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The de-colonization of the digital world and Practical Theology

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Digital processes have developed an enormous power to shape social and individual lives because they are able to convert all aspects of reality into digital formats, to connect them, to collect an immense amount of data worldwide and to create complex instruments of technical control. They have the potential to transform the world. This phenomenon can be interpreted from the point of view of coloniality and de-coloniality. Digitalization opens access to nearly all human knowledge. Social players, governments and economic companies use the potential of cyberspace for their own interest. Artificial intelligence, self-learning systems in medicine, care, autonomous locomotion, all the way to autonomous weapon systems, can make decisions independently from direct human control. Practical theology is therefore challenged to research the influence of digitalization in social and individual life, to identify its colonizing effects, to face the ethical problems, and to defend ethical standards and basic human rights. This contribution will describe de colonizing effects of digitalization and identify strategies of de-colonization from the ethical point of view of practical theology.

Introduction

Digitalization now seems to be a keyword for the development of our human future. We can observe digitalization programs and strategies in nearly every sector of society. Robots and autonomous systems shape the Industry 4.0. The medical sector is developing internet-based systems of diagnosis and intervention. The economy and the banking system are using autonomous internet-based decision instruments for planning investments and deciding whether somebody will have credit and under which conditions. Schools and universities are promoting systems of digital learning. Churches too, are promoting digitalization via building up digital networks for communication between church workers and members, administration, information, the communication of the gospel and pastoral counselling on the web. The military sector is developing drones and autonomous weapons that make decisions based on algorithms of their targets and the necessity of an intervention. Secret services have access to an immense amount of digital communica-

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tion and use it for profiling and investigation. Cyber war is a new reality and it includes hacker attacks against basic systems like water and energy suppliers, nuclear power stations or the internal network of a national government (Hindman 2009).

Are the terms colonization, colonialism and decolonialism helpful for an analysis of the digital world? What can they contribute to a practical theological discourse in this area? "Decoloniality or decolonization is a term used principally by an emerging Latin American Movement which focuses on understanding modernity in the context of a form of critical theory applied to ethnic studies and, increasingly, gender and area studies as well. It has been described as consisting of analytical and practical "options confronting and delinking from […] the colonial matrix of power" (Mignolo 2011, 37) or from a "matrix of modernity" in which coloniality and colonialism constitute the "generative order" of a four-fold matrix of forces comprising colonialism/imperialism, capitalism, nationalism and modernity as a set of processes and discourses" (LeVine 2005a; 2005b; Wikipedia, Decoloniality). Decoloniality is a response to the relation of direct, political, social and cultural domination established by Europeans (Quijano 2007, 168). This means that decoloniality refers to the analytic approaches and socioeconomic and political practices that are opposed to "pillars of Western civilization: coloniality and modernity" (Quijano 2007, 168).

The concept of decoloniality refers to a radical exterritorial view that observes the dynamics of power and the factors that are shaping power (Quijano 2008). This reminds us of analyses of social discourse by Michel Foucault, focusing on social power. In this sense, decoloniality can also be used to analyze the digital world. The basic factors of colonialism/imperialism, capitalism, nationalism and modernity can also be identified as important elements of the internet. But in principle the internet is not defined by those factors. As a universal medium it is principally open to everybody who has access to it, and is apparently neutral. The concept of web neutrality means the equality (neutrality) of transmission of data for all users. This refers to the equal amount of data transmitted for a defined service like telephone, video etc. Providers want to differentiate the quality of data transmission dependent on the contract. In actual fact, the discussion is whether competition of different providers is indeed maintaining so-called web neutrality. In different countries (e. g. Germany), web neutrality is granted by law (Wikipedia, Netzneutralität). It is clear however that digital technology is not ideologically neutral. It is a digital construction of reality and therefore offers a limited – and limiting – perspective in principle, the Internet is an open space of communication for everybody. But in reality, there are restrictions due to economic conditions, the level of instruction and the technical environment. Underprivileged people have less access to the Internet and this widens the gap between rich and poor[1]. Notwithstanding, it offers a space for communication for the representatives of exterritorial perspectives, for the expression and meaning making of the colonized and oppressed. Social media has become a powerful instrument of communication for the organization of social protests for example. On the other hand, terrorists and people engaging in crime and abuse use the web for nefarious purposes, recruiting followers, grooming and exploiting people, and planning criminal acts. Digitalization can allow an articulation, communication and sharing of vastly different meanings and agendas, the good and the bad included.

