Welfare State and the archiving of Keynesian compromise between capital and work. And it was supported by the development of a powerful ideology of legitimation which made use of the joint action of economic doctrines, such as monetarist theories and the anti-Keynesian doctrines of the primacy of market over the State, of legal doctrines, such as the theoretical movement, Law and Economics based on the extension to political institutions of the models of exchange and the rational action of economic operators on the market. In short, economics has supplanted or worse, colonized legal and political philosophy as the terrain of public debate"<sup>18</sup>. The consequence of these actions is concentrated in the intensity of growth throughout the world of precarious, fragile, flexible work, self-employment, work with short-term contracts, and socially differentiated black work. About the deliberate confusion between freedom and liberalism, the idea that ousting work would pave the way for a new 'reign of freedom' passes. In fact, Gorz is convinced that "in principle, the massive abolition of work, its post-Fordist de-standardization, and demassification, the destatization and de-bureaucratization of social protection could or should have opened

<sup>&</sup>lt;sup>16</sup> J. Rifkin, La fine del lavoro. Il declino della forza globale e l'avvento dell'era post-mercato 26 [The End of work. The Decline of Global Power and the Advent of Post-Market Era] (Dalai editore, 1997).

<sup>&</sup>lt;sup>17</sup> A. Honneth, *Lavoro e riconoscimento. Per una ridefinizione in* Capitalismo e riconoscimento 20 [Work and Recognition. For a Redefinition, in Capitalism and Recognition] (Firenze University Press, 2010).

<sup>&</sup>lt;sup>18</sup> L. Ferrajoli, Manifesto per l'eguaglianza 81, 82 [Manifesto for Equality] (Editori Laterza, 2018).

the social space to a swarm of self-organized and self-determined activities in function of immediate and mediated needs. This liberalization of work and this expansion of public space did not happen: they would have presupposed the birth of a different civilization, society, and economy, which would put an end to the power of capital over work"<sup>19</sup>. In this perspective, the end of the work society would allow sociality to express itself in subjective and therefore free dimension. Paradoxical and optimistic vision. Piketty says "from a strictly theoretical point of view, there are potentially other elements of strength in achieving greater equality. For example, we might think, over the course of history, production techniques assign ever greater importance to man's work and his skills so that the share of income from work shows a trend of growth: a hypothesis that we could call 'growth or redemption of human capital'. In other words, if this were the case, the progressive adaptation to technical rationality would automatically lead to the victory of human capital over financial and real estate capital. [...] in some way, economic rationality would mechanically translate, if this were the case, into democratic rationality"<sup>20</sup>. But this approach did not occur in reality. The picture is very different. Due to the new condition experienced by the worker who becomes a consumer, always imprisoned in the acquisition of goods that confirm his social existence, moreover often defenseless and at the same time neurotically in competition with machines that take his place and produce the goods purchased by him. Society is not finished and is not contained in a functional development in compliance with any kind of change. Yet the theme of a reductio is never put in the attic. The attempt to denuclearize work and life, therefore, remains active and ongoing. Flexibility and an economy of uncertainty are 'sirens' that raise the call for a quality of life that seems to forget the dangers inherent in technology and massification. But the noise of the machines, increasingly obsessive, with rhythms dictated by clocks that simply mark the times of work, as in the famous Metropolis by Fritz Lang, seems to close all space to the 'voices within', to the conscience which, disoriented, exacerbates the germs of anguish on the one hand and boredom on the other. Social recognition must reclaim the public dimension of work. It has come to this extent in global capitalism because work has been interpreted as social randomness and nothing more. Through the modality of insecurity, the strategy of social emptying ensures the return of new forms of slavery, which are embodied in individual and collective fragility, giving space to a 'blocked system' that breaks experiences. With destructuring of the social bond and growing individualism, supported by an epistemic of precarization that has grown in the arms of the primacy of the market and the

<sup>&</sup>lt;sup>19</sup> A. Gorz, Miseria del presente, ricchezza del possibile 13 [Present Poverty, Wealth of the Possible] (Manifestolibri, 2009).

