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## SPECIAL ARTICLE

# COVID-19 and the Mother Earth's day

## COVID-19 y Día de la Madre Tierra

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### Abstract

This brief article has no other purpose than to make a reflection on different aspects of our existence that come together in keeping our house, the "Earth" alive and livable. It has been written in difficult and cruel moments in which Spain already exceeds 23,000 deaths and we Spaniards, are confined suffering a quarantine caused by COVID-19. Last April 22nd we celebrated, like many years before, a day dedicated to our Mother Earth; fact that has motivated the title of this article, which strives to trace the relationships that exist between the processes of environmental collapse and the emergence of new pandemics. After a brief exposition of some central characteristics about the Coronavirus, the article reflect on the concept of solidarity and otherness. There is no search for culprits in this work, only an instigation to reflect and dust-off "old" writings such as the Earth's Charter that are still new and very unknown, and which we must be read and implemented in order to become authentic prodigal children.

### Keywords

COVID-19; Earth Charter; Solidarity; pandemic



## Resumen

Este breve artículo no tiene otro objetivo que hacer una reflexión sobre diferentes aspectos de nuestra existencia que confluyen en mantener viva y vivible nuestra casa "La Tierra". Ha sido escrito en momentos difíciles y crueles donde España ya supera los 23.000 decesos y los españoles nos encontramos confinados sufriendo una cuarentena, provocada por el COVID-19. El pasado veintidós de abril hemos celebrado, como muchos años atrás, el Día de la Madre Tierra; hecho que sin duda ha influido en la elección del título de este artículo, cuyas líneas pretenden trazar las relaciones que existen entre los procesos del declive medioambiental y la creciente aparición de nuevas pandemias. Después de una brevísima exposición de algunas características centrales sobre el Coronavirus el artículo trata de reflexionar sobre el concepto de solidaridad y otredad. No se busca en este trabajo a culpables, sino reflexionar y desempolvar "viejos" escritos como la Carta de la Tierra que siguen siendo nuevos y muy desconocidos, los cuales hay obligatoriamente que leer e implantar para convertirnos en auténticos hijos pródigos.

## Palabras clave

COVID-19; Carta de la Tierra; solidaridad; pandemia

*There are many worlds, but they are in this one*

*Paul Éluard, French poet*

From the real, although not virtual, solitude of this confinement we want to manifest and remember certain recent relevant aspects, through the JONNPR, at these painful and chaotic moments. Our intention is not to delve into the already quite deep wound, but rather to continue looking for ways of dialogue, hope and response to the call of our house: "the Earth".

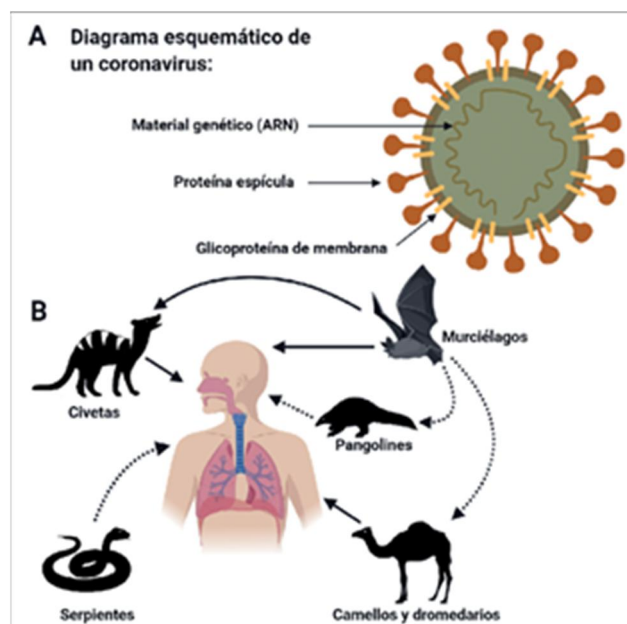
We have been visited by a "new" virus, SARS-CoV-2/COVID-19, a beta coronavirus that has got its numbered-ending according to the year of its discovery and scientific description. It is related to other viruses such as SARS-CoV and MERS-CoV that have already appeared in our recent existence, and created panic without reaching the levels of our current biological host. This virus whose characteristics are well reflected in very recent scientific reviews<sup>(1-3)</sup> attacks humans through mucous membranes using the angiotensin 2 converting enzyme receptors or ACE2 (in Spanish terminology, ECA2) and originated after multiple replications, a viremia that leads in some cases, in less "protected" or immunosenescent individuals to a hyper-inflammatory outbreak.<sup>(1-3)</sup> Unconfirmed news performed in Italian patients' necropsies killed by COVID-19 indicate that death occurs at a late stage in which massive levels of thrombosis



