



Doomsday Possibly Caused by Coronavirus vs Prediction with Gao's Equation $E = 7B2^{44}$

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Abstract

Henry Kissinger's words in his article "The Coronavirus Pandemic Will Forever Alter the World Order" induced the author to discuss the possibly positive effect of Covid-19 in the increasing of the human beings' health quality and elongation of the lifespan of mankind as a biological species and postpone the doomsday, which was hypothetically calculated to be A. D. 3552 or much earlier based on the analysis with Gao's Equation $E = 7B2^{44}$.

Keywords: Doomsday; Covid-19; Henry Kissinger, Gao's equation; Human being; Population and natural selection

Introduction

Recently, I read an article by famous politician Mr. Henry Kissinger [1]. I found that the title is rather interesting. It is called as: "The Coronavirus Pandemic Will Forever Alter the World Order", in which certain ideas caused a resonance in my mind. Then, I found the contact email address of that publication, to which I sent out an email asking the officer to forward my book, in the form of PDF, to Mr. Kissinger through google.com drive [2]. Although Mr. Kissinger's words in "The Coronavirus Pandemic Will Forever Alter the World Order" are rather plain, I couldn't figure out what is the future world order he pointed out and how coronavirus could contribute the unique effect to it. Thus, I raise some opinions, which might be not commonly considered to majority people, to let readers discuss.

My kind of viewpoint to the covid-19 pandemic

Up-to-date, July 29, 2020, the worldwide infected case numbers of covid-19 as reported by the "European Centre for Disease Prevention and Control" are: "Since 31 December 2019 and as of 29 July 2020, 16,708,920 cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) have been reported, including 660,123 deaths [3] (Figures 1 and 2)." Everyone will have no any doubt that the real

case number could be much higher than that reported number, since some affected patients may have not been tested due to lack of enough testing kits and various reasons.

Although both the infected persons and the death number seem quite high, the figure of 660,123 deaths among 16,708,920 infected patients mean that the ratio of death is only 3.95%, or approximately 4%. In compared with world total population 7,000,000,000 (as reported in 2012) the infected persons of 16,708,920 cases are still very low. It is merely about 0.238%. The death number is less than 0.01% of the world population. To me those figures are far less than my prediction. I believe that if there were no drug that can cure the disease, no vaccines that can be urgently invented and be extensively used, or, for economic reason to go back to work too early, which will cause ineffective isolation, the infected persons' number and death number will still surge higher. The Congressional Research has issued a quite long booklet recently [4]. Since the COVID-19 outbreak was first diagnosed, it has spread to over 200 countries and all U.S. states. The pandemic is negatively affecting global economic growth beyond anything experienced in nearly a century. Estimates so far indicate the virus could trim global economic growth by 3.0% to 6.0% in 2020, with a partial recovery in 2021, assuming there is not a second wave of infections. The economic fallout from the

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pandemic raises the risks of a global economic recession with levels of unemployment not experienced since the Great Depression of the 1930s. The human costs in terms of lives lost will permanently affect global economic growth in addition to the cost of rising levels of poverty, lives upended; careers derailed, and increased social unrest. Global trade could also fall by 13% to 32%, depending on the depth and extent of the global economic

downturn, exacting an especially heavy economic toll on trade-dependent developing and 3 emerging economies. The full impact will not be known until the effects of the pandemic peak. This report provides an overview of the global economic costs to date and the response by governments and international institutions to address these effects.