<sup>&</sup>lt;sup>20</sup> PIKETTY, *supra* note 15, at 44.

individual, the "utopian nucleus of the capitalist ideology that has determined both the crisis itself and our perceptions and reactions of it"21, social change takes the place of society precisely because it possesses its benefits without having to discount its limits any longer. A social reality addressed by the exception as an opportunity, by the 'shock doctrine'<sup>22</sup> which, as Naomi Klein wrote, uses every crisis of various kinds to be able to impose neoliberal policies, without any popular consensus, causing unemployment and poverty and destroying any semblance of connection social. Domination practices are always present in the DNA of historical eras. With the advent of the risk regime, populations, for the most part, adapted to new forms of individual and social life based on comparison with technology and information technology. The watchwords are compulsive dynamism and mobility in the latency of a regulatory order. In the risk regime, the only possible 'order' is that which is expressed through markets and competition, namely information technologies that simultaneously make possible new types of decentralized forms of production, with less use of men, increases of productivity, and alteration of lifetimes. Work is changing through the conversion of production achieved by intelligent technologies at the expense of humans. Technological unemployment has been predictable for years, as has the growth of uncertainty and risk. The correlation between growth, work, income, and security does not play out on the level of complementarity but on the field of competition. Due to this condition of ideal precariousness, work, and the social state are in crisis by the climate of exclusion of the most fragile classes in the name of the idea of flexibility. As Maffettone wrote, speaking about the concept of Community in Adriano Olivetti, "the old way of doing things is no longer acceptable because the economy is not only profit but also and above all human relationship, the economy is a means to achieve the human potential and not a purpose." $^{23}$ .

<sup>&</sup>lt;sup>21</sup> S. Zizek, Dalla tragedia alla farsa. Ideologia della crisi e superamento del capitalismo 6 [From Tragedy to Farce. Ideology of the Crisis and the Overcoming of Capitalism] (Ponte delle Grazie, 2010).

<sup>&</sup>lt;sup>22</sup> N. Klein, Shock economy. L'ascesa del capitalismo dei disastri [The Rise of Disaster Capitalism] (Rizzoli, 2008).

<sup>&</sup>lt;sup>23</sup> Jacques Maritain et al., Per una economia umana 56 [For a Human Economy] (Edizioni di Comunità, 2016).

#### 3. ARTIFICIAL INTELLIGENCE: THE WORLD TO COME?

Human time may no longer be exclusive but shared with machine time, not intended as an expression of social organization,<sup>24</sup> but as an anthropomachinic metaphor. The man-machine is near horizon, ready to 'integrate' or 'replace' the old historical man in his corporeity<sup>25</sup>, both in his physical and intellectual functions; now incapable of carrying out all the tasks required by productive development, the body is preparing to integrate its activity with machines that process information, thus carrying out both material and immaterial work through the definitive rise of Artificial Intelligence. "Artificial intelligence could actually represent a turning point because its advantages in terms of productivity would not simply be limited to doing things better than we already do, but would allow us to strengthen the creative capacity at our disposal, and therefore accelerate the development process itself technologically. In short, machines would not only create new things but would also create new ideas"<sup>26</sup>. The feeling of fear, if not of bewilderment, experienced in the 'new world' signals the expulsion of subjectivity disconnected from reality due to computer and information conditioning. For Lyotard, power is completely posthumanistic, in the sense that the aspirations of individuals are simply thought of as dependent variables of the 'system'. "In this sense the system presents itself as the avant-garde machine that drags humanity along, dehumanizing it to rehumanize it on another level".<sup>27</sup>. At this point, multiple opportunities are possible to rewrite human identity. Starting from the desire to return to opening one's identity despite the difficulty of access. In the new forms of politics, therefore, the problem arises of access to the participatory dimension today deluded by the 'network democracy', which is not for everyone and, therefore, for a few autocrats with partial rules and no collective guarantee. In fact, Severino clarified that a political-social reality without mediation only favors capitalism. "When democracy is direct, those who go directly to the people without the obstacles of the political structure are not so much the defenders of democracy but rather capital"<sup>28</sup>. Globalization was probably the final phase of a complete capitalist society, with the consequent adaptation of the State, which certainly does not disappear from the scene despite the indisputable crisis, where the condition of reciprocity between the economic and the political must be underlined. In particular, at

<sup>&</sup>lt;sup>24</sup> S. Latouche, La Megamacchina. Ragione tecnoscientifica, ragione economica e mito del progresso 9, 17 [The Megamachine. Technoscientific Reason. Economic Reason and The Myth of Progress] (Bollati Boringhieri, 1995.)

<sup>&</sup>lt;sup>25</sup> A. Punzi, L'Ordine giuridico delle macchine. La Mettrie - Helvétius - D'Holbach. L'Uomo Macchina verso l'intelligenza collettiva 373, 405 [The Legal Order of Machines. La Mettrie - Helvetius - D'Holbach. Machine Man Towards Collective Intelligence] (Giappichelli, 2003).

