

Centesimus Annus Pro Pontifice (CAPP) – German Section

Integral Ecology for the Digital Age

Contribution for the 2019 Annual General Meeting in Rome

Introduction

The digital age transforms our economies, societies, political systems, cultures, and everyday lives. In many ways, digitalization has made our lives easier. We can instantly communicate across the globe. We can save, copy, and share enormous amounts of data. We have better tools to cure deadly diseases such as cancer and to fight climate change. Digitalization offers many more promises, from autonomous cars to the use of robots to assist elderly people.

In the annual preparatory work-shop of the German CAPP section, held at the Jesuit university of St. George in Frankfurt/Germany on February 23rd, 2019, we discussed the promises and risks of the digital age, especially its ecological significance. Integral ecology, as defined by Pope Francis in his 2015 social encyclical “Laudato Si”, serves as a multidimensional analytical perspective on the complex ecological consequences of the digital age. It also offers an alternative normative mission to make digitalization better conform to the ethical requirements of the common good, international solidarity, and intergenerational solidarity.

The Holy Father posits that all major social systems – economy, society, culture, as well as everyday life – are intrinsically connected to each other. To solve or mitigate global problems we need a global analysis and comprehensive solutions across all systems. In particular, we cannot separate society from ecology. We must treat nature as a special object of care, along with the poor and the marginalized. Without nature, everything is nothing. The interests of future generations can no longer be ignored. In today’s liberal Western world, which privileges individual autonomy and immediate gain, intergenerational solidarity requires sacrifices but also humility and courage.

Christian anthropology for a digital age

In his kick-off speech, Prof. Dr. Armin Grunwald, a German physicist, philosopher, and technology assessor, encouraged us to resist all forms of technology determinism and fatalism. There is a worrisome tendency to worship or idolize digital visionaries. There is also increasing political and social pressure “to get ready”, “to adopt”, “to adjust” to the digital life. All visions about the future, Prof. Grunwald argued, reflect contemporary hopes, sorrows, and concerns. They do not describe future realities. The future is never fixed. Humans have both the capacity, the freedom, and the responsibility to make informed decisions about our future, both individually and collectively.

Anthropologically speaking, Prof. Grunwald warned us of the emergence of a “negative” view of the human person. Some already argue that robots are “better” or “more efficient” than humans. Others believe that algorithms could potentially be better politicians or employers. Whenever we fall into the trap of believing in the inherent supremacy of digital technology, a troublesome anthropology is emerging on the horizons of the digital age.

To counter this technological ideology, the German section of CAPP follows Prof. Grunwald by strongly arguing for a robust and Christian form of anthropology. If digitalization is to serve man, it is crucial to have a correct understanding of the origin, nature, and destiny of the human person. Man is made in the image of God and has an inherent inalienable dignity. Man also has capacities that no machine or robot has. Normatively speaking, it is man that can distinguish between how things are and how things should be. Man can develop counterfactual realities and envision a better future. Man is a dialogical being with feelings. We can make sovereign, ethical decisions rather than simply following pre-given algorithms or programs.

To paraphrase John Paul II, digitalization is “for man” and not man “for digitalization”. Put differently, digitalization is a means to promote the well-being of man. It is not an end in itself. This is why humans have to remain the shapers of digitalization rather than its object or even its victim. As God’s creation, both man and nature have a higher intrinsic value than technology. Humans cannot delegate ethical decisions to computers or algorithms. We are called to assume responsibility and to make ethical decisions by ourselves

Christian anthropology puts man at the center. In the past, this has often resulted in a lopsided understanding and justifications that allowed man to exploit nature. It is urgent to leave such misguided conceptions behind. We need a responsible Christian anthropology for the digital age that includes not only the poor and the marginalized but also the environment and the well-being of future generations.

Integral Ecology for the digital age: The international level

The world community is protect creation by legally instruments such as the Paris Agreement. It is crucial that all states strengthen and speed up their contributions to mitigate global warming. Often we are under the impression that our digital activities are by nature “green” and “good” for the environment. Yet we forget that the production of computers, smart phones, and batteries require rare earths. We cannot ignore how these elements are produced. Mining and refining rare earths has serious environmental consequences if not properly managed. The digital progress of the West cannot take place at the cost of polluting the developing world.

Recycling digital waste poses another challenge. Too often, the global South, especially African countries, become the digital dump of prosperous countries. Entrepreneurs and policymakers are to find ways of extending the lifespan of electronic devices and responsible forms of recycling.

Digitalization happens globally. However, it must not happen in a lawless space. There is the danger of new monopolistic companies that dominate the digital era. Here we need robust and transparent data protection laws.

Concerning the health sector, we see a lot of promises. New forms of individualized medicine should be available to all people, not just the rich and powerful. The use of robots in nursing old people can offer important help. Nevertheless, such robots may never replace human contact and affection.

Integral Ecology for the digital age: The national level

Environmentally, states have a responsibility to promote, support, or subsidize the energy-efficiency of houses, apartments, and offices. In the European Union, for example, buildings consume 40% of overall energy and emit 36% of total CO₂ emissions. Improving the energy efficiency of buildings offers a large potential to reduce emissions and reduce costs. Smart meters provide a particularly powerful means to better control, estimate, and decrease energy use.

