

## The necessary ethical limits to progress: law, technocracy, artificial intelligence.

The relationship between progress, which new scientific discoveries allow for the human species, and the consequent legal regulation that the legislator is called to give to the new situations that arise from progress, can envisage both circumstances in which science offers elements of definitive clarity certainty of the issues that are faced, and circumstances in which the defining framework of the question is incomplete and prone to change over time<sup>1</sup>. The invitation we want to address here is to read the reflections of this paper in the light of the current pandemic situation that humanity suffers, considering how much renewed relevance today is the need to place ethical limits on scientific action. Limits capable of guiding the scientist towards the common good.

We can find confirmation of what has just been said if we follow J. Eccles, Nobel laureate in 1963, who wrote: "Accetto tutte le scoperte e tutte le ipotesi ben corroborate dalla scienza, considerandole non come verità assolute, ma come il punto massimo di accostamento alla verità che si sia finora raggiunto. (Ma) esiste un importante residuo non spiegato dalla scienza, anzi al di là di ogni futura spiegazione scientifica"<sup>2</sup>. Indeed, from the statements of Eccles, the conviction that the legislator, especially in the field of the repercussions of scientific discoveries on the life of man and of the human species as a whole, must act in compliance with the principle of precaution<sup>3</sup>, in order to avoid that the work of science brings negative consequences for humans, rather than benefits. In fact, conceiving a completely autonomous action for the scientist, in my opinion, means conceiving an incomplete action: incomplete when compared to the undeniable complexity of human nature, considered in the totality of its dimensions (the biological, the instinctive, the relational, the metaphysical, etc.). The autonomy of the scientist, ethically and legally, must be limited when his research does not go towards the common good and effective progress for man, considered in the totality of his dimensions. To this end, a point of reference, both for the identification of these limits, and to direct the scientist on the path towards the common good of humanity and towards respect for human nature as a whole, can be substantiated in respect of human rights. Human rights which, with reference to the progress that concerns us here, undoubtedly impose on the scientist (and more broadly also on the present generations in the present time) to act responsibly<sup>4</sup>, respectful towards today's humanity and those to come with future generations<sup>5</sup>.

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<sup>1</sup> The theme has already been the subject of my studies, with reflections that I partially reproduce here, expanding and enriching its perspective. Cfr., *passim*, G. Tarantino, *Diritto alla vita e libertà della ricerca scientifica con riferimento alla costituzione italiana*, in A. Pisanò (Ed.), *Se la specie umana sia titolare di diritti*, ESI, Napoli, 2007; ID. *Lo sviluppo sostenibile. Il necessario equilibrio tra progresso, economia e limiti etici. Materiali per uno studio*, in *Il turismo tra accoglienza, attrazione e investimento*, F. E. Rubino, P. B. Helzel, L. M. Hita (Eds.), Franco Angeli, Milano, 2017.

<sup>2</sup> J. C. Eccles, *The Human Mystery* (1979), trad. it. E. Cambieri (Ed.), *Il mistero uomo*, Milano, Mondadori, 1990, p. 18.

<sup>3</sup> For the precautionary principle, among all, see L. Marini, *Il principio di precauzione nel diritto internazionale e comunitario*, CEDAM, Padova, 2004.

<sup>4</sup> On responsibility towards future humanity, illuminating pages can be read in H. Jonas, *Il principio responsabilità. Un'etica per la civiltà tecnologica* (1979), trad. it. di P. Rinaudo, Einaudi, Torino, 1990 ed in ID. *Tecnica, medicina ed etica. Prassi del principio responsabilità* (1985), trad. it. di P. Becchi e A. Benussi, Einaudi, Torino, 1997.

<sup>5</sup> These concepts have already been recognized for some decades at a supranational level, for example, in two UNESCO documents: in the Universal Declaration on the Human Genome and Human Rights of 11 November 1997 and in the Declaration on the responsibilities of present generations towards future generations of November 12, 1997, but which have also been recognized by numerous subsequent international documents.