<sup>&</sup>lt;sup>26</sup> Cottarelli, *supra* note 6, 123, 124.

<sup>&</sup>lt;sup>27</sup> J. F. Lyotard, La condizione postmoderna 114 [The Postmodern Condition] (Feltrinelli, 2014).

<sup>&</sup>lt;sup>28</sup> E. Severino, Il destino della tecnica 20 [The Fate of Tecniche] (Rizzoli, 2009).

the end of the first decade of the third millennium, through the great financialization of the economy of a concentrated nature compared to the distribution standards that had marked the principle of equality in developed Western society in previous decades. Technology is now an essential tool in everyday life. The socio-economic sector, in its various partitions, is strongly influenced by it, starting from the relational phenomenon remodeled through social networks, passing through the area of e-commerce, up to the creation of an alternative justice to the traditional one necessarily homologated - in terms of implementation times and tools - to the changed condition of economic exchanges. The digital technologies that underpin the fourth industrial revolution, also known as 'Industry 4.0', have significantly accelerated the evolution of production processes. In particular, new digital technologies impact four lines of development: data collection, which encompasses issues related to big data, cloud computing, and the Internet of Things; data analysis, from which it is possible to profit also thanks to machine learning processes; human-machine interaction, which mainly concerns touch devices and augmented reality; 'additive manufacturing', which acts as a bridge between the digital and the real through tools, robots, and machine-to-machine interactions. Technological progress is therefore presented as the main road to a 'new' industrial success, a harbinger of new work and production models in which men and machines are the protagonists together. However, it is not yet possible to know precisely how human-machine interaction will manifest itself and what scenarios may emerge, so it is necessary to keep in mind that the machine "is not the docile servant it was supposed to be"<sup>29</sup>. and that forms of control and oppression are still possible. "Perhaps this is precisely the task our time calls us to learning to understand each other with artificial intelligence that, on the one hand, using algorithms that imitate our neural networks, will become increasingly intelligent; on the other, using increasingly sophisticated conversational agents, they will be able to establish more natural relationships with us, if the expression is allowed"<sup>30</sup>. And so it is clear that we can say that the central issue is not to flee from technology. But, to paraphrase a very beautiful expression by Blumenberg, the truth, in any case, is reflected in the background and must be sought because it will always go beyond the possibility of being of simple assistance through technology. All this must lead us to think technology, machines, robotics, and everything in this world, as Anders would say, can simply herald a positive catastrophe that can once again make us reflect on what humanity is. This is the final point: to go beyond the aid but to return

<sup>&</sup>lt;sup>29</sup> P. Piovani, *Salus a machina*, in 6 Ethica. Rassegna di filosofia morale 35, 45 [Salus a Machina, Ethica. Review of Moral Philosophy] (1967).

<sup>&</sup>lt;sup>30</sup> A. Punzi, L'Umanesimo digitale: verso un nuovo principio di responsabilità? [Digital Humanism: Towards a new Principle of a Responsibility?] in 1 Democrazia e diritti sociali. Rivista telematica di Filosofia del diritto (2023).

to thinking perhaps the technique is still an accepted path today simply because our image, Imago Dei, the one that is reflected in the mirror, is still recognized. It is the comforting image of the Imago Dei in its image and likeness. But if one day, looking in the mirror, we find the Imago-machine, then terror can arise, or even the possibility of a non-recognition of one's own identity. Then we must be vigilant, as the forbidden algorithm that we find in the Tree of Knowledge is an algorithm that fundamentally cannot be acceptable in a "paradise lost," to quote the poet Milton. The forbidden algorithm fundamentally detaches us from the truth and must still be, in our view, capable of marking the final boundary, because from the tree of the knowledge of good and evil, as it is said in Genesis, "you must not eat"<sup>31</sup>, without knowing and without seeking the truth. The algorithm, the machine, the robot must not seduce us but make us once again recognize man in the truth, in the splendor of truth. This is the challenge that we must accept not by fleeing but by trying to perceive its beauty so that the technique is always subjected to our creative will. In this direction, today, more than ever, we have the opportunity to reason about the theme with an eye focused on new technologies. Starting from the possibility of using these technologies, a wide window opens onto a fundamental point, which is that of the erosion of responsibility, which is crucial because when we talk about AI and robotics, we are still fascinated by a mystery.

