Pandemic - Catalyst of the Virtualization of the Social Space

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Abstract: There are a number of contemporary cosmogonic theories, which we would introduce into what we have called quantum metaphysics, which holds that the current world we live in is actually a simulation. Technological globalization can be analyzed from the perspective of the mutations that occurred in the interpretation of the social space from the traditional one, limited to the geographical coordinates of the interaction, to a delocalized and universalizing one. The pandemic caused by the COVID-19 virus has accentuated this trend. The digital revolution produces a phenomenon of virtualization of social space - in the sense of transferring socializing interactions to virtual environments - with special and somewhat unpredictable consequences for the evolution of being and even the human species. Next, we consider the identification of some constitutive dimensions of the phenomenon of the virtualization of the social space, of its evolutionary tendencies and of the eventual sociopathologies. The cultural space, being essentially cross-cultural, generates a continuous (re) negotiation of the interpretation of the social reality and of the construction of new interpretative models. Understanding the interpretive drift of the concept of social reality in the context of communication virtualization allows us to say that the virtualization of social space has led humanity to explore a sui generis additional dimensions of space, noetic in nature, experienced in the form of instantaneous communication and virtual ubiquity.

Keywords: *virtual reality; augmented reality; virtualization of social space; digital avatar; interpretive adrift.*

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Introduction

The idea of virtual reality has only gained ground recently, in the form of augmented reality, special glasses for virtual reality and "*second life*" games, in which we have a meeting with *another* who does not have a physical projection, but is just a digital avatar, an incipient form of Artificial Intelligence or even another player. In essence, the virtual world is an alternative world to the one we live in and involves the development of a digital interaction with other entities that exist in the virtual space in the form of *avatars* - digital extensions of real people - or completely digital characters without correspondence. in the physical world.

There are a number of contemporary cosmogonic theories - which we would introduce in what we have called quantum metaphysics (Sandu, 2011a) - which consider that the current world we live in is actually a simulation (Bostrom, 2003; Chalmers, 2003; Dainton, 2012; Campbell et al., 2017; Preston, 2019; Thomas, 2020). The idea of virtual reality is closely linked to the idea of simulation, of transforming reality into something that seems to be real but does not necessarily have a material consistency, an ontological consistency, if we want, in philosophical terms. The idea of material consistency means that there is a substance associated with that information that we perceive. The substance that we experience or that our consciousness seems to experience is a real substance, while the substance of the virtual world is an ideal one, it is only information, but it is perceived as real as what we encounter in real life.

Technological globalization can be analyzed from the perspective of the mutations that occurred in the interpretation of the social space from the traditional one, limited to the geographical coordinates of the interaction, to a delocalized and universalizing one. The digital revolution produces a phenomenon of virtualization of social space - in the sense of transferring socializing interactions to virtual environments - with special and somewhat unpredictable consequences for the evolution of being and even the human species.

Next, we consider the identification of some constitutive dimensions of the phenomenon of the virtualization of the social space, of its evolutionary tendencies and of the eventual sociopathologies. We will follow the interpretive drift of the terms *reality* and *social interaction*, respectively, in the sense of deconstructing the traditional anthropological perspective on the human being, which we see as limited by our own corporality and proximity, in the context of communication globalization and generalization

of teleaction. The cultural space, being essentially cross-cultural, generates a continuous (re) negotiation of the interpretation of the social reality and of the construction of new interpretative models. Understanding the interpretive drift of the concept of social reality in the context of communication virtualization allows us to say that the virtualization of social space has led humanity to explore a *sui generis* additional dimensions of space (Sandu & Vlad, 2018), noetic, experienced in the form of instantaneous communication and virtual ubiquity.

By virtualizing the social space we mean the construction of a new communication universe in the virtual space and the transfer to it of social interactions with a globalizing character. The globalization of communication, and especially of online communication, creates a new feature of social interaction, namely the escape from physical space into a purely communicative (virtualizing) one. The virtualization of the social space modifies the behavioral habits, any type of communicative interaction (Habermas, 2000) can suffer virtualizing effects that lead to intrinsic changes of the interactional specificity, by transforming the (social) space from a framework of interactions and coexistences into a mediation framework. communication action (Habermas, 2000). There is a formalization of communication in order to be well positioned in the search engine, in parallel with the decrease of the emotional impact of the act of communication, due to its mediated character, etc.

1. The concept of "person" from the perspective of quantum metaphysics

The philosophy of mind questions the nature of mental reality and its substantial or informational character (Stoljar, 2001). Of course, a metaphysical problem is that of the “reality of real substances”, especially in the context in which using quantum physics - from a perspective of quantum metaphysics (Coleburt, 1987; Sandu, 2011b) - we find that the substance we consider to be real is, at its quantum level, completely different from what we perceive, having a dual, corpuscular and undulating nature, and not just a substantial nature, as we perceive macroscopic reality.

We understand the idea of virtual from the perspective of quantum metaphysics, as a possible post-religious explanation of the experience of existence, namely that this reality we live in is actually contained in the divine consciousness as a reflected reality, so virtualized (Singh & Maheshvarananda, 2016; Kaul, 2020).