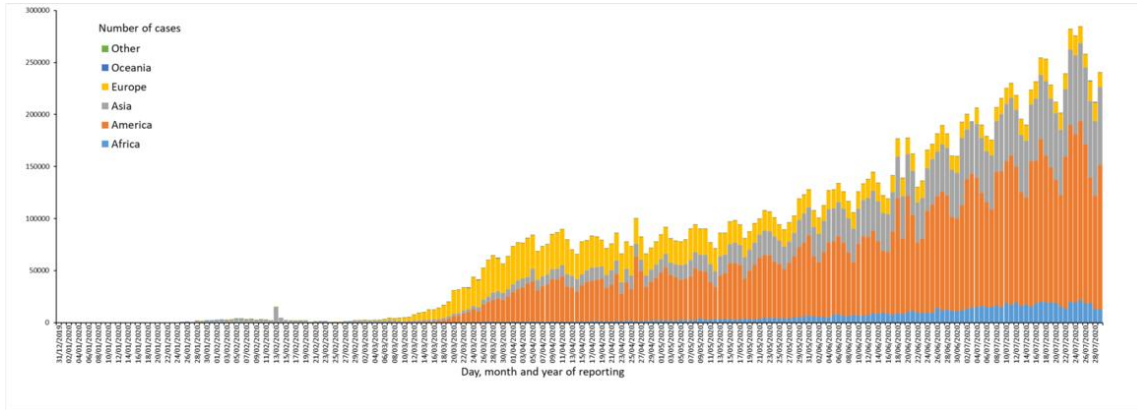


Figure 1: Covid-19 case number worldwide 29 July 2020.

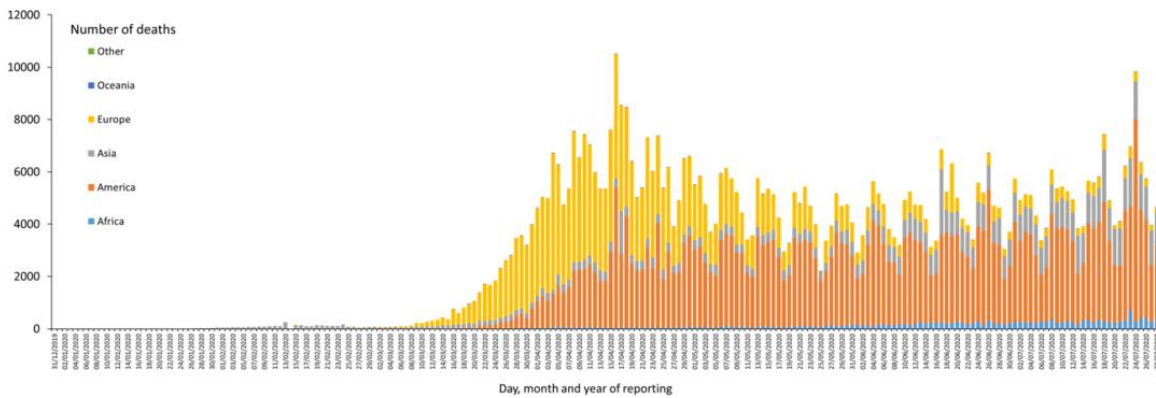


Figure 2: Covid-19 death number worldwide 29 July 2020.

Wikipedia’s search words: “Impact of the COVID-19 pandemic” is another channel to see the various impact of Covid-19 [5,6] And World Bank also has issued a report [7]. Some other positive considerations are shown in an article [8]. However, none of them have the opinion like mine. In an article “How long the coronavirus or its alike could kill the whole mankind?” (Feb. 9-11, 2020, in press) I indicate some of text in *italic* below: It was a totally hypothetical calculation, which may have very little meaning in practice. However, with that outcome of calculated result, we can figure out the possible severances of that a pandemic disease in the worst condition. Of course, you do not necessary to believe it. It is just as a self-threatening and worst warning.

Let us set

P_s = Population survived.

P_o = Original world population.

S = Starting number of infected persons found at the beginning of detection, such that it could be 1, 2, 3, 4, 5, 10, 50, 100, etc.

$7B$ = Seven billion people, which is approximately the current world population (based on 2012 report). Or, it equals to 7×10^9 .

R = Ratio of average multiplication. Such that 1:2, 1:3, 1:4, etc., which means one sick person can cause average spread the disease to 2, 3, 4, etc. persons.

n = the order of generation of infection.

D = Death number after each generation of infection, when the average percentage of death number out of whole infected persons is A . Thus, $D = S \times R^n \times A$

Because $P_s = P_o - D$, so, $P_s = P_o - S \times R^n \times A$.

