ABSTRACT

The person and new technologies: ethic, education and law Di Antonio Foderaro

This study analyses the scientific and technological progress experienced over the last decades. A "new technological wave" is now being referred to, which particularly involves: the most recent Information and Communication Technologies (ICTs), big data, robotics, the Artificial Intelligence (AI), and cognitive enhancement. Such are the issues opening today a new chapter in the ethic of sciences and new technologies.

This technology is very helpful for man: examples of this are the mobile phones interacting with us, possible medical innovations, and the new vehicles able to capture dangers and protect a distracted driver. Technology develops through its own logic, which man almost only looks at, without being responsible. The field of new technologies represents a huge challenge for philosophy and ethic, because technological progress has been calling into question many well-established concepts and new technologies themselves possess well precise values.

New technologies are certainly those having already reversed their relation with the scientific area depending on them: today scientists cannot but use them in order to complete new discoveries and, in this sense, technology is an autonomous form of knowledge, in a constant and continuous change. New technologies are also those making artificial what is natural as well as aspiring to control the processes they trigger themselves and their consequences.

Such technology has no doubt got remarkable, essential implications, assuming that we are completely dependent on it nowadays and it certainly tends to be consolidated so as to make our life more and more comfortable. Yet the negative side of this needs to be underlined. Today the moral and legal bearings on artificial intelligence constitute a crucial and much debated theme.

Robotic and AI (artificial intelligence) raise issues about human and post-human dignity, autonomy and responsibility, what is considered right, in the replacement of man replacement with machines and the interaction between man and machines, particularly in the workplace.

The themes here considered actualise Heidegger's intuitions and Guardini's prophetical views.

Heidegger's analysis, carefully considering the man-technique relation, may help to clarify at a first instance the sense of technique, specifically addressed in his essay *The Question Concerning Technology*. This states that: "in its essence, technique is nothing technique", but rather a mode of the revelation of the Being, that is Truth. For Heidegger, the essence of technique has got the Being itself as an ontological foundation. Such a foundation does not lie on a bare ability to do, but on the reason why man is able to do.

Technique cannot be understood if its only external manifestations are considered, but it has to be included within that process of revelation regarding truth as *a-létheia*, i.e. un-concealment. It is thus included within the process of manifestation of Being, which has man as its shepherd. Heidegger has unveiled the situation of man in the contemporary world dominated by technique, being convinced that consciousness is of the utmost importance. It is the only key allowing men to recover the right relation with the world and the others, other than themselves.

Romano Guardini's reflections about the man-technique, freedomresponsibility relations grasp the historical impact of the new era in front of him, when technique is always needed. This is inborn in man since it responds to the need and desire of man, but in the new era a more human, "humanised" technique is going to be necessary. The thinker is aware that the issue of technique is so fundamental that it cannot be abandoned or absolutely refused in view of an anachronistic sentimentalism. Guardini has never been contrary to technique *per se*, but opposed to the loss of contact between this and man's needs and, consequently, the broken relation with nature. His critiques and doubts, surrounded by great sensitivity, never wanted to lead to "Luddism", to the revolt against machines. On the contrary, they were expressed in view of a recovery of that culture, that mankind previously able to correspond to nature, by enhancing the spirit and the knowledge of man. That humanity is no more considered to be capable of this.

An ethic of responsibility is necessary to deal with new technologies. The principle of responsibility by Jonas currently constitutes the serious and concrete attempt to answer the need of an ethic for technological civilisation. In fact, the need of this ethic originates in the contradictions deriving from our relation with technology, in the man's trust in it, and in the idea of progress representing the "prime mover" of scientific and technological advances. Responsibility towards future implies a "heuristic of fear".

Compared to the inadequacy of traditional ethic, the "heuristic of fear" (recognising a methodical priority of the wrong forecast upon the good one) needs to be combined with a principle of objective responsibility in action, also able to support the long-term consequences. Fear is to be considered as a wake-up call because it leads us to question about the meaning of "humanity" and the conditions of good and right life we wish to create for the whole humanity.

The technology involving the digital world is a complex resource, where the relation between the "properly human contribution and automatic calculation" needs to be well studied because it is not always easy to "foresee the effects and define responsibilities". New technologies are not "neutral tools" and, according to their characteristics, manage to "blur boundaries so far considered well distinguishable: between organic and inorganic matter, between what is real and what is virtual, between stable identities and continuously interrelating events."

A person is the centre and not the margin of any human success. In the case of technological devices, this means that the conscience of their inventor is not sufficient, but it is also needed to form the conscience of the user. In front of the advances of technology, a "transdisciplinary" pact has to be formulated, possessing three fundamental coordinates: ethic, education and law.