For Abhinavagupta, an 11th-century Kashmiri philosopher, reality is nothing but a dream of the divine conscience. Divinity, hidden in the form of individual consciousness, is recognized as divinity or awakens from the illusory dream, thus becoming a divine consciousness that plays (according to *Brahmasutra - Līlā*) with itself (Cush et al., 2008), dreaming of myriads of worlds, names and forms. Beyond the mentioned metaphysical perspective, in social practice we can identify more and more illusory interactions, observing the social reality that we live as compelling and immediate, which turns out to be nothing more than a social construction. Trying to define the idea of social construction, we can take as an example any object, say a chair. We all agree it's a meal. If I sit on it, then it becomes an object on which to sit, a chair. What is a table, what is a chair? In the end, we are talking about language conventions, which change with the transformation of meaning - there is an interpretive drift.

By changing the meanings of a term or the definition with which we operate on that object or social construct, we generate an interpretive drift. If we manage to easily change the meaning of terms that refer to immediately accessible material objects, applying an interpretive drift, changing their meaning, we ask ourselves what they are and how can we talk about more complex objects? Here, we can ask the question: from what height is a form of relief considered a mountain? It is often estimated that from 700 m., 1000 m., 1500 m., Or more, the respective form of relief can be considered a mountain. The idea of the mountain is a socially constructed one, either based on height or on the opinion of the community. Along with the first social construction, that of the mountain, there is also that of the inhabitants of the community, who consider themselves mountain people. A social construct, once invested with interpretive power, objectifies and generates behaviors specific to the new interpretative convention, as if it had always been real. In constructionist sociology, interpretive drift is translated by the expression "words create worlds" (Hartman, 1991).

Constructionist sociology considers that this is the way we create meaning regarding the reality in which we live, in fact our personal reality, depending on discursive contexts (Gergen, 2001), contexts in which we interpret that reality. This is a first meaning - or the most common - of the idea of social construction of reality: if a certain physical or mental object receives a series of definitions with which we agree, at the level of a group of people - called interpretive community - who accept to use the same meaning for the same object, that object becomes a social construct. The idea of social construction of reality applies especially to symbolic objects, such as: values, standards, norms, professions, social phenomena, etc.

We are talking about a social construction of normativity, a social construction of institutions, professions, daily life in general, the fact that we always have a process of allocating meaning to everything around us, be it objects from physical space, or objects from noetic space. When we talk about noetic objects, we are talking about emotions, feelings, values, worries, ideas, etc.

This is the first level of virtualization of social space that occurs based on the process of social construction of reality. Compared to the physical, objective space, which is populated with substantial objects, the social space is one of our consciousness, in which noetic objects appear, which do not necessarily have a material consistency, but a semantic one, but which influence our life. The first step in the virtualization of social space occurred when humanity began to talk about noetic products and introduce them into everyday life - whether it is money, laws, etc. (Harari, 2011). Plato speaks of a world of ideas, which is a virtual one in the sense that it is not a substantial one, but a noetic one. For Plato (2010), however, the world of ideas is real. Moreover, it has a deeper level of reality than the material one, because, in order to assume our own reality, our ideas must participate in the world of pure ideas, where the ontological substance of our world comes from. From here derives that subjective idealism later developed both in Western philosophy (Hegel, 1998) and in Eastern spirituality (Areopagite, 2018) and which is based on the belief that there is a world of ideas, which is transsubstantial, but we can have access, in which we can participate.

Aristotle speaks of a world of forms and substance, being the first to distinguish between substantiality and forms (Aristotle, 2011). We are acquainted with form rather than substance. Christianity introduces the idea of a transsubstantial world, of the Kingdom of Heaven as a divine world, which exists independently but not separately from our world. The world of Plato's ideas becomes the divine world, of the Divine Consciousness, in which the divine idea becomes Word or Logos, which is understood as a person (in Catholic theology) or *hypostasis* (in Orthodox). The term person, from the Latin *persona*, literally means mask, that mask used by actors in Greek and Roman tragedies. The *persona* - the mask - was the one that the actor appropriated, put on his face when he said his role, then took off his mask, put on another mask and could play another role. It is very interesting that the idea of divinity is related to *ousia*, to the unitary divine nature, or to the divine substance, speaking in Aristotelian terms, but also to the *persona* - person. We therefore have a divine, unique, co-substantial nature, without speaking of a created substantialism, of a material substance, but of a divine essence - *ousia* -, but also of the divine person, the form in which the

Divinity appears to itself, but also the whole of creation. Within this divine nature appear the three Persons who are ultimately reunited in the idea of the Trinity, who are of the same nature, but threefold as a person. Although, originally, the term person comes from the term mask, ie non-essential identity, it was adopted to refer to the very reality of God's existence.

The evolution of Christianity transfers the essentiality to these divine Persons, who are identified as the Father, the Son and the Holy Spirit, distinct but indistinguishable existences of God. This is another interpretive drift of the term person, from non-essential form to uniqueness, in the inseparability of the divine substance. Christianity emphasizes the idea of person, not only divine, but also human, only the character of person being the one that ensures the individual access to divinity. Later, in current psychology, from the term person derives that of personality, which returns somewhat to the sense of mask, which represents the social individual or in relation to others. The term personality returns somewhat to the meaning of mask in the sphere of psychopathology, when speaking, for example, of multiple personalities.

