

My research amidst the COVID-19 pandemic (2020)

Towards an ever-greater consciousness

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Summary

The presence of Covid-19 in the world has radically changed our way of life. Indeed, due to this new virus, the world is not like it used to be: churches, universities, stadiums, airports are empty. The Covid-19 pandemic as a natural phenomenon deserves to be considered in depth in order to identify the new directions that humanity must take for its survival. Using a philosophical method called phenomenology, I have tried to « suspend » the reality of "Covid-19" in *epochè* in order to discover the characteristic features of this new phenomenon itself. Three essential traits caught our attention: fear of the "invisible enemy", isolation and the economic crisis.

Doing scientific research in the midst of the Corona virus pandemic requires a certain maturity which is characterized by an awareness of the permanent danger humanity as a whole is facing. The expression, « greater consciousness » borrowed from Reverend Father Teilhard de Chardin SJ helps us to understand the Covid-19 pandemic in the evolutionary sense. According to the French scholar, evolution = rise of consciousness and, moreover, rise of consciousness = effect of union. In other words, more complexity means more awareness. Thus, more consciousness means a growth of complexity. Better, a growth of intelligence. Faced with Covid-19, researchers are invited to be more conscious because of the complexity of this new virus. It is an invitation for an even greater intelligence.

Beyond frustrations and fears, scientists, like a lamp shining on a high mountain, have to remain optimistic and put all their energy into discovering new ways of conducting scientific research during the Covid-19 pandemic. In fact, doing scientific research at the time of covid-19 therefore requires certain adjustments and adaptations on the part of the researcher. The first thing is figuring out how to do research in isolation and at the same time find ways to stay in touch with other researchers through modern devices of communication. Learning to live in the virtual world is essential.

O. Introduction

What has become of human life on earth since November 2019? A new phenomenon confounds the world: churches, universities, stadiums, airports... are empty. Some may ask the question: where is the world going? Things are not like they used to be. The movement of goods and people are now adequately controlled to combat an invisible enemy, the corona virus. We are witnessing with helplessness and bitterness the spectacular fall of the world economy. Even religion has not been spared. Churches are empty, believers have to learn to use new technologies to commune spiritually with God. Indeed, churches have moved into homes through technology. This is something new! The same phenomenon is observed at the level of education: universities and classrooms are empty. The time for the virtual world is finally a reality.

The Covid-19 pandemic as a natural phenomenon deserves to be contemplated in depth in order to identify the new directions that humanity must take for its survival. On the side of the scientific world, new measures are being taken to help researchers to continue working in a safe environment. Measures which sometimes slow down and make the work difficult. The virtual world has become a reality that every researcher needs to get used to. Torn between frustrations and isolation, the researchers are invited out do themselves to remain vigilant with an ever-growing awareness. Faced with the Covid-19 pandemic, awareness of the threat on a planetary level appears to be an effective means to eradicate the common enemy of mankind. Scientists are called upon to seek and find new ways of survival.

In this paper, I would like to discuss three main points: the Covid-19 phenomenon, my research during the pandemic and finally, my call to a greater consciousness. The conclusion will recall the main points of our reflection.

1. The Covid-19 phenomenon

Since the first case was reported on November 17, 2019 in China, more specifically in the city of Wuhan, a new coronavirus (COVID-19) has been identified in the world. This is a new coronavirus that had not yet been identified in humans. As a reminder, coronaviruses are a large family of viruses that can cause a variety of illnesses in humans, ranging from the common cold to Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). According to WHO statistics, Covid-19 has already claimed the lives of millions people around the world. On 13th of February 2021, there were over 2373 398 deaths confirmed around the world¹. No continent is spared. This is a new reality, a phenomenon which overwhelms humanity in its entirety. Indeed, with this new virus, the world is not like it used to be. The way we live on Earth has completely and dramatically changed. Planet Earth is facing a new phenomenon: Covid-19.

Like any phenomenon, the Covid-19 reality invites humanity to do an in-depth analysis to identify the different connections in this phenomenon as a whole capable of helping to elucidate what has just appeared in our world. Phenomenology, from the Greek *phainómenon* “what appears” and *logos* “study or discourse”, is the study of phenomena. Fundamentally, it is a study whose structure is based on the direct analysis of a subject's lived experience. We

¹ World Health Organization. Coronavirus Disease (COVID-19) Dashboard. 2021. <https://covid19.who.int>.

look for the meaning of the experience through the eyes of a subject who accounts for what he has gone through.