Politicians are to serve the broader common good rather than narrow self-interests. Digital means of communication, such as social media platforms, provide an innovative way of creating stronger bonds between political representatives and their constituents. Citizens can also make good use of new forms of digital movements to start petitions, to demand a more robust answer to the challenge of climate change, and to connect like-minded citizens to evaluate ethically the consequences of digitalization.

There are many challenges at the interface between digitalization and climate change. It would be helpful to establish research centers or endowed university chairs to study these topics in depth. In a time where young people are increasingly disconnected from traditional forms of art, digital means to represent our artistic heritage allow for new and innovative forms of experiencing art.

Autonomous driving is a major new trend that promises to revolutionize mobility. Its potential to decrease dramatically the number of accidents and deaths on our streets and highways is to be welcomed. At the same time, we are concerned that ethical decisions are delegated to an algorithm. We insist: A person's life may never be outweighed against another person's life.

The next generation grows up as digital natives. This makes it ever more important to teach them how to use digital products responsibly. Schools require the necessary tools such as personal computers, laptops or tablets. More importantly, teachers need to receive adequate training to help promote the digital maturity of our students. The value of the teaching profession deserves to receive special recognition. Digital tools or computers can only assist and never replace human teachers.

Integral Ecology for the digital age: The Church level

The Catholic Church, with its 1.3 billion membership, is not only a spiritual communion. By its sheer size, its members can also exert a certain purchasing power. All faithful are called to read carefully to the Holy Father's advice as laid down in *Laudato Si'*. It is the Church more than any other international actor that puts the intrinsic worth of the creation at the center of humanity's consciousness. With its thousands of buildings and churches, the Catholic Church also has the chance to pay more attention to its CO₂ footprint. The installation of solar panels on Vatican rooftops serves as a good example.

With its organic Catholic Social Doctrine, the Church and its Supreme Pontiffs have always taken seriously the ethical consequences of socio-economic developments. Given the significance of digitalization, its chances and risks ought to be incorporated more explicitly into Catholic Social Doctrine.

Digitalization also offers many new tools to the Church to support its pastoral work, to enhance its missionary outreach, and to facilitate its administration. At all levels, the Church can use these tools responsibly and innovatively while never forgetting the primacy of real community experiences and interpersonal relationships. Sacramentally, digitalization can only serve as a tool to promote mass times, etc. Sacramental acts can only be administered by priests and have to be based on material substance rather than digital screens.

Integral Ecology for the digital age: The organizational level

Companies must adhere to legal, environmental and ethical standards. In their supply chain, companies need to clarify the ecological burden, in particular of their digital products, and make them transparent to consumers. Moreover, companies should commit themselves to ecologically sustainable production and aspire to CO2 neutrality. Digital companies have the responsibility to pay special attention to privacy and data protection rights. Companies are to uphold ecological standards in their digital operations and decision rules, e.g. within online shopping platforms. Artificial intelligence provide a tool to find the best solution in complex environments – solutions that human beings cannot find or calculate on their own. In doing so, human beings will continue to play a crucial role as supervisor, benefitting from their contextual intelligence.

Integral Ecology for the digital age: The family level

Wherever possible, forms of remote-work or home-office can help decrease ecological costs. They can also have a positive impact on family life. For example, they can make it easier for struggling parents to take care of sick children in circumstances where no relatives are around and where no leave can be taken.

As the basic cells of society, families also play a privileged role in educating their children. Parents are to raise their children's awareness of waste prevention, recycling, and respecting God's creation. Young people can play a pioneering role in setting examples and serving as role models. Families also have to maintain a barrier between the digital and the real world and protect children from all pathological faces of digitalization such as shooting games that glorify violence or pornography. "Digital detox" as a form of shared digital fasting can help families spend more time with each other than with their digital products.

While digital forms of communicate can help bridge the gap between family members that live far apart, families are also called to dedicate time for personal contacts with each other and to help or visit the poor and marginalized in their local communities.

Integral Ecology for the digital age: The individual level

Individual choices matter. Every person of good will should pay more attention to recycling, to saving electricity, to reducing our carbon footprint, and to protecting nature. An increased awareness of the environment and more conscious purchasing decisions are now world-changing opportunities: How we behave, what we eat, what we wear and above all what we consciously buy are the most impactful acts that anyone can do for the planet and humanity. If we take more "green" decisions, the market will produce more "green" products, adapting itself to the new demand. So, there is a tremendous need of establishing humanity- and planet-friendly habits. Last but not least we should focus on how we spend our leisure time;

digitalization can lead to “addiction to distraction”, more less focus/attention -not only at work but also in the interaction with the others- more less time and engagement in real relationships. This is the effect of a new world-wide dysfunction: the so called “Digital Dementia” caused by the increasing amount of time spent on social media.

We also have to counter all forms of digital bullying in the internet and on mobile phones, especially against young people and immigrants. The digital era also can be very unsettling and lonely for many people. Individual faith and the community of the Church can serve as a foundation in troubling times. Public discourse also matters. All people of good will are to communicate courageously, to side with truth and the poor, to counter fake news, to enjoy the fruits of digitalization, but also to reflect critically about its risks.