affect the lung and heart. As of today, successful treatments that are saving many lives are being glimpsed<sup>(4)</sup> and on the horizon, there is hope for a vaccine as a reality not too far away.<sup>(5)</sup> Even some nutritional aspects point to the reality of helping in the fight against the virus.<sup>(3)</sup> We will briefly comment that Coronaviruses are viruses of approximately 30 kb with "capsid" that contains the genetic material; a single strand of positively wound RNA that infects a wide variety of species (Figure 1). Coronaviruses are classified into four genus;  $\alpha$ ,  $\beta$ ,  $\gamma$ , and  $\delta$  based on their genomic structure. The  $\alpha$  and  $\beta$  coronaviruses infect only mammals.<sup>(2)</sup> According to these same authors,<sup>(2)</sup> the WHO has classified COVID-19 as a group 2B  $\beta$ -Coronavirus. Their genetic sequence shows an identity greater than 80% with SARS-CoV and 50% with MERS-CoV, and that both SARS-CoV and MERS-CoV originated in bats.

Therefore, the evidence from phylogenetic analysis indicates that COVID-19 belongs to the  $\beta$ -coronavirus genus, which includes SARS-CoV, which infects humans, bats and wild animals.<sup>(2)</sup> Other clear scientific evidence that suggests that COVID-19 originates from bats is the existence of a high degree of homology for ACE2 receptors in a variety of animals, which implies these animals as possible intermediate hosts, or model animals for infection with the coronavirus.<sup>(6)</sup>

Much has been speculated and will continue to be done these days about its origin: zoonotic, biotechnological, chance, provoked, negligence. The first, zoonosis (an animal disease that can incidentally be transmitted to people)<sup>(1,2,4,6)</sup> would be mainly due to the invasion by humans of isolated ecosystems, (or in their proximity) where previously the human being had not arrived before or had done it so slightly, that it had not originated "immunological memory" against the infectious being. Many zoonosis cases (e.g. Ebola, SARS-CoV) have been the cause of fearsome human diseases. The zoonotic mechanisms escape the content of this article, but several viral transfers between wild and domestic animals or man are suspected to help increase their pathogenicity (Figure 1). If in turn, a biodiverse and healthy ecosystem can perform as a contention barrier against emerging viruses, an over-simplified ecosystem due to environmental stress, and hyper-connected to a globalized world can facilitate viral transmission between animals, humans and society.<sup>(7)</sup>



**Figure 1. Characteristics and zoonotic transmission of the SARS Coronavirus.**

**A. Coronavirus structure.** Basically coronaviruses consist of four parts: spicules, membrane, shell, and nucleocapsid. The spicules are composed of a trimeric glycoprotein that protrudes from the virus surface and determines the variety of the coronavirus and the tropism by the host. Two functional S1 subunits are responsible for binding to the host cell receptor and one S2 unit that allows the fusion of the viral and cellular membranes and therefore the internalization of the virus. **B. Zoonosis interspecies transmission.** In SARS CoV (and possibly in SARS-CoV-2 / COVID-19) the natural host of the virus appears to be the bat, which accidentally passes the disease on to other wild animals. It can also happen that the virus is transmitted to humans through the contact of organs, fluids, from dead wild animals or directly through the ingestion of dead or alive bats, even in poor condition or contaminated.

[https://www.google.com/search?q=Esquema+de+zoonosis+por+SARS-cov&tbm=isch&ved=2ahUKEwjgu-\\_hxoHpAhVLwuAKHV-iAUcQ2-cCegQIABAA&sq=Esquema+de+zoonosis+por+SARS-cov&gs\\_lcp=CgNpbWcQAzoECAAQHICWxwFYkPUCYJf5AmgAcAB4AIABggGIAbwMkgEEMy4xMpgBAKABAaoBC2d3cy13aXotaW1n&sclient=img&ei=MR2jXqDfO8uEgwffxla4BA&rlz=1C1CHBD\\_esES895ES895#imgsrc=EkrIGbQNCgxIUM](https://www.google.com/search?q=Esquema+de+zoonosis+por+SARS-cov&tbm=isch&ved=2ahUKEwjgu-_hxoHpAhVLwuAKHV-iAUcQ2-cCegQIABAA&sq=Esquema+de+zoonosis+por+SARS-cov&gs_lcp=CgNpbWcQAzoECAAQHICWxwFYkPUCYJf5AmgAcAB4AIABggGIAbwMkgEEMy4xMpgBAKABAaoBC2d3cy13aXotaW1n&sclient=img&ei=MR2jXqDfO8uEgwffxla4BA&rlz=1C1CHBD_esES895ES895#imgsrc=EkrIGbQNCgxIUM)