The process of digitalization can be interpreted from the point of view of coloniality and de-coloniality. We can describe the Internet and virtual reality as an open space, a new dimension of reality that is constructed by digital technology and colonized by very different users. They occupy spaces via the creation of websites and platforms that organize information exchange and communication. We can observe that in a short time, such concentration processes have taken place. Hardware and software producers like Microsoft, Apple, Google, Facebook, Amazon have attracted a huge number of customers and even more money by advertisement and information services. The actual currency is information. Big Data analyses result in personal profiles that are used to control consumers' activities and motion profiles. Internet portals can assess individual behavior, output and results of activities. Social feedback-portals and life logging bracelets for example, permit the surveillance of individuals and can direct their behavior. The immense amount of data, its application in the development of algorithms for analyzing and influencing individual behavior appears

1 For example, in Brazil, 4.8 million children and adolescents have no access to Internet and 39 % of the students in public schools have no computers, notebooks or a tablet to study. See: https://porvir.org/acontece/cetic-br-pesquisa-tic-educacao-2019/.

as a new form of the colonization of private and public life.

But for most people access to the Internet is regulated by software systems from Microsoft or Apple. The market focuses on a few big companies, which are also competing in the market of smart phones and tablets. The controversy over whether the Chinese systems of Huawei may be allowed for government use in the US and in Europe or if they are a security risk, because they could systematically leak information to the Chinese government, shows the dimension of the problem. The concentration of capital and government interests directs access to the internet. There are many ways of repression and exclusion of free discourses in the digital world, from switching off a website to influencing discourses using trolls. Phenomena like cyber mobbing, shitstorms, and fake news in social media demonstrate that moral standards, ethical principles and legal regulations for the digital world are necessary. It is indeed the big question who is in control of the World Wide Web.

The task of Practical Theology

Practical theology asks for the leading images and principles of digitalization, the implicit or explicit anthropology, particularly regarding the domain of ethics and moral standards. It is interested in the way in which religion, and especially Christian beliefs of the different denominations, is present in the digital world. Practical theology seeks out the possibilities of digital religious communication. And there may be certain risks involved in establishing digital systems and communications for religious purposes, without a concomitant theological reflection of what is indeed occurring, or what the consequences could be. Christian theology should have a fundamentally critical perspective that is based in the radical otherness of God and in the radical inversion of the human order by the incarnation of God in Jesus Christ (Dussel 2017, 257). This implies the identification of God with all, who are excluded, on the margin of life and society, with the poor. This basic perspective of Christian theology concludes with the radical exterritoriality of the theory of decoloniality. But it means colonial aspects of digitalization from a theological point of view and therefore inscribing theological arguments into the theory.