I illustrated by the term person the idea of interpretive drift, following the transformations that the original term *persona* - mask - has over time, from the non-essential figure who hides the true identity, to the *hypostasis*, a distinct form of the Godhead, inseparable from its divine nature, therefore, an absolutely essential element for the divine being, both within the Trinity and before creation, and which represents even the mystery of the triune uniqueness of God. The interpretive drift continues through the transition from the divine to the human person, which acquires a series of specific features, ie personal attributes that are specific to it, and from here it slides to the psychological, outlining the idea of personality and, finally, pathological personality. The term person, used in different interpretive contexts - that of ancient tragedies, the Christian and later the psychological - acquires distinct, contradictory meanings, but retains a certain interpretive invariance, namely that of separating the individual from a common universal - of the character from actor, of a Hypostasis towards the *ousia*, respectively of the social personality towards the individual self. The interpretive covariance is the transition from non-essential to essential, depending on the essence-appearance game that the concept of person illustrates and goes through.

2. Postmodern society and the avatar identity

The idea of interpretive drift is particularly important for understanding the phenomenon of virtualization of social space because, in essence, this process is one of adding a noetic dimension to a real element, virtualization being a process by which a noetic object - including feelings, relationships, values, which are subjects of reflection - it acquires a non-material, non-immediate value and in addition there is an additional process of deconstruction-reconstruction, of transition from the preoccupation to the essential to the preoccupation to the formal.

Postmodern society is an anecdotal one, in which the emphasis is on packaging and not on content, ie on form, not on essence. Moreover, the packaging often seems to refuse the content, thus generating a culture of exteriority. We consider that this phenomenon is also one of virtualization, since the real identity - including that of individuals - is replaced by an approximate identity, a personality in the sense of a mask and which only approximates the person it represents.

Returning to the idea of person, the mask takes the place of both the character and the actor, the essence and appearance being confused. It derogates from the essentiality and deconstructs the idea of unique truth, pluralizing it in the multitude of particular truths, valid in context. If we were to refer in the specific religious terms mentioned above, the phenomenon of virtualization preserves the person, but eliminates the *ousia*, emphasizing the difference from others, our uniqueness - even caricatured - without a bias towards common human nature. The identity of a person without substance can be called "*avatar* identity", an identity artificially created to survive in a world that is unsuitable for us.

In fact, the process of deconstruction is incomplete, as long as it is not followed by a reconstruction, by a return to the essential unit, only not a monolithic one and imposed externally, but one in which to keep our identity in the "network". This condition of the world as a simulacrum (Baudrillard, 2019) is emphasized on the model of electronic virtualization of reality, ie when we communicate in computer networks and then, due to the immediate electronic character in which our image appears to the other, we talk about simulacrum and simulation. When the mask overlaps with the essence we have a simulation of reality. Objective nature means the existence of a material substantiality, while the subjective term refers to an inner nature, intangible and immaterial, purely noetic, but cognitively accessible based on intellectual knowledge.

3. Augmented reality - a noetic sensory experience

With the advent of virtual and augmented reality, a process of virtualization of communication and social interaction in the form of computer-mediated teleaction is developing. Human-machine interaction is another model of virtualization of human interactions. Descartes (2003) talks about two substances, one physical, spatialized, *res extensa*, and one noetic, *res cogitans* (Cottingham, 2017). The philosopher raises the issue of the communication of the two substances and their mutual influence.

In augmented reality we can experience, in relation to the computer and smart phones, sensory experiences of the noetic type, ie sensory experiences that are not generated in physical immediacy. If I put on a sensory headset, I see a 3D movie and I will have a full feeling that I am in that reality, that I am riding the roller coaster - and I even have a stomach ache - but all these sensations have no material support. In Cartesian terms, *res cogitans* acts completely independent of *res extensa*. In the same sense, of the confusion between reality and dream, it is worth referring to Chinese wisdom, to the sage Choang Tzu who remembers that he dreamed of a butterfly, and on waking did not know who he really is: Choang Tzu dreaming that he is a butterfly or a butterfly dreaming that it is Choang Tzu (Neill, 2006).

In the same way, the technological virtual reality is foreshadowed, one of a dreamlike type, which simulates reality to the point of creating confusion between plans. The insubstantial reality of a well-performed simulation should be indistinguishable from the sensory perceived reality. This would be technologically possible precisely because the cognitive processes in our brain are virtualizing, the sensory influences being used by the brain to simulate external reality. This process of mental simulation of reality takes place by eliminating redundant information from the senses, but also by anticipating elements that should appear in the sensory flow. This usually explains the phantom limb sensation that manifests itself in pain in the wooden leg. In the brain there is a representation of the sensory of the amputated limb, and when the mind anticipates the appearance of a sensory signal - a nerve signal from the limb - generates the sensation, even if the sensory influx can not occur, missing the corresponding organ and nerves.

Precisely due to the mental construction of reality, we perceive augmented reality as substantial, as long as impulses are transmitted to the brain through our senses to suggest the reality and substantiality of an object. On the other hand, our brain in the process of codifying the external reality as an internal one - mental reconstruction - compares the sensations

received from several receptors, which it approximates and, when these sensations are contradictory to each other, or with the already memorized reality. , the object of perception is declared illusory. In the dream state, this censorship of perceptual illusory is diminished and the brain accepts the suggestion of the reality of dream images. Augmented reality is based on this process of perceptual reconstruction. Perceiving augmented reality as real, we attribute substantial features to it and try to build our reality taking into account the virtual reality, we practically start to expand our reality in the virtual sphere.