Having made these general considerations, let us then think of a more particular aspect of the relationship between progress and scientific discoveries. An aspect that, incidentally, appears to be of primary importance if we think about the concrete possibilities that doctors have today for the treatment of Covid 19, and also the possibilities that the lines of research that until the outbreak of the pandemic it was decided to carry out did not they have, instead, allowed to have. The aspect to which I refer with this last example is the more general one of the relationship between science and technology: it too can be oriented in the opposite direction with respect to the direction that leads to the achievement of the common good and the effective progress of the human species<sup>6</sup>. As has been highlighted by many, today we are witnessing, undoubtedly, a drift of a "technocratic" type (if one looks at the political-legal field) and of a "technoscientific" observation of scientific research), as a result of which the traditional relationship between science and technology is subverted.

If until a few decades ago, in fact, it was science that indicated to technology which tools to produce to facilitate and improve the free research capacity of the scientist, today, instead, (often with the consent, not always fully aware, of the political decision maker) is the technique that imposes on scientists the objectives to be achieved, most of the time for the precise purpose of pursuing the sole needs of the technique itself and implementing its potential, and not to achieve, on the contrary, a real improved degree of well-being and progress for the man. Consider as an example the weakening in recent years of research on Corona viruses, which some scholars have highlighted, also hypothesizing that the cause of this weakening was a specific will of some pharmaceutical companies, which have not found interest in financing research in that field, preferring to finance others in different fields. For the sake of completeness, we must also consider the fact that the "techno-scientific" drift, then, often declines into a "technoeconomic" drift. This happens when the tools and revenues of the economy are no longer enslaved to the progress of man as a whole, but become ends themselves, from the perspective of individual enrichment.

Enrichment that is often pursued to the detriment of the other (this occurs, for example, when the richest peoples exploit the natural and economic resources of less rich and less developed peoples) and the natural environment in which man lives. This is an aspect that B. Troncarelli underlined well when he wrote: "Una società carente o priva di principi normativi, che inducano al rispetto del mondo circostante in tutte le sue manifestazioni, umane e ambientali, e che traducendosi in specifiche regole garantiscano un sistema di reciproca fiducia tra governanti e governati, tra istituzioni e cittadini, tra decisori e collettività, tra imprenditori e lavoratori, tra venditori e acquirenti, è destinata al fallimento, non solo a livello economico, ma in ogni altra dimensione del legame umano, e della realtà socio-ambientale"<sup>7</sup>.

Finally, consider how much acceleration progress has received, in all its fields, due to the introduction into everyday life of the innovations achieved by artificial intelligence technologies. Also in this area, as for those mentioned above, the identification of ethical-legal limits<sup>8</sup> has become increasingly necessary, especially due to the sudden development experienced by these technologies. This while recognizing that

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<sup>6</sup> On the technoscientific drift, see the volume by L. Palazzani, *Il potenziamento umano. Tecnoscienza, etica e diritto*, Giappichelli, Torino, 2005

<sup>7</sup> B. Troncarelli, *Dilemmi della società complessa. Implicazioni economiche, tecnologiche ed etico-giuridiche*, ESI, Napoli, 2015, p. 71

<sup>8</sup> The ethical issues that have arisen, for example, around the use of tracking apps for infections from Covid 19 are well known.

artificial intelligence has reached different levels of development, in different fields. And in this regard, I believe that the various problems inherent in artificial intelligence can find synthesis, again, as with the other issues discussed above, in the primary problem of responsibility. In this regard, we can well agree, in fact, with L. Palazzani, when he states that: "Una delle prime questioni riguarda, anche in assenza di coscienza e consapevolezza, la responsabilità, strettamente connessa all'autonomia. L'IA può avere più o meno autonomia, intendendo con questo termine, desunto dall'antropologia, la possibilità che l'artefatto intelligente sia in grado di apprendere e, pur in assenza di consapevolezza e coscienza di sé, di definire percorsi in modo indipendente dal programmatore"<sup>9</sup>.

These are the general lines of a reflection on the future and human progress. Progress that, as reiterated, cannot ignore the duty to act responsibly for the present generations towards the generations to come, in order to protect their dignity and the integrity of the natural environment that will welcome them.

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<sup>9</sup> L. Palazzani, *Tecnologie dell'informazione e intelligenza artificiale. Sfide etiche al diritto*, Edizioni Studium, Roma, 2020, p. 54.