In the following, I would like to do a phenomenological analysis of the Coronavirus pandemic. My reflection will center around this phenomenon as it has appeared since the end of 2019 until today. Seen as a whole, what appears in front of us will be able to be unpacked and thus provide the solutions which could effectively help to understand the situation we are living through now. The “phenomenological reduction” or *Epochè* in greek (ἐποχή / epokhè) as named by Edmund Husserl, will help us, to radically suspend the phenomenon of the Corona virus pandemic in order to allow access to “things themselves” that is to say - access to its structure^{2,34}.

1.1. The fear of the "other"

Since the discovery of the new virus, the « other », humanity is experiencing a deep sentiment of fear. It is fundamentally about the fear of the unknown: the corona virus. Indeed, the "other" can infect and kill me. Hence the isolation, the separation, the rupture, the confinement. This situation causes a withdrawal of oneself, a breakdown of relationship. Everyone wants to protect himself against this unknown virus. Self-withdrawal manifests itself on a global level as well as on a personal level. Globally, several countries around the world have had to close their borders to protect their populations. International flights are reduced. One thing is clear: everyone stays at home. This is a global quarantine that refuses to reveal its true identity. But this reality remains stubborn and the fear is so deep.

This feeling of fear has prompted major traditional religions to rethink the way they practice their religion. Relationships with God and others have changed. In the Catholic Church, for example, churches have been closed. Christians are learning how to use new technologies of communication for their spiritual nourishment. Eucharistic celebrations are organized virtually and Christians are invited to participate through social networks. This is a new way, a spiritual communion with God and others. People across the world can participate in a eucharistic celebration that takes place on a different continent using new telecommunication technologies.

The education sector has not been spared by the new virus. Indeed, the fear of the virus requires the implementation of new ways of transmitting knowledge. Rooms in the universities are empty. And yet, the lessons are given remotely over the Internet. Everyone stays at home; no physical contact is possible. However, there is a required condition to virtually "exist" in this new way of living. Everyone should have the equipment to participate in the concerts of knowledge. Without adequate equipment, no scientific life! Thus, it is clear that the poor are condemned to ignorance because they are unable to afford new and expensive technologies.

² The phenomenological *epoché* could be understood as a term in the philosophical movement of phenomenology describing an act of suspending judgment about the natural world to instead focus on analysis of experience.

³ Beyer, Christian (2020), Zalta, Edward N. (ed.), "Edmund Husserl", The Stanford Encyclopedia of Philosophy (Winter 2020 ed.), Metaphysics Research Lab, Stanford University, retrieved 2020-12-03.

⁴ De Warren, N., Husserl and the Promise of Time: Subjectivity in Transcendental Phenomenology (Cambridge: Cambridge University Press, 2009, p. 79).

Stadiums, restaurants, airports, hotels - in short, places where people gather have become deserted places. The time of the corona virus pandemic is the time of the experience of emptiness: inside and outside. Inside because of our fears and outside because gathering places are empty.

1.2. The Isolation

We understand by isolation a situation in which an individual is separated by will or by force from the rest of his usual environment. For people with an infectious disease, this situation may correspond to a health need to prevent the spread of contagious diseases. Isolation also concerns the wearing of protective equipment such as masks, gloves and gowns. In addition, isolation is also used in psychiatry in the case of behavioral disorders entailing a significant and imminent danger for the patient or for others.

Faced with the Covid-19, isolation seems to be the « best » solution to stop the propagation of the virus. Everyone is isolated. Wearing a mask is compulsory. The invisible enemy is everywhere, hence the need to apply barrier measures. Everyone must respect its territory. This is the new phenomenon: isolation. Through masks, we no longer know how to see the other as he naturally is. There is a separation, a rupture imposed by the presence of the virus. For the individual, passing through neighborhoods, cities, to countries, the phenomenon of isolation is a reality. Living in today's world is learning to live in isolation.

However, it should be noted that isolation, while being a solution to effectively fight against the spread of the virus, can be the cause of several mental disorders. Thus, the most effective solution is not total isolation but the search for the happy medium.

1.3. The global economic crisis

The Covid-19 pandemic has impacted the global economic sector very severely. With the closing of borders, several countries must tighten their belts. No tourists in the country because there is a possibility of contamination! No work, No money! Restaurants, hotels, cinemas, stadiums or any other place which brings in money are closed. Workers are requested to stay at home. As a result, several companies and businesses are forced bankruptcy. The Corona virus, not only prevents people to move freely, but also stops money from physically circulating. Alone, the virtual world remains untouched by the new virus. Less developed countries where banking systems are not yet computerized are facing serious difficulties in making transactions.

The agricultural sector has been strongly affected by Covid-19. Indeed, the workforce being reduced, it is logical that production is also negatively affected. Several agricultural plantations no longer have adequate labor because of the invisible enemy, Corona virus.