Seeking out the image of the human being in digital processes in terms of theological anthropology, we can see, that the human being as an image of God with its own dignity, liberty and responsible relationships is not present in digital processes. The human being is seen not as an individual or a person in the respective cultural patterns, but as a digital subject, that means a user number, a digital code (Gäfgen-Track 2019). And all their digital actions are accounted to one or several code numbers and included in algorithms. The user of digital programs is seen fundamentally as a consumer and object of innumerable offers that are adapted to their calculated individual profile. This individual profile is the total of all memorized online actions. It is built up as an *avatar* of the real person. And there are existing experiments and programs that this *avatar* may be able to communicate in the virtual world instead of the physical person. How is this compatible with the Judeo-Christian perspective on the human being as image of God? It is possible to understand the *avatar* as being an authentic representation of the person, if the individual is able to control it and is related to it. This relation between the virtual utterances and the physical subject is not a platonic one, as long as there is a physical subject. Becoming autonomous, the identity of the *avatar* and the one who caused it is no longer granted. Online, the *avatar* is in fact an amalgamated creation of statistics and a statistical function shaped by the interest of being optimized as a consumer. Indeed, "The Christian image of the human being with its emphasis on being a creature related to God, the creator, on liberty and responsibility for the own self and for others, the human relatedness and capacity for relations as well as the human search for truth and orientation can serve as critical corrective in processes of… digitalization" (Gäfgen-Track 2019). This includes reflection on the relation of the digital *avatar* to its likeness to the image of God.

In what follows we identify some topics that deserve special attention by practical theologians.

The protection of data

A fundamental ethical and legal consequence is that digitalization must guarantee the person's right to their own data. In order to keep human dignity as inviolable, as image of God, legislation for the protection of personal data is necessary. We need international standards and an international legal convention that grants the same rights for persons using the Internet in Europe, in the US, in Brazil and in

countries like China. Central legal aspects are the right of informational self-determination, the preservation against abusive data processing, the preservation of personality-rights and privacy. The *OECD Guidelines on the Protection of Privacy and Transborder Data Flows of Personal Data* (The OECD Privacy Framework. 2013) has existed on an international level since 1980. But its application in the different countries is wide-ranging. The *European Data Protection Convention* is relatively strict and is obligatory for the national legislation of the European Union States, while the United States of America does not have a national legislation and only a few States like California have integrated the constitutional right on the preservation of privacy in their law. In Europe, national law grants that every person has the right to be informed about all data collected about them. In Russia, China and certain Asian states the government is in control of the internet and does not respect the person's rights on their own data. The protection of those rights is an urgent necessity for the international community of nations and for respective national legislation.

Violation of fundamental citizen rights

The basic rights of persons as citizens can be violated on the Internet, and political actions and processes of opinion formation can take place that undermine the constitutional rules of democratic states and change the character of free and democratic elections. If personal data are collected, sold to political parties or to the movement of politicians and then used for individual nudging of opinions in election campaigns, then liberty of meaning is undermined. If robots post programmed political messages and interact in Chatrooms like Twitter or Instagram or in Facebook, we have the problem of opinion manipulation. The individual user cannot recognize whether the communication partner is a robot or a real person. An individual's opinion formation can instead take place in social networks and not via independent newspapers or on-line articles, this makes people more vulnerable to being caught in internet bubbles and manipulated by fake news.

The documentary film *The Great Hack* directed by Karen Amer and Jehane Noujaim (Netflix 2019) presents the ways in which Cambridge Analytica used information from Facebook users without their knowledge or consent in order to categorize them so as to better reach them. This data was used in the election campaign of Brexit in the United Kingdom as well in the elections in the USA, Argentina, Malaysia, Brazil, Colombia and others. Most of the resources used from Cambridge Analytica were directed to users whose minds could be persuaded or changed and impact in the elections. These persons were bombarded with blogs, sites, articles, videos and were conditioned to see the world in a specific way. In this sense, technology manipulated the electors' minds without their consciousness and sabotaged the entire democratic process. The results of many of these elections are extreme right governments leaving social life and communities in ruins, as happened in Brazil for example. If for Zuckerberg, the purpose of Facebook was to connect people, create communities "and [bring] the world closer together" (Zuckerberg 2019), the contrary happened with people grouping up into bubble communities, excluded from the larger world and not realizing how they were manipulated. The research of Share Lab exposed the power of the algorithms that own the personal and intimate data of millions of people and shows how they were organized and sold for big capital (Silveira 2019, 43).