# 4. THE BOUNDARIES OF FRAGILITY: ECOLOGICAL TRANSITION OR TRANSITIONAL ECOLOGY?

Cottarelli wonders how the dream of limitless growth can still be realistic and concludes that without decarbonization, the world we will leave to our children will be worse than the one our parents left us<sup>32</sup>. As Ferrajoli writes, "we must know, this is a future of global regression, marked by the explosion of inequalities and discriminations and fears"<sup>33</sup>. The paradigm of 'sustainability' invests the epistemological, conceptual and lexical structure of all sciences, opening it up to new meanings, starting from the cognitive resource that is the other. This brings back into play the reflection on the 'intermediate bodies', today folded in on themselves. They should recover their original role as organisms of proximity, capable of creating networks between the center and the peripheries, between the totality in crisis and the unexpressed residuality through a renewed social

<sup>&</sup>lt;sup>31</sup> 2 Genesis 16:17.

 $<sup>^{\</sup>rm 32}$  Cottarelli, supra note 6, 145, 168.

<sup>&</sup>lt;sup>33</sup> L. FERRAJOLI, *supra* note 18, at 246.

culture, capable of providing answers to the current drift of 'disintermediation', a new expression of the technocracy of our times. As Rifkin wrote in Entropy, "Many diseases caused by the environment arise from the accumulation of wastes and other forms of wasted energy, as the entropy of a given environmental site increases. [...] As the wastes and exhausted materials created by the intense flows of non-renewable energy accumulate in a race to grow all kinds of disorder, a point will be reached where the population will no longer have a choice and will have to change course and return to renewable energy and limited uses, or face disease and death in epidemic proportions"<sup>34</sup>. The call to the right to prevention, both individual and collective, becomes forceful and perhaps we understand even better what Pope Francis meant when he spoke of 'human ecology'. In the Christian dimension, the environment is part of Creation, towards which man has an unlimited responsibility both inside and outside of it. In this perspective, establishing a relationship between principles and rights allows us to imagine. The call for the right to prevention, both individual and collective, becomes forceful, and perhaps we understand even better what Pope Francis meant when he spoke of 'human ecology'. In the Christian dimension, the environment is part of Creation, towards which man has an unlimited responsibility both inside and outside of it. In this perspective, establishing a relationship between principles and rights allows us to imagine. All men have a specific function in proclaiming an ecological awareness, which is nothing other than the responsibility assumed towards themselves, towards others, and creation. A global issue, which, as theologian Hans Küng stated, refers to a project of global ethos to be considered on the basis of social principles starting from that inherent to the person, taking into account the principle of solidarity, in the direction of subsidiarity which translates into the perspective of sustainable development which also becomes a principle in teleological key. It could be argued that through the reconstruction presented, it is possible to develop an environmental ethic that has as its purpose, on the one hand, the development of a suitable regulation for the defense and protection of the environment and on the other, the change of the individual's point of view towards the environmental issue. We are not only talking about Hans Jonas's principle of responsibility,<sup>35</sup> but of the attempt to take into consideration the value of nature, of everything that has been created together with us, and to adopt a sustainable lifestyle from an ecological and social point of view. The ethics of technology proposed by Jonas tends to go beyond a rational foundation through which to question the evaluative program of science. But this is not enough since the sociologist believes that the

<sup>&</sup>lt;sup>34</sup> J. Rifkin, Entropia 292, 294 (Dalai, 2000).

<sup>&</sup>lt;sup>35</sup> H. Jonas, Il principio responsabilità. Un' etica per la civiltà ecologica [the principle of responsibility. An ethic for Ecological Civilization] (Einaudi, 2002).