Whether it has leaked or been fabricated by biotechnology is not far from what is possible or probable, but it is around what we know as lack of solidarity and indisputable recklessness. It is nothing more than the fruit of playing god's role, while being small in every sense of the word. Because *solidarity* together with *citizenship* and *responsibility* constitute a triad of widely used and even harassed terms in these days of real crisis. Millions of messages, videos, "chats" have flooded us, are flooding us and will continue to flood us since the origin and consequences of the pandemic in Wuhan (China) were officially known, until well into the summer of 2020.

According to the dictionary of the Royal Academy of Spanish Language<sup>(8)</sup> the word "solidarity" has two meanings: 1.f. circumstantial adherence to the cause or to the company of

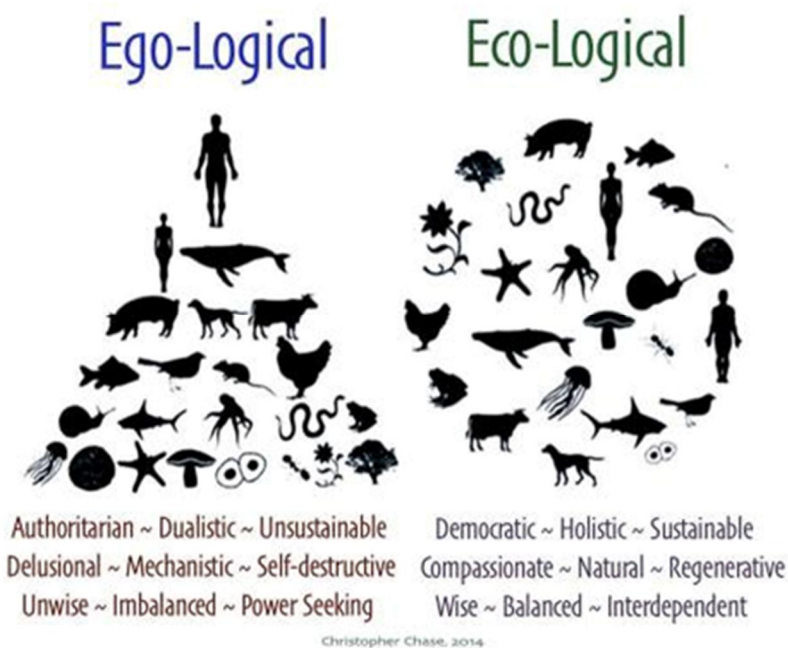


others. 2.f.Der. Mode of right or obligation *in solidum* (being *in solidum* the obligation of several people, each of whom is fully accountable to the creditor when there is no representation link between them). When other treaties are reviewed we see that in the term of solidarity other synonyms come together, such as harmony, altruism, philanthropy, companionship, adherence, attachment, fraternity, brotherhood, friendship, camaraderie, union, help, defense, favor, concord. Solidarity, strictly speaking, would be the communion of interests and responsibilities between people that leads to a disinterested adherence to actions that benefit a group, a company and or a cause.

César Gracia Álvarez<sup>(9)</sup> in his review "Hellenism or the Search for the Other" tells us about many selves: the interior self (closed), the open self, the selfish (ego), and the self(I)-us(we) that dissolves everything in the universal, which implies the consideration of accepting *the same* and *the different* from *the other*, without which there would be neither inclusion nor integration, nor gender transfer or equality, nor solidarity, dialogue or cooperation.