It is necessary to establish national and international ethical and legal control instruments to guarantee the constitutional basics of democratic states, specially the freedom of elections. Mark Zuckerberg himself, the founder of Facebook, is demanding international rules for the internet. In his article "Four ideas. to regulate the Internet" (Zuckerberg 2019) he suggests international standards "on harmful content", legislation for "election integrity", "a globally harmonized framework" for "effective privacy and data protection" based on the European GDPR regulation. Indeed, "Different rules in different regions would break one of the most important qualities of the Internet: it's one platform that everyone can access and build up". It seems to be necessary to observe whether this political statement of Zuckerberg does not serve primarily to stop national activities of legal control and is in function of a liberal discourse hiding the exploration of user data and the concentration of power into the hands of the shareholders. As mentioned by the Brazilian sociologist Jessé Souza: "Facebook is the perfect metaphor of the strategy of neoliberal financial capitalism, which is colonizing and exploiting us in an imperceptible way, while parasitizing and manipulating our relationships and our most intimate desires" (Souza 2017, 262).

Robotization and artificial intelligence in a theological perspective. The communication with robots confronts us with the question of the status of artificial intelligence. "A robot is a system that usually consists of three components: (1) a sensor which gathers information from its surroundings; (2) a processor, which processes that information; and (3) an effector which can interact with the surrounding environment" (The Catholic Church in the European Union 2019).

We follow here the analyzes on the robotization of life presented by the European catholic bishops associated in the Commission of the Bishops' Conferences of the European Union (COMECE). Robots often are related to the internet. Whether a robot is a machine or a programmed software function in a computer system seems to be irrelevant in relation to the basic definition of a robot.

The Catholic bishops' paper shows two main insights: "Some societies cannot afford efficient robotization and certain populations groups or classes which, because of economic reasons or personal physical or mental disabilities are left behind due to their lack of access to technologies. The robotization of life must therefore be wisely considered as an opportunity but not as an absolute necessity (because it is related to certain particular interests) and with a concern for those potentially left behind" (The Catholic Church in the European Union 2019). In the perspective of Christian ethics robotization is not demonized. But it should submit to the ethical principles of common welfare and self-realization. The Christian perspective of the option of the poor shows the potential damage, also for societies of the global south, if we think, for example in the robotization of agriculture. It is necessary to consider where robotization is an advantage and where it would constitute damage. "It must also be noted, that robotization is, in certain sectors driven by factors which are themselves reinforced by the robotization they have created" (The Catholic Church in the European Union 2019).

The second insight of the bishops is: The use of robots is at the same time strengthening and limiting human action. "This gives rise to a paradox: the more human power over the environment increases thanks to machines, the more human beings are deprived of agency and control" (The Catholic Church in the European Union 2019). The consequence can be a collective impression of "unease and powerlessness" that may create a climate of tension and aggression against robots. Therefore, the decision about the introduction of robots into certain sectors must be ethically questioned. On the other hand, the human relation to existing robots must be shaped according to ethical standards. The catholic bishops suggest: "It is therefore necessary to extend the principle of good relations, which previously regulated human interaction with nature and with other human beings, to include robots" (The Catholic Church in the European Union 2019).

The anthropological foundation for this is the idea of 'creaturality'. This means "… just as human persons in their freedom and nature with its regularity and unforseeability, as creatures of God, so robots, despite their autonomy, are built and programmed by humans". (The Catholic Church in the European Union 2019). Robots are thus human creatures. They share with humans the characteristics of being a creature, the ability to relate and interact with the other and that they "can be subject to moral judgement as to the good or evil – in the sense of harmful or harmless acting – of the exercise of initiative or the consequences of its actions" (The Catholic Church in the European Union 2019). Therefore, the human person can care for robots and be assisted by them.

