

Letter to Editor

COVID-19; The earth restart button

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Abstract. The outbreak of coronavirus disease (COVID19) in mid-December 2019 in Wuhan, China poses a challenge to the world. Although coronavirus is more commonly known as a fatal virus that affects the human respiratory system, it seems to have deeper effects on humanity. What sets the SARS-COV-2 virus apart from other microorganisms that similarly involve the lungs and endanger human lives? Can the Coronavirus be considered as a trigger to start the Earth restarting process? If we consider the major extinction events as the big restarts that have occurred on earth, is there any connection between the coronavirus and the sixth mass extinction? In this article, we're going to look at the Coronavirus, not as a cause for pneumonia, but as an earth restart button.

Keywords: COVID-19, rise, darkness

Restart; arise after a short period of darkness

One of the things we have all experienced when using computer is the low processing speed and the need to restart afterwards; An action that although keeps the basic features of the computer, removes all the half-finished and non-saved efforts.

According to the Cambridge Dictionary, *Restart* means "to begin something again after it has stopped for a period of time." We know that everything will get rusty gradually. One of the compensatory mechanisms placed in many systems is the ability to recover existing capabilities that have been worn out over time. Restarting means a rise after a short period of darkness; a reappearance after the temporary absence and again start when everything stop. Restarting is one of the best solution when things get tangled up and no advance has been achieved. Restarting does not add to the system; instead, it provides the ground for forgotten and worn-out abilities. Although restarting can be unpleasant because of destroying all efforts that haven't led to fundamental changes, it is ultimately beneficial and in some cases, even the life of a system depends on it. In the case of computer use, who wants their personal computers to be burned due to overheating?

A forest on fire

Many forest fires take place every year. Most of the people consider large forest fires to be environmental disasters, while they do not mean they are unusual or undesirable. Although these fires can burn houses and cause financial and life threatening damages to humans, they can reduce surface fuels, improve ecosystem health,

and provide an exceptional opportunity for the forest to be restarted and restored [1-3]. In the absence of usual fires, the unlimited expansion of vegetation, with the rise of canopy and surface fuels [4, 5], paves the way for large unnatural fires that could destroy many plants, propagules, and animals [3]. These unnatural fires cause many changes in soil and biophysical environment [6] which can affect the post-fire plant growth and can destroy a vegetation composition [7].

Dose our world need to be restarted?

The forest needs to be restarted as a small ecosystem, so does the earth as the largest one. The restart of earth is not something that has never happened before and the 5 mass extinctions are a testament to the claim that earth, at some points, needed a restart. Major extinctions, despite being dark spots in the history of life and reducing biodiversity on earth, have ultimately been profitable by playing an important role in the process of evolution. Although it is not possible to determine the main cause for these biotic crises, it seems that the cause of mass extinctions is the sudden onset of a shock to the biosphere that has long been subjected to various environmental stresses [8].

There are many examples of environmental stress that has plagued the earth for many years. The unprecedented rise in global temperature has increased the frequency, severity, and size of forest fires, killing thousands of animals and endangering a large number of animal and plant species on earth. It has also exposed many ecosystems to extinction by increasing the rate of melting

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of polar ice caps and causing widespread climate change. Another example of these environmental stresses is the increased resistance of many pathogenic bacteria to current treatments and the weakness of human knowledge on overcoming the high rate of bacterial resistance to antibiotics has put the world in the face of a major catastrophe. It seems that the most important factor that has so far protected us from mass extinction was wisdom and humanity. Now the question is, if this wisdom and humanity are taken from man, what will protect us from a great extinction?

A deep look at human societies reveals signs that humanity is in danger. The unfair distribution of food around the world has caused thousands of people to die from starvation but on the other hand obesity is the most important risk factor for all the diseases that comprise the highest mortality rate in developed countries. Also the growing prevalence of psychological disorders such as depression, the rise in suicide rates and drug and alcohol addiction, as well as the obsolescence of spirituality in all societies, indicate that human mental health is at risk.

Dividing the world into developed and developing countries, while the columns of the developed societies are made of the raw materials of the developing countries and are built on the bent backs of those people, has provided the ground for ignoring the rights of them. Declining birth rates have put all communities at higher risk of wearing out and depleting them of young workers. Unlimited expansion of technology which is no longer on the path to facilitating human life, and in some cases, by taking over the power of thought and will, hired many of human beings as workforce and exposed them to the identity crises. It seems that everything is ready for a big extinction.