4. Virtualization - a new dimension of communicational space

The specificity of virtualization is to address another non-present, to accept that non-presence - or immediate non-presence - can still be personal and can generate interaction. This represents the introduction of a new dimension of space in the communication process. For us, spatiality is represented as immediate, as a place where I can manifest. In fact, through online communication we introduce another essence of spatiality, from the immediate to the mediated, but non-topological, which allows a certain form of virtual ubiquity.

From an ethical perspective, the dimension of responsibility changes, from the one towards the spatial and temporary contingent - the person next to you, the neighbor, in ethical terms - to the responsibility towards non-presence, towards the ethical relationship with the neighbor immediately.

The virtualization of communications denies a defining element of the human condition, that of the face-to-face relationship with otherness (Sandu, 2003). Virtual space is non-three-dimensional, the topological distance being replaced by the intersubjective intensity of communication. This change affects the perception of spatiality in its categorical quality, and can be understood as a transcendence of the human condition, of being located in time and space. The category of spatiality limits the freedom of consciousness from the perspective of ubiquity perception (Sandu, 2019). The virtualization of social space, through the virtualization of social communication, requires a different ethic of the relationship with the other, non-present, and as such we can speak of a responsibility towards non-presence.

Regarding the recorded messages, we are talking about a delayed interaction, a procedure that is not completely new and is not dependent on virtualization, the messages in time being possible since the invention of writing. The postponement of communication is a sure sign of civilization,

which has accompanied humanity throughout its history. The delayed interaction is a noetic one and as such represents a form of virtualization of the social space, in the sense of desubstantiating the other. The other is a virtual presence, insubstantial, but which acts communicatively.

Mass communication through television has generalized what we call teleaction, hence the term telecommunication. With the advent of the Internet, communicative telecommunication expands, giving rise to a "new dimension of space", characterized by *immediate distance*. This was already foreshadowed by telegraphy, telephony and later television and radio. However, in these ways of communication, the feeling of physical distance remained noticeable. The feeling of immediate communication and ubiquitous presence is much less present than in the case of the Internet, especially now that we are actually talking about intelligent communication systems that simultaneously transmit calls, data, audio, video, text and affect at least two sensory channels.

In online communication, especially the current one, which allows video conferencing, simultaneous data transmission, voice and image, in my mind is generated the idea that I participate in the immediacy of that noetic reality, which gives me the feeling of a virtual ubiquity and at the same time makes you assign a virtual substantiality to the interlocutor - in the form of a mask (*persona*), a virtual person, an *avatar* identity. These relationships, although they are under the sign of the simulacrum and the technological artifact, create in me the feeling of an immediate relationship with a non-presence.

We started to carry out activities through telework and this has become widespread throughout the planet, the courses are conducted online and there is educational interaction, even if the answers come from different locations, because it simulates a regular group meeting, but not spatially located. This virtual ubiquity generates the sensation of moving to another dimension of space, a sensation that calls into question distances. In our opinion, this accentuation of online interactions - especially in this pandemic period, when most significant social actions take place online - changes the nature of social interaction. For us, this virtualization represents overcoming an ontological obstacle for humanity, the deconstruction of immediacy, closeness and the need for a contingent to be able to act. The socialization processes we went through built us as a local being, which emphasizes its substantiality. We need immediacy to be able to act. We perceive the limitation in the possibility of acting on the basis of distance as a component of our human, finite nature, dependent on our own corporality. Suddenly, we are talking about body extensions, prostheses, which are not integrated in

our biological nature, but which with the development of bionic prostheses begin to generate a symbolic, non-biological body, especially as long as bionic prostheses can transmit decoded nerve impulses from the brain as coming from a bodily but non-biological foot. The same can be said about the sensations coming from the virtual reality headsets, or even from the sensory suits, which allow the training of pilots in simulators, or about the practice of telemedicine operations.

Although we have not yet built an avatar identity, we are beginning to add this fourth virtual dimension to our extended reality, as we have delocalized bodily sensations and as we perceive virtual communication tools - smartphone or laptop - as an extension of one's own corporality. These simulations of extended identity will develop in the coming years, as the human-machine interface will be developed in the direction of extended neural connections. Thus, it will be increasingly difficult for us to distinguish the reality of simulation and we will most likely reach a point where we speak of *extended reality* - or *augmented reality* - as the reality in which we live, as, at this time, our reality is already extended by the inclusion of noetic objects such as reified values, religious beliefs, etc. We will gradually be able to have other delocalized senses, not only hearing and seeing, as at this moment, but also tactile, in the case of the sensory suit and the bionic prosthesis, and then we will talk about sensory delocalization coupled with virtual ubiquity. We are practically talking about another perception of space, which will give us an ontological freedom, a transcendence of limitations in spatiality - in the sense of delocalization and ubiquity - and in the capacity for action - in the sense of teleaction and perhaps omnipotence over virtual objects.

Contemporary society, as a knowledge society, is at the point where it moves from the use of knowledge in order to create goods and services, to the emphasis on the production of knowledge itself. The production of noetic goods, existing only in virtual networks, generates added value accepted as such even in the world we consider real. Cryptocurrencies, exclusively digital goods, are gaining commercial value and today we are witnessing the emergence of the first virtual currencies of some states and the migration of the economy to such currencies (Chen, 2020). During the pandemic, especially after the infection spread from Wuhan, China, to the rest of the world, to counteract the effects of the economic crisis, China decided to issue its own cryptocurrency and move the economy to this currency.