Seneca defined the importance of social principles that underlie the concept of *otherness* in a very different manner from that of *the other* arguing that "*it is not intelligence that unites us but willingness (...). Whoever does not recognize their flaws will not achieve true brotherhood (...). The search for maximum equality between the divine and the human, nature and the rational life of mankind form a unit. Together we constitute the truth*".<sup>(10)</sup>

The intent of this article is not that of turning these lines into a rude philosophical treatise, but rather into a few words of reflection of that which constitutes the great evil of unsupportive selfishness. Octavio Paz already told us in a singular poem: *So that I can be / I have to be another / look for myself among the others / the others who are not / if I do not exist / the others who give me full existence*; and full existence is about taking care of our own home and cultivating understanding, will and solidarity. Blindness, putrefaction, corruption, vanity, and lack of solidarity have made us children who mistreat their own parents, their own brothers and the very roots of their existence (Figure2).



**Figure 2. Ego-Logic vs Eco-logic.** Christopher Chase, 2014.  
Published in Systems Thinking: Seeing How Everything is  
Connected. November, 2014.

Every day, thousands of hectares of forest disappear and with them hundreds of plant and animal species that impoverish the biodiversity of «Gaia»<sup>(11)</sup> our earth and contribute to exacerbate Climate Change.<sup>(12,13)</sup> Every day, the human being inexorably approaches and invades those spaces that make resilience, coexistence and life possible. There is scientific evidence on how climate change is related to diseases that have increased or displaced its action scenario; among other causes, due to the increase of several degrees in ambient temperature in very short time-spans. Further on, anthropogenic intervention of landscapes with irrigation or canal-building techniques, intensification of agriculture, urbanization, deforestation and the creation of new habitats has elevated the casuistry of Schistosomiasis, Malaria, Helminthiasis, Cholera, Dengue, Leishmaniasis, Disease of slime, Hantavirus pulmonary syndrome.<sup>(14)</sup>

A message arrived a few days ago to our mobile devices: an image of the Earth's globe focused over Africa and Asia, which appear sadly and subliminally demonized through an adjacent message (sic): *“International Day of Mother Earth. A new infectious disease arises in humans every 4 months. 75% of these emerging infectious diseases come from animals. Healthy ecosystems help to protect us from diseases, because biodiversity makes it more difficult for pathogens to spread. Around a million animal and plant species are in danger of*





*extinction*". There is no doubt that SARS-CoV-2/COVID-19 can also be a prominent author in this scenario in which we live.

In the whole context of the flood of information that comes to us these days, it is difficult, even for a specialist, to discern true information from unofficial claims.<sup>(14)</sup> We inhabit a contradictory world where a permanent dualism exists and lives on, only increased by the influence of the media. The entire Spanish country rages upon a story of "a child who falls into a well and surely has died in the fall." Thousands of written pages, millions of euros spent to rescue a life, while paradoxically every two-three seconds a child dies of hunger or related diseases in the world (more than one million since the state of alarm and confinement was issued by SARS-CoV-2/COVID-19). We are part of a global society that spends huge amounts of money to produce what it does not need and more to eliminate what is left over or remains un-used.<sup>(16)</sup>

We have created a world that allows gigantic extensions of tropical forests to burn to the ground for the sole purpose of monocultures; a world which tolerates the death and incineration of biodiversity and the extinction of mutualisms that have taken millions of years to flourish. A society that remains indifferent to the claims that these mega-fires are happening to allow the growth of other plant species, which in turn will entail sustenance, guarantee growth and livestock production, oleo-diesel, etc. A mode of humanity that questions the need for forests and stubbornly sets fire to thousands of hectares to open up areas for new residential development that nobody needs; which will inevitably become inhabited by the ghosts of eviction and the Sixth Great Extinction event.<sup>(17)</sup> A reckless ecocide that many proclaim to contribute to a so-called "progress", symptomatic of a system that looks the other way in the face of global radioactive pollution<sup>(18)</sup> and the tides of plastics that asphyxiate entire ecosystems while silently penetrating in our weak bodies; promoting innumerable affections. A world that lies compulsively and that almost nobody calls a liar.