If we set the $S = 4$, which might be quite reasonable. $R = 2$. (One sick person can cause average spread the disease to 2 persons in one generation of infection, which is very reserved). $A = 10\%$,



or, $A = 10/100$, or 10^{-1} , as it was reported five months ago. (That figure may need to be reset today after 5 months from February to July 2020 development.)

$$P_s = P_o - S \times R_n \times A = P_o - 4 \times 2^n \times 10^{-1}$$

$$P_s = 7 \times 10^9 - 4 \times 2^n \times 10^{-1}$$

If $P_s = 0$ (which means no one can survive), then, $0 = 7 \times 10^9 - 4 \times 2^n \times 10^{-1}$, or, $7 \times 10^9 = 4 \times 2^n \times 10^{-1}$.

So that $2^n = 7 \times 10^9$ divided by 0.4

$$2^n = 17.5 \times 10^9$$

When $n = 1$, $2^1 = 2$

$$n = 2, 2^2 = 4$$

$$n = 3, 2^3 = 8$$

$$n = 4, 2^4 = 16$$

$$n = 5, 2^5 = 32$$

$$n = 6, 2^6 = 64$$

$$n = 7, 2^7 = 128$$

$$n = 8, 2^8 = 256$$

$$n = 9, 2^9 = 512$$

$$n = 10, 2^{10} = 1,024$$

$$n = 11, 2^{11} = 2,048$$

$$n = 12, 2^{12} = 4,096$$

$$n = 13, 2^{13} = 8,192$$

$$n = 14, 2^{14} = 16,384$$

$$n = 15, 2^{15} = 32,768$$

$$n = 16, 2^{16} = 65,536$$

$$n = 17, 2^{17} = 131,072$$

$$n = 18, 2^{18} = 262,144$$

$$n = 19, 2^{19} = 524,288$$

$$n = 20, 2^{20} = 1,048,576$$

$$n = 21, 2^{21} = 2,097,152$$

$$n = 22, 2^{22} = 4,194,304$$

$$n = 23, 2^{23} = 8,388,608$$

$$n = 24, 2^{24} = 16,777,216$$

$$n = 25, 2^{25} = 33,554,432$$

$$n = 26, 2^{26} = 67,108,864$$

$$n = 27, 2^{27} = 134,217,728$$

$$n = 28, 2^{28} = 268,435,456$$

$$n = 29, 2^{29} = 536,870,912$$

$$n = 30, 2^{30} = 1,073,741,824$$

$$n = 31, 2^{31} = 2,147,484,648$$

$$n = 32, 2^{32} = 4,294,967,296$$

$$n = 33, 2^{33} = 8,589,934,592$$

$$n = 34, 2^{34} = 17,179,869,184$$

$$n = 35, 2^{35} = 34,359,738,368$$

$$n = 36, 2^{36} = 68,719,476,736$$

As you can see, when $n = 34$, $2^{34} = 17.18 \times 10^9$, which is smaller than 17.5×10^9 ;

When $n = 35$, $2^{35} = 34.36 \times 10^9$, which is larger than 17.5×10^9 .

When $n = 34.03$, $2^{34.03} = 17.54 \times 10^9$, which is near but a little bit larger than 17.5×10^9 .

Now let us consider what are the days of one generation of infection needed. Probably, it might be less than 14 days.

$14 \text{ days} \times 34.03 = 476.42 \text{ days}$. (One year and 111.42 days. Or one year plus 3.714 months.)

So, it is clear that it needs only one year plus less than 4 months the coronavirus, after going through 34.03 generation of infection, if without good way to control its spreading and no drug can cure that disease, it could kill all the mankind's population.

Is that a very dangerous pandemic we are facing? We must do our best to control it! If human being can't win the battle against coronavirus or its alike, the doomsday is terribly close to the mankind.