constitutive principle of his reasoning is 'the self-affirmation of being.' In our view, it is not a matter of simple survival, but of 'something more'. In this sense, man would occupy one of the many places in the natural scale, to the point that he could be identified as a simple 'collateral damage' of the successful development model. However, the human being understood as a person is not 'calculable' in his relational and exclusive proposition. As Karl Popper wrote, "The most serious scandal of philosophy consists in questioning the existence of the world precisely while around us the natural world is perishing."<sup>36</sup> In recent decades, the environmental issue has taken a serious hold on the stage of political discussion, often agitated in the name of fads but undoubtedly present in the agendas of every government on a global scale. Nature has no voice and does not vote. Nature does not exist except through the 'presence' of man. Determination is completed in the density of the relationship between man and nature, of which the latter is denoted as being correlated to the conscience of the former, revealing its objectification. The theses of the so-called 'historical environmentalists', are developed, in our opinion, on the sustainability of the idea of a sort of humanization of nature, almost in an autopoietic and functional way. In reality, the problem is posed differently. At the center of the discussion remains the man-creature with his limits. It is not enough to turn one's 'gaze' towards the natural world in a phenomenological way, underlining the distance, but, in the current situation of 'shortage,' it seems remarkable to illuminate the proximity through an attitude of profound 'regard.' Ecology not only has a conservative habitus, but expands and dilates in relation to the regions of the structural formation of social communities. In this sense, one can certainly assert that the existence of a social ecology is not bound to unsustainable commercial outcomes. "The economy is only one aspect and one dimension of complex human activity. If it is absolutized, if the production and consumption of goods end up occupying the center of social life and become the only value of society, not subordinated to any other, the cause must be sought not only and not so much in the economic system itself, but in the fact that the entire socio-cultural system, ignoring the ethical dimension, has weakened and now limits itself only to the production of goods and services".<sup>37</sup> These words clarify the points of distinction between a vision of the dominant and unlimited supremacy of the unipolar market and a reminder of the limits of human action that cannot use and abuse nature. It was impossible to symbolically 'eat the fruit of the tree', without moral implications beyond mere biological laws. This purpose is based on the increasingly evident formation of an ecological conscience among the peoples of the Earth that must find 'adequate expression in concrete programs and initiatives'. Questions such as the

<sup>&</sup>lt;sup>36</sup> K. Popper, Conoscenza oggettiva 57, 58 [Objective Knowledge] (Armando Editore, 2002).

<sup>&</sup>lt;sup>37</sup> Id.

theme of interdependence, the unfounded neutrality of science, the fragility of the ecosystem, the threat of meteorological changes in relation to the biosphere, and the disposal of toxic waste enter into reflection. More than ever, in this case, it is legitimate to affirm that the Imago Dei can be found in the suffering Face of the Earth. Redesigning the environment according to the tenets of a true humanism that has at heart a shared interest in models and rules for a project of intergenerational solidarity. "Projects for integral human development cannot ignore subsequent generations, but must be marked by intergenerational solidarity and justice, taking into account multiple spheres: the ecological, the legal, the economic, the political, the cultural. Theses that see, on the one hand, a naturalistic and pantheistic attitude, on the other, the temptation to completely technize nature, must be equally rejected. The visions denounced are equally nihilistic in that they relieve man of responsibility in the face of the superpower of nature and technology. Nature, on the contrary, especially in our era, is so integrated into cultural and social dynamics that it does not constitute an independent variable." <sup>38</sup> The degradation of nature is the other side of the cultural degradation that exacerbates the meaning of the current crisis of human coexistence. "When human ecology is respected within society, environmental ecology also benefits".<sup>39</sup> Human ecology is fullness. "While it has been relatively easy to integrate the entire world into a single techno-economic apparatus, today we do not know how to contain and govern the cumulative effects of this process. [...] The theme of sustainability – which cannot be reduced to the environmental dimension, but involves the human, social, economic one - is an extraordinary opportunity to return to a concrete thought and practice".<sup>40</sup> To guard is to contemplate, not to dominate. Care cannot be limited to a 'trendy' ecological approach, generic and insufficient, preparatory to moral desertification. Man's dwelling on Earth is not delimited by 'open spaces' but simply by the fragility of 'closed living' that does not experience the hope of including and being included. Carlo Cottarelli's words are simultaneously full of concern but also lucid hope: "There remains then the ultimate dream, that of endless growth but in balance with the planet we live on. This is the dream for which I fear most that a rude awakening awaits us if we do not change course soon. We have been dreaming for too long, and, in the meantime, we are not doing what would be necessary to make the dream of sustainable growth a reality. There is still time, it is true, but it is above all in this field that we must realize that dreaming is not enough"41.

<sup>&</sup>lt;sup>38</sup> GIOVANNI PAOLO II, EVANGELIUM VITAE (1995), https://www.vatican.va/content/john-paulii/it/encyclicals/documents/.

<sup>&</sup>lt;sup>39</sup> Id.

<sup>&</sup>lt;sup>40</sup> C. Giaccardi & M. Magatti, La scommessa cattolica 181 [The Catholic Bet], (Il Mulino, 2019).

<sup>&</sup>lt;sup>41</sup> Cottarelli, *supra* note 6, at 170.

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