This is based on in the vision of Christian anthropology, rooted in biblical wisdom, of the human person's primary task being that of "preserv[ing] and cultivat[ing] nature" (The Catholic Church in the European Union 2019). The concept of nature is extended also to robots as creatures made by humans. It is the task of humans to preserve and cultivate robots. This implies a clear differentiation between humans and robots. The central mark for the difference is that humans enact "freedom and non-dependence upon the technology at their disposal" (The Catholic Church in the European Union 2019). Human beings can critically evaluate the use or misuse of technology. The catholic bishops see robots at this current stage of development "as not capable of this" (The Catholic Church in the European Union 2019). Therefore, they cannot consider them in this status of a 'person'. "… only the human person can be considered a 'person' in the proper sense, and in their full dignity" (The Catholic Church in the European Union 2019). Their argumentation is based on "the assumption that there are fundamental qualitative differences between the human spirit and the "spirit of the machine" and that there exists a "fundamental barrier that machines cannot exceed" (Kreplin 2019, 114). Instead of an argumentation of retreat, which relates to the still existing or to

the principal difference between human beings and robots which in the near future could be outdated by brain research as well as by robotics, it could be more adequate to rethink the status of robots. The concept of robots as electronic personalities serves primarily as a legal term to hold an intelligent machine accountable for the damage it is causing and for the consequences of autonomous decisions (European Parliament 2017). The autonomy and accountability of robots will also make it necessary to rethink their status from a theological perspective. This may change the philosophical and theological concept of the person, but also concepts like freedom and dignity (Kreplin 2019, 114).

Ethical standards of digitalization

From a western perspective this could be related to the basic idea of Immanuel Kant's ethics not to use human beings as means for a purpose, not to instrumentalize humans by the relation to robots and by digital systems in general. Vice versa, Kant's idea makes it obvious that the relation of humans to digital systems and robots is always an instrumental relation. At this degree of development, this fits with the status of autonomous digital systems and robots that are exclusively operating based on statistics of trial and error. But in the future, they could reach the complexity of neuronal webs and develop autonomy like humans and animals. This would create a conflict with their character as being a means to an end. Therefore, digital ethics should develop new ethical models for the mutual relation of autonomous digital systems, robots and humans.

From the point of view of decolonialism, Kant's foundation of ethics is not a valid argument. It lost credibility because the prohibition to instrumentalize every human being did not hinder the representants of the enlightenment to accept or tolerate slavery, colonialism, and the exploitation and the murder of indigenous populations. Human rights were actually designed for and restricted to white European males. Decolonial theory attempts to focus on and reignite excluded and repressed traditions and narratives. It also denies the western interpretation of the Bible and aims to create its own hermeneutic access to the Bible. The reference to indigenous narratives can lead to a holistic vision of human beings as part of creation, in deep animated relations with the whole of creation. The indigenous idea of the universal interconnectedness of creatures, the earth and the universe as an organism may lead to a new interpretation of anthropology in the Jewish Christian tradition. It can, from an indigenous point of view, nurture the understanding of the biblical vision of the human destination to preserve and to cultivate nature. It can also open access to the understanding of the human being as co-operator with God, the creator, as co-creator. As well as the development of society, this could extend to the development of technology, of autonomous digital systems and processes as well as of robots. In this perspective, this can be considered as an expression of humans' co-creativity, shaping, complementing or even augmenting God's creation beyond nature by culture.

Today, the human being is on their way to assuming the position of creator instead of following the path towards becoming a modest and humble *co*-creator. It is a small degree from one position to the other. In his bestseller *Homo Deus* (Harari 2017), Yuval Noah Harari describes in general terms, the history of mankind as a process of transformation of our planet in which mankind is assuming the position of God. Digitalization has constructed a new belief system, which Harari calls "Dataism", which in the 21st century will substitute humanist achievements like individualism, the soul and free will.