COVID19; a potential restart button

Of the numerous small flames that burst into fire in forests during a year (either naturally or as a result of human behavior), only a limited number of them can cause a large fire, for starting the restart process. For a factor to be assumed as a restart button, it should be unavoidable, unpredictable, unpreventable and unstoppable until the restart process is complete.

As it hasn't been long time since the first report of COVID-19, it's not well known and predictable; since no suitable treatment has been found for it, it's not stoppable; since no practical vaccine has been found for it, it's not preventable and because all the humans can be involved, it is unavoidable. Corona virus proved that the Earth needed a major restart. In many cases spread of COVID-19 has shown the decline of humanity and morality and by closing factories and forcing countries to declare social isolation, it's improved the environmental conditions of earth, even in this short period and has shown that Earth still is recoverable.

Handmade or born of nature?

A tree branch is not aware if tomorrow is the day which it will burn in the fire, but the intellectual abilities of human beings allowed them to predict the future based on

evidences, adapting to it or take action to change it.

The earth needs to be restarted raises the question of whether the outbreak of coronavirus is a spontaneous event and originates from nature to reform earth circumstances or coronavirus is designed to accelerate the restart event and prevent the occurrence of an unknown restart by nature? one of the special features of the COVID-19 disease is higher mortality rates in elderly population - which just like large trees- have grown up to the maximum level and do not have capacity to grow more. On the other hand, some of the political wills do not give priority to elderly people in hospital admissions and some treatment protocols that prevent the admission of people with certain diseases arise this doubt that COVID-19 may be handmade. So the question that should be answered is that is it possible that human set fire to a forest for fear of a forest fire?

Human Being's after COVID-19

When a fire breaks out in the forest, the small seeds that herald the next generation are only an innocent observer. Thanks to the fire, they can remove the thick, multi-layered shells which is heritage of their ancestors and prevent them from growing. They should prepare themselves to build a new world, the world after the fire.

The experience of the Corona Crisis is a great opportunity for human beings to put aside the thoughts and habits left over from the previous generations that like a thick multi-layered shell, hinder their intellectual development. Although these changes may be minor, it is very hard to claim that humans and human activities can return to pre-coronavirus conditions.

The survivors of the corona fire have learned to take care of their health and to avoid going to hospitals unless necessary, so from now on, they will be safe from many diseases transmitted from the hospital. Being socially isolated in home and experience of loneliness made remnant humans to think more about themselves and world. Reducing attendance at communities and reducing the use of fashion products give COVID-19 survivors a chance to put aside the mask that society and the media have defined for them as beautiful and look themselves beyond that mask. Given the profound weaknesses in the developed countries' health systems seen in COVID-19 crises and the obeisance of human knowledge against coronavirus, the survivors of corona cries will doubt other capabilities that humans have claimed so far as well and this reminds them the need to rely on a higher source than of human power. On the other hand avoidance to admit elderly people and someone with end-stage disease or incurable ones, which are costly for the health systems and governments, made survivors doubt the things they have been fed before in the name of equal human rights.

The best fruit that man can reap from COVID-19 crises is consciousness and wisdom. The ability to mass production of drugs and vaccines cannot protect humans against future epidemics, just as the discovery of the vaccine and the eradication of smallpox could not have a significant effect on human ability to fight coronavirus.

What can be done?

If new trees move along the path of their ancestors, the result is another large fire in the future and re-burning, but small trees cannot be blamed because they have no choice other than growing upwards in the soil. But does this also apply to human?

According to some articles, we are in the middle of the path to the sixth mass extinction [9, 10]. Although this extinction is multi-cause just like prior extinctions, some scientists accentuate the significant role of anthropogenic activities in accelerating this process [11-13]. The higher rate of current species extinction than the expected rate estimated by data extracted from fossils is an evidence for this claim [14]. It seems the average rate of vertebrate extinction in the last century is 100 times greater than background rate [15].

The environmental condition improvement due to closure of big industries followed by COVID19 spread, showed that the damages which human has done to the earth can be compensated.

Although Coronavirus does not have all the essential features that needed to launch a major extinction, ignoring Corona's crisis lessons is a step toward a larger restart. A restart, that years later may be called the sixth mass extinction.

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Conflict of Interest

The author declares no conflicts of interest.

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