## The post-COVID-19 pandemic - New socio-medical future

3 May 2020

Bernard Ars, M.D., Ph.D., president of the Federation of Associations of Catholic Doctors

The confinement period of the beginning of 2020 has shown that globalization, an economic and financial phenomenon, has limits, but also has a political dimension and beyond that a spiritual dimension, on the scale of the whole planet. It also highlighted the reality and the power of the Internet, the instrument of this globalization, as well as the capacity of communication technologies to connect people with each other, with its advantages and disadvantages.

This era also demonstrated the radical transformation of medical practice by Artificial Intelligence (AI). It certainly even accelerated it. The "AI" applications allow, and will allow more and more, epidemiological modeling, remote diagnostics and therapies, tracking people contaminated in the environment, teleworking, as well as the strategic management of hospital occupations and in intensive care units. They also help speed up the search for vaccines and new drugs.

But what do we mean by "Artificial Intelligence"?

It is a set of theories and techniques used to make machines capable of **SIMULATING** certain procedural functions of the human mind. It's in fact an automated information flow management system. A.I. is an illusion of intelligence. It brings "competence", but not "Intelligence". A.I. aims to give more added value to humanity, to creation, it is a decision aid.

The advantage here of A.I. for Human Intelligence resides on the one hand in the storage capacity of an almost unlimited quantity of information, and on the other hand, in the power and the speed of calculation in the exploration of this mass of information.

Cognition is a formalization instrument that serves to testify to the results of practicing one's intelligence in a communicable way. This cognitive power of Artificial Intelligence is not Human Intelligence. It is at its service, but it is a tool for which the user is responsible, just like all tools.

Human Intelligence is characterized by the awareness that each of us has of our own existence, by the moral awareness of what to do or not to do, as well as by the ability to be attentive to others, to the world and to himself, ability to be in a **responsible** interaction with others, the world and himself, **in order to make a decision**.

We are only at the beginning of a large-scale revolution, the A.I. progressing at a dizzying pace, strongly powered by "deep learning" algorithms that use huge amounts of data to train very complex programs.

How then to tame Artificial Intelligence so that it is truly at the service of all?

Among the most expressed fears vis-à-vis A.I., we have the problems of job cuts and a "loss of humanity" in front of this "monster" represented by the algorithms "that govern us", on the Internet, on social networks, in the management of public health, in e-commerce and even in our private life.

With regard to the "loss of humanity", one of the major challenges concerns the ethical, legal and juridical frameworks, based on a vision of Man, to be established, in order to mark out the choices and uses of new technologies, in order promote the development of applications which respect our RESPONSIBILITY, our personal data, our social framework and our model of society and finally to avoid digital exclusions.

The most real danger lies in the "big data business" which threatens the confidentiality of data. In order to guard against it, it is necessary to anticipate the risks of A.I., by calling into question completely autonomous decisions, by preventing discrimination and the reproduction of human prejudices, and by developing data protection and conservation, as well as the right to be forgotten. With regard to the deletion of jobs, I.A. is not going to destroy human labor, but to turn it upside down.

A.I. is not separate from Human Intelligence. The first only exists thanks to the second. Human Intelligence can however often be helped by the former. The ideal goal of A.I. is not to replace employees, but to relieve them of repetitive, dirty or tedious tasks so that they can focus on missions with higher added value.

With incredible capacity for fast and tireless processing of large amounts of data, the A.I. does not "understand" things in the manner of human beings, since, for her, there is **no sense**, even less conscience.

Faced with this extraordinary technological innovation that is A.I., it is imperative to define the meaning of the work done by humans and its hydration by A.I.

Because it gives a role in the enterprise, gives us social status and integrates us into society, work is an essential element of identity in our modern societies.

In all professions, but particularly in that of physician, the "activity" required today is that of – what I call – "translator", of competent and constructive intermediary between Men and A.I., epistemic mediator between Humanity and Technology, which translates human expectations, the needs manifested by men, in terms compatible with the significant capacities of "machines" and which, in this way, can offer in response to expectations, very professional and responsible solutions, at the service of the Human.

All of this requires an "operational transparency" of A.I., which will allow better understanding to make the decision, which will give everyone confidence and help to be accountable, to be more responsible.

To be a real translator, in medical practice, it will be necessary not only to know the deep language of the Human, but especially to possess well the meanings and the limits of the technical language. An ethics of **responsibility** is essential.

The translation of the nature of the human person – what it is deeply – by the writing of algorithms very clearly follows objectives and cannot betray this deep human sense.

In care professions, there must also be the "accompanying translator", the one who accompanies the other (the patient) what most call the "caregiver" (nurse, psychologist, spiritual, social assistant, educator, etc.) with the development of an ethics of **fraternity**.

But while having these qualifications, what is or must be additional, in the PHYSICIAN, it is the need to give a "presence", an "existential authority which gives confidence" – Medicine remains an Art. In addition to effective professionalism, the physician must have the skills of compassion, of team leader, sensitive to the result, but above all meaningful. This authority implies the need to respect certain limits.

In addition to the ethics of responsibility and fraternity, it is advisable to propose and above all to bring to life a vision of the Human, implying requirements of interpersonal relations as well as with its environment; its limits and an opening towards Transcendence. "To give confidence", to testify by his presence, it is to develop by virtues, strong personalities, "leaders".