Final Statement on Dignity and the Future of Work In the Age of the 4th Industrial Revolution

1. The future of human labour today is full of hopes and threats. A collective assumption of responsibility is necessary on behalf of all humanity, nations and international organizations, in order to achieve these hopes and avert these threats. The new knowledge economy, centred on Information and Communication Technologies, together with AI / and robots, can free men and women from the mere execution of tasks and allow them to devote their energies to more satisfying and creative purposes. It can, however, also create mass unemployment or alienation of workers reduced to the role of subservient auxiliaries of a working process they can no longer control. Much depends on the philosophy that guides the new automated production processes: will it be a philosophy that aims solely at profit or one that values the participation of workers, care for the common good, and has a special concern for the poor and the marginalized?

2. The digitalization and development of artificial intelligences is producing a new and unexpected revolution: since the 1950s, computer science and Information and Communication Technology (ICT) have exerted an influence that has changed not only our interaction with the world but also the understanding of ourselves: we do not perceive ourselves as isolated entities – and we no longer live as such – but rather as interconnected informational bodies, or *inforg*, sharing a global environment ultimately made of information, the infosphere, with biological agents and engineered artifacts. In light of these transformations, we must be careful not to mistakenly think of digital ICTs as mere technologies that make improvements. A more subtle, less sensational, and yet more fundamental and profound transformation is at stake in our way of conceiving what an agent is and what kind of environment these new agents inhabit through a radical transformation of our

understanding of reality and ourselves.

The main tool of this transformation is the algorithm. The algorithm is shown here as an interesting entity. It is not just a calculation tool but a real social actor that fully enters the complex system of labor and union coordination. Only if we know how to open up the algorithm by making it an explicit voice in negotiations will we have instruments of greater objectivity in consultation and contracting between workers and companies. If the algorithm remains hidden and opaque, there is the risk of taking away – from the unions and, consequently, from the workers – a space to co-determine their role in the production process. In short, if on the one hand we would be able to move towards horizons of greater objectivity and transparency, on the other, we would de-unionize certain forms or ways of working with very uncertain results and, in particular, exposing them to non-legitimate uses of these systems. We need to combine the world of algorithm with the world of ethics. Ethical values must be introduced in the regulations of the new technologies and included in algorithmic systems. To preserve the dignity of human work, to protect the dignity of the person we need an *algor-ethics* that protects us from inhuman forms of *algo-cracy.*

3. To promote the dignity of work in an increasingly digitalized environment, it is necessary to: (i) increase awareness of work as a social relation, and not only as a functional performance, and therefore configure it as a social relationship linking all the stakeholders in the processes of production and consumption; (ii) enhance the capacity of the worker to manage relations with technology through digital literacy and proper reflexivity; ensure that the work activity favours the exercise of the (meta)relational reflexivity of the worker; (iii) apply relational contracts to the work that allow the worker to pursue a balanced daily life between work and family and private life.

We need to recover a basic metaphysics of the human person (aimed towards the good and the common good, growing into freedom through growing in virtue) that can help us to understand ourselves better and to influence the current direction of development of technology. It is possible to direct technological development such that it is more focused on developing human skill and on allowing human beings the space to devote themselves to "leisure" in the Pieperian sense, to being in communion with those on the margins of society, and, most of all, to worship.

4. Some kind of "adaptation" or "hybridization" is inevitable and is emerging, between the human person and the technologies of the fourth industrial revolution, but it should be assessed in its consequences on those who produce and use the new technologies. In understanding these changes, we can be helped by our historical knowledge of technological upheavals from the past, even if we recognize that this is a new, and unique, phase in history. We need to find new ways of worker representation so that workers can be an effective part of our deliberations on the future of technology. Tensions and difficulties in understanding the contents (anthropological foundations) of the dignity of human work are related (i) to the inheritance of modern mechanistic and reductive view about the human being and her activity and (ii) to the emerging global dynamics for which an adequate epistemology still lack to account for the influence they have on humans and living

beings more in general.