These are new challenges to be resolved if humanity, as a whole, is willing to stay alive.

2. My research during the time of Covid-19

2.1. The empty campus

Arriving in Japan in the middle of March 2020 to begin my PhD in chemistry at Sophia University, I was deeply struck by the silence on the campus. Indeed, as a Jesuit religious, my superiors missioned me to stay at SJ House, a community of professors who work at Sophia University. Every day, I could go out and visit the university alone. Strangely enough, the place is empty. No student in sight. They are at home. Only birds and insects seem to escape the directives taken by the authorities of my University. Normally, Sophia University has over 13,000 students. But since I arrived, it's been an empty campus. A strange phenomenon! This

reality has not been easy to accept and understand. Even orientation week was not organized out of fear of the "invisible enemy". The watchword is out: everyone stay home!

2.1. Between frustrations and optimism

As mentioned before, my first steps at Sophia University were difficult. An unforgettable experience. Indeed, the new virus has imposed a scientific loneliness that will take time to get used to. Several major questions often came back to my mind: how to do research under such conditions? Is it possible to do research in chemistry without going to the laboratory? How do you learn to use machines if you haven't been taught before? Will I be able to complete my thesis in time?

However, over time, things have changed for the better. Doctoral students were authorized to work in the laboratory respecting barrier measures to protect themselves and others. The number of students as well as the number of hours in the laboratory are set by the academic authorities. No one can work more than 6 hours in the laboratory. I should therefore learn to work under these conditions in order to progress in my doctoral research which focuses on the identification of bioactive substances in a tropical medicinal plant, *odontonema strictum* (OSM). My job is to isolate the secondary metabolites that are present in this plant species and do biological tests to explain the pharmacological properties of the plant under supervision of professors Hayashita T. and Usuki T.

It was 2008 that I discovered this plant through the dog of my Jesuit community in Lubumbashi (DRC). The dog, named BUSH, used to eat the roots of a certain plant that would later be identified as OSM. I was more struck by the fact that the dog behaved as if he were hallucinating after eating the OSM roots. I quickly concluded without hesitation that the plant had medicinal properties that could affect the brain. It was therefore necessary to prove that. A few years later, I was asked to do a master's in chemistry, and the OSM was the subject of my research. I was able to isolate and identify two molecules responsible for antibacterial activity. At the same time, I discovered that the plant was used in Burkina-Faso as an anti-hypertensive plant. Also, two other species belonging to the same genus are used in Central America for their anti-inflammatory, antibacterial and promoting uterine contractions in pregnant women. There you have it, a discovery that has guided my research for 12 years.

At the beginning of last September, my samples arrived at Professor Usuki's laboratory. Despite the limited number of working hours, I organized myself to progress in my research. Little by little, I get used to the new working conditions imposed by the corona virus. Indeed, adaptation seems to be the key to success in this new way of conducting research. Seminars and other conferences are organized online. I had to learn to use ZOOM or REMO to participate in the various scientific meetings. For the first time in my life, I had to attend a symposium, The Chemical Society of Japan (CSJ) 2020, where I had to present a poster "virtually". A great experience to see how participants can visit my poster and engage in a discussion with me online. Indeed, there is a lot to learn online. With covid-19, my computer has become both a classroom and a working tool. Classroom where I virtually meet others. My new world. If the campus is physically empty, through my computer I have discovered a new crowded campus.

Life in the laboratory is pleasant despite the barrier measures. I have met very nice people who are always willing to help me. Although I do not yet know Japanese, everything is done to facilitate my integration into the group. The situation in which I am in now has made me

think more about how research is done around the world today. And I came to one certainty: consciousness in the time of the Covid-19 is beneficial.

3. Towards an ever-greater consciousness

This expression, « greater consciousness » I have borrowed from Reverend Father Teilhard de Chardin SJ who in his book "Human Phenomenon" developed it. This, of course, is the whole process of evolution. According to the French scholar, Evolution = Rise of consciousness and, moreover, Rise of consciousness = Effect of union. In other words, more complexity means more awareness. In the evolutionary sense, more consciousness means a growth of complexity, better, a growth of intelligence⁵. It is an even greater intelligence. I would therefore like to place present-day humanity in an inevitable evolutionary process in which adaptation is crucial for survival. The outcome for our current world is therefore a common desire to live together. In this sense, seeking together means to combat different kinds of separations introduced by the new virus should be encouraged. Indeed, as we have underlined previously, Covid-19 has paralyzed the traditional activities of modern man affecting several areas, namely: religion, economy, defense, transport, sport, education, etc. The world as we have always known it has just changed and will not be the same. We must therefore be aware of this in order to focus all our energy on building the future.