The social phenomena related to the globalization of mass communication impose a new socio-communicational construct, namely the

spiritualization of distances as a virtual replica of the phenomenon of spiritualization of borders. The phenomenon of virtualization of social space has a polycentric and unstructured character, there are as many virtualizing environments as communication projects are carried out at a given time (Sandu, 2019). A non-local consciousness can be interpreted as transcending the limitation of spatiality into a continuum of being. Social space virtualization technologies (based on the Internet and / or virtual reality) allow the emergence of an additional dimension, untraceable, in which consciousness manifests itself through teleactions (use of robotic arms in telemedicine, 3D printing technology - construction of objects based on simple conscious design, without a transforming human intervention on a raw material).

Constructed reality may itself be objective for us, but we are talking about an objective reality, which is populated by substantial objects, and then we are talking about a virtual reality in the proper sense, as a computer simulation of reality, and that , practically, we suffer a change in terms of the perception of spatiality in virtualizing interactions, in computer-mediated interactions, in the sense of a virtual ubiquity.

5. Virtualization of the medical space - telemedicine

Next we will try to analyze from a bioethical perspective some aspects of the possible virtualization of the social space following the effects of the pandemic in this period in which humanity suffered a contraction of freedom of movement manifested most strongly in the form of self-isolation - more or less voluntary - when a transfer of interactions in the virtual space was imposed, which allows a greater freedom of action, in the sense of wide addressability of messages, but also a greater dependence on artifacts and as such an instrumentalization of communication to adapt to the online environment.

Placing ourselves in a bioethical discourse, we begin the analysis of the virtualization of the social space with the problems in the sphere of public health and the ways in which health care can be virtualized in the context of the pandemic and later in the post-pandemic society. The first such way to virtualize health care is through telemedicine (Wootton et al., 2017). Telemedicine includes a wide range of applications, starting with consultations with the attending physician, issuing prescriptions online, their automatic transmission to pharmacies and distribution by express courier to the patient, thus limiting the physical interaction between patient, doctor,

pharmacist and so on. This virtually mediated interaction generally retains the characteristics of a classic query, because it is a 1-to-1 communication.

We believe that this first form of virtualization of medical activity will diversify and become permanent in the post-pandemic period, because it has already become a habit to go online to the doctor. This will contrast with the classic image of the doctor's meeting with the patient, present in the collective imagination. Current technology allows, where necessary, remote temperature measurement - there are thermal scanners ("Iasi: From Friday", 2020) that allow temperature measurement and here they are used in airports, even in agri-food markets and so on. Also, outside the temperature, pulse and voltage can be measured digitally and there are already applications on mobile phones that do this. We are talking about smart bracelets that measure blood pressure, blood sugar levels and can be programmed for direct reporting to the attending physician (Andorno, 2004).

This form of telemedicine cannot replace the meeting with the family doctor in any situation, but it is a form that, personally, I think will be generalized, being approached by doctors and young patients, some of them being part of the generation of digital natives (Palfrey & Gasser, 2008; Kondrateva et al., 2020), who will probably prefer this type of interaction to the classic one. One element that attracts our attention and that deserves to be analyzed from a bioethical point of view is that, with the generalization of this type of remote consultation and the use of devices for measuring blood pressure, blood sugar, pulse and other conditions. of the body, such data may be subsequently requested by public institutions - the measurement of blood glucose levels in quarantined persons and the reporting to the authorities of this level - which eliminates the confidentiality of the doctor-patient relationship and creates a risk of data accumulation. of a medical nature, other than those necessary to eliminate the risks to public health.

Access to medical data beyond the limits of confidentiality and the legitimate need for information in public health programs may lead to inappropriate use of it and to discriminatory decisions. For example, maintaining the thermoscanning measure beyond the emergency or public health period may be beneficial in identifying the risk of disease and preventing the development of diseases, both individually and collectively. On the other hand, this measure can create grounds for discrimination associated with the exclusion of sick people - but who do not pose a danger to public health - from social life.

Public health imperialism can prove unethical when rights and freedoms are restricted in its name, disproportionate to the danger that the restrictive measure combats (Jackson-Meyer, 2020). From a bioethical point

of view, a balance must be sought between the right to privacy and the public interest in health. The generalization of telemedicine can create the conditions for imposing a mandatory consultation, at a certain time, accessible to the majority of the population, including people belonging to various categories of vulnerable populations. The approach to telemedicine based on digital consultation and the measurement of biological parameters through intelligent technology is associated with preventive medicine, by creating the premises for measuring biological parameters and frequent population *screenings*.