A field in which this seems even more obvious is that of biotechnology. Elon Musk, the founder of Tesla, is investing in research on brain implants that would transform human beings into Cyborgs, chimeras of humans and machines. Musk is convinced that humans must upgrade to Cyborgs so as to not become superfluous in the environment of artificial intelligence (Lobe 2017). Indeed, research reports show that a research team of Hassan Akbari at Columbia University in the USA developed an artificial neuronal network that can identify, and process brain signals typical for language, and then by a vocoder transform them in spoken language. As a next step, the researchers want to develop neuro protheses that would make possible speaking to and with paralyzed and non-verbal people. This example shows that the interface of brain and digital networks could in fact serve as a form of therapy or aid. But it is also clearly at risk of abuse: if for example, the neuro protheses could be used to spy on what people are thinking. This would put the freedom of even thinking and individual privacy at risk. If the basic attitude is to use digital networks and artificial intelligence to perfect the human being via bio technological manipulations, then humans assume the

position of creator. The ethical challenge is to prevent mankind from the various possibilities to abuse digitalization for a new order of life serving for the perfection of a small elite and downgrading masses of people and excluding them from this perfect world, rendering them exploited, manipulated and powerless. The digital world represents a huge temptation, and sin is waiting, in plain sight, outside the door.

As Conclusions

What can be done? What is our task as practical theologians? Here we can take inspiration from the ideas the theologian Gäfgen-Track who states that: "In this situation a transparent global social discourse" about the future of digitalization is necessary and urgent. Practical theology in the diverse countries and societies in which it finds itself, should involve itself meaningfully and critically in processes of digitalization and insist on establishing this public discourse.

> "In this discourse not at least the big four, Google, Amazon, Facebook and Apple, should publish their algorithms, the criteria and the operation mode of processing data, in the same way should do also researchers and developers who work with digitalization and artificial intelligence for instance in the areas of medicine, biology, chemistry or mobility. In an ethical self-obligation, the big four must manage the publicity of their data in a way that excludes each suspect that they could want to manipulate with their data. The objective is a socially and politically responsible use and further development of digitalization and artificial intelligence" (Gäfgen-Track 2019).

Required is a process of digitalization shaped by global social, political and juridical orders. "The note that neither Silicon Valley, nor the Chinese government will respect legal rules and ethical standards should not lead to the conclusion to give up everything in research and development to the forces of the market. Quite the contrary, all efforts should be focused on the goal to realize this process of rethinking worldwide and to legally enforce it" (The Catholic Church in the European Union 2019).

In this process, practical theology should assume a role of motivating: reinforcing churches and religious organizations to critically reflect on the process of digitalization, to participate in regional, national and global ethical discourse about digitalization, to analyze the ethics of digitalization in their own institution and to rethink its objectives, standards and legal procedures from a theological point of view.

Theology is challenged to participate in a critical interdisciplinary dialogue with technology, about the construction of the concept of the human being. It should analyze and evaluate the communication of human beings and robots and, based on the idea of the responsibility for robots as a part of nature, as creatures constructed by humans, reflect theologically and ethically on the implications for shaping communication with robots or artificial intelligence in more general terms. Assuming responsibility for the World Wide Web and for digital products, practical theology has the task of reflecting on the ethical implications and to advocate for possibilities for shaping the internet according to ethical principles.

It is also important to go a step further and look at the parishes and communities that are polarized due to conflicts within digital platforms, and help members and people to understand how their personal data is being used. It is also important to be aware that in a near future, when the Internet will have access to our biological data, manipulation will be even more intense (Harari 2017). Practical theology in this perspective has a special challenging task: first to be able to understand how this system of technology works and, secondly, to educate people to have a critical understanding of it. Special pastoral training for ministers, priest and pastoral agents is required so that they can build awareness and educate and prepare members in communities and parishes to understand how the new technology operates. In this way one can work on conflict management, regaining trust, reconciliation and restore community life and democracies as well as claiming for our data as a human right (Levitsky and Ziblatt 2018). It is also important to prepare church leaders to discuss with conservative religious leadership from both extremes (right and left) about fake news in Internet ecosystems and to reveal the truth behind fake news. Decolonialization in our understanding must consider this perspective as it affects all societies and people's lives.

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