Doing scientific research during the time of Covid-19 therefore requires certain adjustments and adaptations on the part of the researcher. The first thing is figuring out how to do research in isolation and at the same time find ways to stay in touch with other researchers through modern technologies of communication. Learning to live in the virtual world is becoming essential. Courses, seminars and major scientific conferences are now held online. The internet has therefore opened up the possibility of visiting the world while remaining cloistered in the workplace. Thanks to new technologies, distance is no longer a problem but an opportunity to know more. In other words, to be more aware.

Being a scientist in this time of Covid-19 is therefore an opportunity to open up to new communications technologies. The scientist is invited to learn to use new technologies to stay in communion with his colleagues. If because of the virus, physical meetings are prohibited, virtual meetings are not affected. Not learning to use new technologies of communication is a condemnation to a certain and real scientific death. Hence, the appeal is made to governments around the world to support the education system by investing substantial resources because the scientific world of tomorrow will be more virtual than physical.

Studying in the age of Covid-19 means thinking about those who do not have the technical facilities to carry out qualitative research work. Indeed, communication and various related technologies require a lot of money that the poor cannot afford. By this very fact, they are excluded from scientific life. I am thinking more particularly of third world countries. In my country, the Democratic Republic of Congo, rural areas still have difficulty connecting to the Internet. There are many areas of our planet which are excluded and therefore condemned to remain in the darkness of ignorance. It is clear that raising funds to support poor institutions around the world is vital for humanity. Indeed, the corona virus spares no one. Rich, poor, old, young, men, women, everyone is vulnerable to this invisible enemy. According to Teilhard de Chardin, the rise of consciousness must culminate in the Union effect. This is a general gathering in which all of the powers and thinking units are engaged at a particular

⁵ Pierre Teilhard de Chardin, *Le Phénomène Humain*, Paris, Seuil, 1955, p. 270.

moment in the history of mankind. Indeed, our world will not be able to defeat this virus by being divided or by closing borders. As long as there is a single corona virus in one country, rich or poor, developed or developing, the whole world will always be in danger. The threat is real and could take several years to eradicate. Together, victory is certain! It is certain that protection, instead of being individual should be taken on a global dimension. Rich institutions have a duty to help the poorest to fight our common enemy, the corona virus. Without this consciousness, it will be difficult to eradicate this virus.

Towards an ever-greater consciousness, this is the mission of the scientist in the time of Covid-19. Staying in your laboratory but at the same time opening up to the world through new technologies so that together, with a greater consciousness of our common enemy, the future is assured.

4. Conclusion

The Corona virus pandemic struck us as a whole new phenomenon in which we watch, sometimes helplessly, all of humanity being pushed into a pit. For fear of the "invisible enemy", churches, schools, universities, stadiums, airports, restaurants, tourist sites ... have been closed. Happiness has been replaced by fear. The Corona virus pandemic has profoundly changed human life. Even scientific research has not been spared. Phenomenological analysis helped us to suspend the reality of "corona virus" in *epochè* in order to discover the characteristic features of this new phenomenon in itself. Three essential traits caught our attention: fear of the "invisible enemy", isolation and the economic crisis. These three points are not exhaustive. Several other aspects have to be studied for a better understanding of the phenomenon.

Doing scientific research in the midst of the Corona virus pandemic requires a certain maturity which is characterized by an awareness of the permanent danger to which humanity as a whole is facing. Beyond frustrations and fears, scientists, like a lamp shining on a high mountain, have to remain optimistic and put all their energy into discovering the new technologies necessary for the quality of scientific work. However, we should not forget to protect ourselves and others by respecting hygiene measures. This is a greater consciousness. Alone, we cannot defeat the new enemy of mankind. It is therefore appropriate to combine efforts so that this virus is eradicated from planet Earth. The participation of all is the key to success. Those who have more resources have an obligation to help the weakest so that all humanity is victorious. I end this reflection by writing a few sentences from Father Teilhard de Chardin:

The way out of the world, the gates of the future, the entry into the superhuman, will not open ahead to some privileged few, or to a single people, elect among all peoples! They will yield only to the thrust of *all together* in the direction where all can rejoin and complete one another in a spiritual renewal of the Earth – it is this renewal we must deal with now, clarifying the manner of it and reflecting on its degree of physical reality.⁶

⁶ Pierre Teilhard de Chardin. *The human phenomenon*. A new Edition and Translation of *Le phénomène humain* by Sarah Appleton-Weber. Sussex Academic Press. Portland, 2003, p. 172.

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