Another component of the virtualization of the social space with reference to telemedicine is the impact of Artificial Intelligence in terms of health assessment. Monitoring the health of patients, especially chronic ones, based on Artificial Intelligence programs, with the possible notification of the attending physician about the situations in which certain biological and functional parameters are exceeded, can be beneficial in the care of chronic patients. The person's mobility or lack thereof can be measured automatically. There is already technology that warns us that we have not taken the necessary number of steps today. The interaction with Artificial Intelligence is a form of virtualization of the social space that will be more and more accentuated in the next period. At the beginning of this pandemic period, Artificial Intelligence was used to identify molecules that could be used in anti-Covid therapy, thus increasing the chances of obtaining therapies based on remedies and molecules already on the market (Hurst, 2020; Naudé, 2020; Wakefield, 2020; Woodie, 2020). TAKES. in medicine it will be used from diagnosis, when it will be able to process much faster the biological data of the person, in fact of a large number of people, including for the purpose of use for large-scale *screenings*, to the identification of therapies. customized or active molecules needed in the treatment of various diseases. From a bioethical perspective, before granting I.A. special access to data on our health situation and health care management, precise rules are required, as well as limits on access to I.A. to diagnostic and treatment activities, especially regarding the provision of a level of autonomy to these software in the interpretation of patient data and in the proposal of therapeutic solutions.

The development of telemedicine can only be based on cooperation between the human factor and Artificial Intelligence and we believe that this will become widespread in the post-pandemic period, because there seems to be a positive experience related to doctor-patient interaction and use of I.A. both for diagnostic and therapeutic purposes. We will talk about telemedicine especially in areas where access to health services is difficult

and where there are health inequities related to this issue, both due to the distance from health care centers and difficult access to mobile health services - including rescue services - in certain locations such as in mountainous areas. Despite the opposition of the contestants, the 5G network will be able to cover most areas of the planet, and thus access to telemedicine will be facilitated.

There are also a number of risks that we see in this process of virtualization, namely an increase in the level of medicalization of social life that will cause an increasing dependence on medical, human or electronic consultation, but at the same time we will be less and less autonomous in their own health decisions.

6. Virtualization of education - teleschool

Another area in which, following this pandemic, the degree of virtualization has already increased is that of education. Educational software has been a constant and current presence in our lives for some time. There are already universities that operate mainly in the online environment, so the migration to virtual was not unexpected. However, the migration of education to virtual during this period was disturbing, both for students and pupils, but especially for teachers. Why disturbing? Because suddenly you are put in the situation to rethink, as a teacher, the subject, you have to rethink your teaching methods in order to adapt them to another type of interaction, different from the face-to-face interaction.

This migration to virtual space has taken both teachers and students by surprise, and last but not least, educational institutions. First of all, there is the issue of internet access. Moving the entire online education system has ignored a significant number of students and teachers who either do not have access to technology or do not have the digital skills to do so. Forced and accelerated virtualization of education generates inequities, especially when discussing the conduct of online assessments, including those of particular importance. Even if internet access is resolved, there are localities that are not covered by 3G, 4G or 5G networks and do not have internet access, or 4G coverage is limited and does not allow a broadband internet interaction required for online courses. with bidirectional video and audio sequences. Broadband internet raises issues related to information security, data transmission security and even local data security.

Another aspect is digital skills among both teachers and students. If we are talking more about digital natives among students, a series of difficulties arise among teachers, who were suddenly put in the situation of

carrying out activities for which they do not have skills at this time, especially in the case of past a certain age and who have not assumed sufficient technological training to cope autonomously with the conduct of virtual courses.

The evolution of digital education will be, from our point of view, spectacular in the next period, digital education will be generalized and independent study programs will be developed, exclusively online. In this context, it will be much easier for a student from one continent to access a top university from another continent. This will lead to an increase in competition between universities, leading in the medium and long term to the polarization of higher education among some of the top universities and a decrease in interest in other regional universities. When students have options to access online study programs of any of the world's major universities, doing so from home, the criteria for selecting study programs will be the most competitive prices compared to the positioning of the university and its program studies in various rankings and the prestige that the university enjoys.

We will witness the disappearance of some universities and certainly of some study programs in universities, especially those in the technical, medical and real sciences. In the field of humanities, the local characteristic is particularly important and one cannot claim to study, for example, the national literature of a university from one particular to another university in another state or at the same level of complexity. We believe that a more and more mixed education is being developed, which includes both face-to-face and online training, amid the reduction in the number of hours face-to-face and the increase in the amount allocated to online education.

In the same context, the publishing industry will experience a digitalization by increasing the volume of books and virtual publications, against the background of the accentuation of the digital consumption of scientific or fiction literature. Also regarding the digitalization of education, we will witness in the next period the emergence of Artificial Intelligence in education and the exponential growth of its role in educational processes. I.A.- based educational software will have the ability to synthesize the informational contents and to adapt them to the intellectual level and to the particular requirements of one or another of the students.

Analyzing from an ethical point of view the transition to online and I.A.-based education, we cannot fail to mention a depersonalization of the educational relationship. It will be more and more difficult to build a master-disciple type relationship, already this type of relationship being considered obsolete in many academic environments. I believe that this relationship will

be increasingly deconstructed, with an increasing emphasis on a student-client, teacher-provider of training services - that is, a commercial, axiologically and emotionally neutral relationship. Teachers who do not adapt to the role transfer from the trainer who transmits information or a range of skills in which he is an expert - to the facilitator of learning, in the person who teaches students how to learn and what technology is. In order for them to cope with the virtual web of information, those teachers will probably be increasingly marginalized in the world of education, which can be a professional drama for those teachers, or even for the entire education system. , as long as we witness the polarization of education between large education providers and local training providers, small or medium-sized, especially in the context of the emergence of the digital teacher.