Protection of future generations against the hegemony of algorithms and mere virtual social environments, will be mediated by the elaboration of experiences and responsibilities using the senses and taking care of concrete environments/group of people/projects/etc. This means, for example, emphasizing the care dimension behind the interest for immigration and ecology. Relational engagements will be fundamental through art, nature, and collective organizations. Institutions – as conceived up to know – will disappear leaving the place to living communities governed by the capacity of wonder and admiration. Sustainability is not enough and not possible without solidarity's processes.

5. The idea that schooling should be a factory belt delivering workers ready and relevant to today's systems of production and distribution is vulgar and misses the nature of what schools do best. Schooling as we now understanding it – first imagined by the Greeks, must endeavor to educate "the whole child for the whole world." Education must serve children and youth for "doing" and "living" well – the flourishing Aristotelian ideal of *Eudaimonia*. Education must also be to prepare youth for an ethical life of civic engagement, belonging, and participatory and transformative citizenship. And today more than ever schools must give children and youth all the tools – from sciences, the social sciences, the humanities and from ethics – to emerge as champions of unchecked climate change, the existential threat of our times.

Education is more important than ever before in human history and we now have a much fuller understanding of the causal pathways by which education generates better health, a more muscular citizenry, and patterns of status mobility. A strong corpus of sociological, demographic, economic, and psychological research has mapped the effects of education –measured most often by years of schooling on individual socio-economic mobility (human capital), social cohesion, (social capital), and health and wellbeing. The preponderance of evidence, for sometime now, is hardly surprising: schooling tends to generate powerful virtuous cycles. Perhaps the most exciting of these findings is the general nexus between schooling, literacy, and health outcomes throughout the world.

6. How can the digital economy trigger the ecological and social transition? A discernment is needed at different scales and from all actors – States, companies, associations, citizens. Enormous threats and challenges remain: two thirds of our current economic growth, measured by the GDP per capita annual growth is depending on the consumption of energy per capita – energy which is still massively related to fossil fuels. We have to promote decarbonized economic models and lifestyles. However there is a sharp increase in the energy footprint of the digital technologies, growing annually by 9% to 10%. This hyper-growth is occurring despite the steady progress recorded so far in terms of energy efficiency of equipment and digital systems and has the consequences of capturing a gradually disproportionate share of available electricity, which increases the tension on the rise of carbon-free generation sources. This trend is exactly the

opposite to that generally attributed to Digital and goes against energy and climate decoupling targets set by the Paris Agreement. Therefore, it is urgent to lead a collective discernment towards collective action. New curricula are needed in order to educate to a responsible and frugal digital economy. Some new initiatives are flourishing in different countries and many companies commit themselves to be carbon-neutral within 15 or 25 years. However, very few integrate the ecological limits of the Digital. A cultural change is at stake, which can inspire public policies and business strategies.

The surge of new digital technologies, including artificial intelligence, virtual reality, 5G connectivity, big data, supercomputing, and other advances, will produce a new surge of wealth. Yet new technologies threaten wellbeing in many ways: the loss of privacy, rising inequality between the rich and poor, mass technological unemployment as machines replace workers, political surveillance, manipulation of information, acceleration of environmental destruction, and cyberwarfare through the militarization of the new technologies.

7. The challenge is this. Technological advances – including the digital technologies – can raise global wellbeing, but only if the market economy operates within a guiding moral framework grounded in human dignity and integral ecology. In order to create the new moral economy, we must combine three fundamental ideas:

The Universal Destination of Goods: a rise in market wealth must be shared in a manner to benefit the common good. The goal is not a world of a few billionaires and impoverished billions. It is a world of shared and inclusive prosperity.

Integral Ecology and Sustainable Development: wellbeing is relational. The economy promotes human dignity by supporting the cultivation of virtues as individuals, family members, friends, citizens, and participants in the Creation.

Beatitudo (*Eudaimonia*) and the Common Good: wealth is instrumental, but is not the *summum bonum*. The purpose of wealth is to relieve the suffering of poverty and to enable individuals to live well-balanced lives. Higher wealth enables more time for leisure, study, speculative thought, and time with friends and family.

Public policies in the application of the principle of subsidiarity in its various articulations directed at the common good are needed to harness the new digital technologies for the Wellbeing of Nations.