The human being seems like a teenager who does not listen to the voice of experience, only attending to its own rules. The failure in the fight against hunger, with more than 800 million malnourished people and with more than two billion human beings who starve for at least three months a year;<sup>(19)</sup> the fight against the economic control of globalized monster corporations, or the more than 10,000 people in Spain and 7 million in the entire planet who die as a cause of atmospheric pollution every year<sup>(20)</sup> are symptomatic ingredients that set up the recent failure of the Global Climate Summit of Madrid, among many others.<sup>(21)</sup>

The difficulties that multilateralism entail in the current international dialogue have also manifested in this context, and complicated the development of the Summit and the





achievement of any plausible results; making of the Madrid's meeting the longest COP in history. In the conference, there was a strong social mobilization to demand more effective and quicker action from governments, as the COP25 consensus document states (sic) *"Aware of the efforts and concerns of civil society, particularly of the youth and indigenous peoples, who are calling for urgent and ambitious global climate action (...)"*. The document makes reference to the work carried out by the united science, and asks that climate action be consistent with scientific research. However, less than half of the countries represented pledged to present ambitious goals in 2020 and amongst them, there were not any of the largest emitters of greenhouse gases. Again the paradox and the lack of solidarity, of a harm that is inflicted locally and by some more than others, but which find its wound at the global level.

As a counterpoint, the EU activated during the Summit a set of measures to face the climate emergency, through its New Green Deal; committing to climate neutrality in 2050 and agreeing to transform the European Investment Bank (EIB) into a "Climate Bank"; which will allow one billion euros of investment to be unlocked over the next decade. Furthermore, the EIB has announced that it will stop financing fossil energy related projects in 2021<sup>(21)</sup>. At the practical level, the goals of a cleaner world with a mitigated impact on climate are seen today sadly inconsistent, and the global agreement still remains very far away.

Fueled by decades of incoherent goals, there is a booklet entitled "The Earth's Charter"<sup>(22)</sup>, that brings together in a few pages a moving message and that begins with its Preamble (sic) *"We stand at a critical moment in Earth's history, a time when humanity must choose its future. As the world becomes increasingly interdependent and fragile, the future at once holds great peril and great promise. To move forward we must recognize that in the midst of a magnificent diversity of cultures and life forms we are one human family and one Earth community with a common destiny. We must join together to bring forth a sustainable global society founded on respect for nature, universal human rights, economic justice, and a culture of peace. Towards this end, it is imperative that we, the peoples of Earth, declare our responsibility to one another, to the greater community of life, and to future generations"*.

In this Echarter, gathered in small units and paragraphs, we find undeniable truths that anguishedly scream that we keep own home, Earth, in a clean, healthy and sympathetic state. For this reason, in this article, and as a tribute to the efforts of a few, "the Earth's Echarter" is attached, with the hope that its grain of sand will not be lost. The text of the Charter is structured around four basic or main pillars, which are laid-out in sixteen general principles, which are developed and supplemented in turn by sixteen detailed or supporting values. All of them are preceded by a Preamble, and end with a concluding text ("The way forward"). The *Earth's*



*Echarter* also includes a message and a poster that brings together its most important values of solidarity, respect and good work, that are in tune with the goals of the 2000 millennium and the goals of a caring world 2015 (Figures 3-5), which invites us to nurture from “otherness”. There is no doubt that this letter to Earth that requests our help to make the world more sustainable, promotes the fight against climate change and the challenges of anthropocene,<sup>(23)</sup> which as we have seen are directly related to new pandemics, such as SARS-CoV-2/COVID-19.



Figure 3. Millennium Goals, WHO, 2000.<sup>(24)</sup>



Figure 4. Sustainable development goals. WHO, 2016.<sup>(25)</sup>



**Figure 5. Poster of the Earth Echarter.** The sixteen actions that the letter proclaims are graphically summarized. UNESCO and the IUCN (World Conservation Union). [www.earthcharter.org](http://www.earthcharter.org). [www.cartadelatierra.org](http://www.cartadelatierra.org)

However, we are also afraid that unfortunately, in a few weeks, when the fear of the coronavirus stops us from “clenching our throats” and the desire to continually talk about the pandemic and the lies and truths of this reality is extinguished, everything will return to silence. We are afraid that everything will return to the sad reality of selfishness, to which we cling upon also hope that soon enough, the clouds will open on the horizon, and those who keep the illusion and the desire to fight for a better world will be illuminated by the Earth’s Charter. Remembering the words of Miguel de Cervantes (free translation): “*Know that all these storms*



*that happen to us are signs that soon the weather will calm down and good things will happen to us; because neither good or evil can live on, and therefore, by making evil last long, good fortune must be near".<sup>(26)</sup>*

It can be also consulted the Earth's Echarter in English:

[https://jonnpr.com/echarter\\_english.pdf](https://jonnpr.com/echarter_english.pdf)

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