7. Virtualization of productive activities - telework

Telework is also an activity that is currently undergoing extremely rapid virtualization, perhaps the fastest. Suddenly, many activities were outsourced that would never have taken place this way if this pandemic had not occurred. They probably would not have been virtualized and transformed into remote work many years ago because virtualization eliminates a large part of the bureaucracy, and therefore of the bureaucrats' jobs.

We believe that telework will continue in the next period, because it worked efficiently with the onset of the pandemic period. Telework is much cheaper from the employer's perspective, with all the initial costs that equipment and technology entail, especially since most employees who currently perform telework have their own computer systems, their own internet access, and so on. A disadvantage of teleactivities is that they are much more difficult to control remotely, employees in the comfort of their own home can decrease the level of labor productivity, especially intellectual. Effective business planning and bonus results will eliminate many of these inconveniences. I believe that in some countries, after the cessation of self-isolation measures, a large part of employees will return to office work, because there were no regulations to facilitate telework during this period and there were no concerns for the development of telework, solutions for telework, software solutions for this activity, etc.

An advantage that this virtualization of professional activities has - whether we are talking about activities in health, education, public administration, or economic areas - is that you can use relocated specialists. A company in Frankfurt, for example, will be able to hire valuable

Mozambican specialists that it can pay at a higher level than the salaries in the employee's home country. This relocation of professional activity is already happening in multinational corporations, as is the case of those who provide call center activities, customer relations, IT services, PR activities. and so on On the other hand, this increasing relocation will lead to the uniformization of labor costs, implicitly to an economic growth of less developed areas, through this access to telework of the highly qualified resource, accentuating the brainstorming for the benefit of large corporations. On the other hand, for those considered indispensable for the activity of the organization will continue the tendency to be brought to the headquarters or to one of the secondary offices of the organization, precisely to retain the organization, because remote work does not generate - or generates much less - the feeling of collective identity of a company. Motivation policies based on *team building*, on collective identity, on creating a professional identity correlated with the identity of the employing company must be replaced with other such sources of motivation, but we find that there are no such short-term motivational programs to address *virtual employees*. There are currently online training programs, but they are aimed at employees who are to work in the office and not employees relocated to the corporate headquarters and this will probably be a direction for the development of educational services dedicated to telemarketing.

8. Virtualization of religious activity

Next, we will address an absolutely new level of virtualization of social space, namely the virtualization of religious activity and religious practices. There were even before the pandemic crisis that we are going through religious activities carried out through television or even through the internet, such as those of tele-evangelism or even the live broadcast of religious services. On the other hand, it was expected that in the religious sphere the greatest resistance to virtualization would be encountered because, rightly, the representatives of religious cults say that the relationship with God, the relationship with the clergyman is a personal one and that it is very difficult to maintain. an apprenticeship relationship with the clergyman by telephone or the Internet and that this does not replace direct confession before the clergyman.

During the pandemic, in the Catholic world, the Pope granted the release of sins (I.I., 2020) to all those involved in the fight against Coronavirus, medical staff, medical staff, social workers, patients, and so on. without the need for a confession of sins, a physical confession, making a

gesture of "virtual indulgence", transmitted through television and the Internet, a gesture that can lay the foundations of a new spirituality that could be more and more present in our lives, even if we are not aware of this reality now. The fact that the services were broadcast online and that a *habitus* of participating in online religious services was created may accentuate the tendency of some believers to have a personal but individual relationship in the home church with God. This habitus can lead, in the long run, to a depopulation of churches, but - and hopefully not - to a resurgence of fanaticism and religious fundamentalism in response to this virtualization of religious practices. The frustration accumulated by those who have felt harmed by the impossibility of being able to participate directly in religious activities can be directed towards fundamentalism.

The virtualization of religious interactions could be a trend especially in terms of catechesis and the activity of transmitting religious knowledge to more and more audiences. There are already a large number of priests who broadcast virtual sermons, who broadcast online at certain times already set, on Youtube or Facebook channels, who address the faithful in general and not exclusively their own parishioners and who have thousands or tens of thousands of followers.

In this context of the pandemic, the emphasis was on individual practice, on personal asceticism, doubled by personal religious communion - as much as possible - including through the media, considering that in the absence of personal communication with the clergyman and in generally with the representatives of the cult of which the persons are part, a major diminution of the religious feeling can be registered. The hypothetical virtualization of religious activities can develop in a positive sense, in the sense of the person's own spiritual search, or it can evolve towards the institutional deconstruction of certain religious cults against the background of a possible doctrinal eclecticism.

Regarding the danger of religious radicalism, let us not forget that there is in some religious denominations, which do not have a recognized activity in many states - we are talking about Islamic groups - a well-established practice of recruiting believers through Facebook and alternative programs. online, a method also used in recruiting Daesh and ISIS members in Europe.

Against the background of the accelerated growth of the role of the virtual in the daily lives of individuals, it is possible that certain advice, blessings, may continue to be offered online or by phone, which would actually increase the interaction between the clergyman and the believer. As an opposite effect, a distancing of so-called non-practicing believers from

this institution can be registered. This accentuates the phenomenon of secularization of public life and, despite the open possibilities of online missionary work, we do not believe that fundamentally, religious interactions will suffer a greater virtualization than that of broadcasting services online or on specialized television stations. We say this because officiating the ceremonial online, precisely through the technological artifact, generates a feeling of distancing from the authentic spiritual and a feeling of secularization, a feeling that will eventually be rejected by religious communities.

From the point of view of the evolution of bioethics, we expect in the post-pandemic period an accentuation of the Christian bioethical discourse, religious in general, precisely in order to compensate the centripetal tendencies in the relationship between the parishioners and the cult institution. In this regard, we expect an emphasis on conservative tendencies regarding traditional family institutions, the role of solidarity in the community and the importance of the community in the lives of individuals. We expect an emphasis on religious firmness in defense of the dogmatic unity of various denominations, especially some neo-Protestants, who will want to make their voices even louder heard in this spiritual symphony that risks becoming a global noise of virtual religious interaction.

9. Sociopathologies generated by the virtualization of the social space

The virtualization of the social space also implies the manifestation of a series of sociopathologies as an effect of the accessibility of communication and of its globalization. A first such effect is the “fake news epidemic” (Allington & Dhavan, 2020; Bargaoanu, 2018) or “infodemia” (Armanca, 2020). The manipulation of information in the public sphere can be considered an aggression both against the persons receiving the information and towards political stability, national security and public health.

Restricting freedom of expression becomes ethically worrying when practiced by the I.T. - Facebook, YouTube - which, in practice, control the information and influence the direction in which the virtualization of the social space evolves. Recently, Facebook made the decision to censor posts calling for protests against self-isolation measures (Nedelcoff, 2020). This decision is all the more alarming from an ethical perspective, the more its political connotations can be seen.

The ethical perspective on the conflict of values between the right to free expression and the need for public protection against the threats posed

by infodemia to Coronavirus should take into account the principle of proportionality of freedoms and restricted rights in relation to the danger posed by communications to be censored. their potential social impact. When possible political attitudes are hidden under the imperialism of public health, this limitation of information - even with potentially harmful - can be seen as political partisanship, hidden behind the public interest. It is true that the sites in question are the property of private companies and that in the rules of use of the accounts on these sites users transfer ownership of the content of the posts to these sites, which gives them the right to refuse publication. . On the other hand, the restriction of freedom of information - including from alternative sources to official ones - is dangerous for the quality of democracy in that country and even around the world, in the case of the internet giants mentioned.

The information monopoly and partisanship is all the more harmful as there are controversies in the public space, not yet fully elucidated and which require the presentation of all points of view in order for the Internet user to form his own informed opinion. In this regard, we mention the divergence of evidence-based opinions regarding the natural (Andersen et al. 2020) or artificial (Borger, 2020) origin of the Covid-19 virus.

Another pathology of communication that we are identifying at the moment is the increasing dependence on the Internet among the population. Sociopathologies related to the large number of hours spent on the Internet can degenerate into addictions that can be integrated into the field of psychopathology (Pies, 2009; Cash et al., 2012). The quarantine period, which restricted the possibilities of *physical entertainment* - banning team sports, closing theaters, cinemas, museums, libraries and most bookstores - forced the public in search of entertainment or culture to use the resources available online. Theaters, opera and other cultural institutions have recently broadcast online performances, including live. There was a rich offer from virtual visiting museums. Bookstores and even publishing houses have also facilitated free online book access. However, the transfer to virtual has meant an exponential increase in *virtual entertainment* - online games but also video games, small prolonged discussions on social platforms, often transformed into virtual debates - all these create or accentuate the dependence on the internet.

Conclusions

These were the few tendencies of virtualization of the social space received in this period of pandemic, making a *foresight* exercise and without

pretending to have extrapolated all the tendencies registered in this period, or to have correctly intuited the directions in which the social phenomena, related of the virtualization of the social space, will evolve in the post-pandemic period.

Regarding the virtualization of the social space, I am almost convinced that it will continue in the horizon of the next 10-20 years, when we will have most of the social interactions mediated by technology. The price that society will pay for this change in social interactions could be the decrease in the emotional intensity of social interactions, especially interpersonal ones, accompanied by a deconstruction of the idea of belonging group because even within these groups we already have - and we will have more and more - virtual relationships: discussions with our children, parents or grandparents via the internet, which is already happening in the case of families separated by migration. The development of technology and habits created during this period, when virtualizing interactions with loved ones were encouraged by the practice of self-isolation, will facilitate the amplified virtualization of relationships within the family environment and those of membership groups, which will tend to be viewed more and more. the most disengaged at the level of some reference groups.

The notification of the loss of the quality of human interactions will be perceived after a while, when there will be a tendency to return to immediate relationships, as we currently have a tendency to return to natural and *organic* food, after decades of having strived to build a food and beverages industry.

We will also note the increasingly significant presence of Artificial Intelligence in our lives and discuss nonbiological entities, whose rights and obligations we will try to understand, building normative institutions to regulate how we will have to interact with this virtual otherness, this otherness which will often be non-present. In hospitals there are already robots that treat patients and carry out care activities that are considered too dangerous to be performed by human staff (Kiss, 2020). We are also used to communicating with insubstantial biological entities, those communication boxes of the giants in the IT industry - Microsoft, Google, Amazon, etc. and some of us are already communicating with the virtual personal assistant on our smartphone or computer.

We will have more and more frequent interactions with non-biological entities, which exist only in this augmented space, this extended space, a multidimensional space, noetic but only partially imaginary, in which we are already immersed and in which we all partially coexist.

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