Of course, there are many factors that can alter the result of the equation: $P_s = P_o - S \times 2^n \times x$

Such that when the infectious starting from 1 patient, $S = 1$, or the average percentage of death $A = 0.04$ (as it is mentioned on the day of July 29, 2020 on page 2) and $R = 3$, then, the hypothetical mathematic result will be different.

$$P_s = P_o - S \times R^n \times A = P_o - 1 \times 3^n \times 4 \times 10^{-2}$$

$$P_s = 7 \times 10^9 - 1 \times 3^n \times 4 \times 10^{-2}$$

If $P_s = 0$ (which means no one can survive), then, $0 = 7 \times 10^9 - 3^n \times 4 \times 10^{-2}$, or, $7 \times 10^9 = 3^n \times 4 \times 10^{-2}$.

Thus, $3^n = 7 \times 10^9 \times 10^2/4$, or, $3^n = 1.75 \times 10^{11}$.

When $n = 1$, $3^1 = 3$

$$n = 2, 3^2 = 9$$

$$n = 3, 3^3 = 27$$

$$n = 4, 3^4 = 81$$

$$n = 5, 3^5 = 243$$

$$n = 6, 3^6 = 729$$

$$n = 7, 3^7 = 2,187$$

$$n = 8, 3^8 = 6,561$$

$$n = 9, 3^9 = 19,683$$

$$n = 10, 3^{10} = 59,049$$

$$n = 11, 3^{11} = 177,147$$

$$n = 12, 3^{12} = 531,441$$

$$n = 13, 3^{13} = 1,594,323$$

$$n = 14, 3^{14} = 4,782,969$$

$$n = 15, 3^{15} = 14,348,907$$

$$n = 16, 3^{16} = 43,046,721$$

$$n = 17, 3^{17} = 129,140,163$$

$$n = 18, 3^{18} = 387,420,489$$

$$n = 19, 3^{19} = 1,162,261,467$$

$$n = 20, 3^{20} = 3,486,784,401$$

$$n = 21, 3^{21} = 10,460,353,203$$

$$n = 22, 3^{22} = 31,831,059,609$$

$$n = 23, 3^{23} = 94,143,178,827$$

$$n = 24, 3^{24} = 282,429,536,481$$

$$n = 25, 3^{25} = 847,288,609,443$$

When $n = 23.58$, $3^{23.58} = 178,040,656,203$, or, approximately 1.78×10^{11} , which is $> 1.75 \times 10^{11}$. If each generation takes 14 days or



less, 14 day x 23.58 = 330.12 days, or, 11.004 months, i.e. one month less than one year.

Don't be too sorrow. Human being is the top talented living thing. I hope that before the doomsday really to come, we can find proper way to control coronavirus and other virus of its kind. If we could let the death ratio reduce to near "zero", such that the very effective drug saves all life of infected patients, or, the infection ratio reduce sharply from 3 to "0", such that increase the effectiveness of isolation of the infected patients, the coronavirus will naturally be stopped.

Table 1: Red P = phagocytosis positive gene. Red K- the gene of lysosome that can produce cytotoxin to kill bacteria. Nine yellow highlighted combinations mean that the offsprings are of phenotypes that can kill bacteria. The blue highlighted combination means that the offsprings is totally immune dysfunctional. Six green highlighted combinations mean in-complete immune function.

Table of two characters segregation

(Parents)
PpKk x PpKk
(Both produce four gamets)
PK Pk pK pk
(16 combinations of genotypes in zygote)

	PK	Pk	pK	pk
PK	PPKK	PPKk	PpKK	PpKk
Pk	PPKk	PPkk	PpKk	Ppkk
pK	PpKK	PpKk	ppKK	ppKk
pk	PpKk	Ppkk	ppKk	ppkk

Furthermore, biological process shall be much more complicated than hypothetical mathematic calculation. In an article by Johnson Gao (2020) entitled as: "Was the Black Death in the Medieval Time a Natural Way to Prolong the Whole Mankind's Lifespan?" It says: (In Italic) According to Mendel's (1860s) Law of Segregation, the marriage of a genotype PP (phagocytosis positive genotype) individual with a (phagocytosis negative) genotype pp individual will produce a genotype of Pp offspring. Marriage of two genotype Pp persons will produce the genotypes in the ratio of one PP, two Pp, and one pp. That is to produce three phenotypes of normal phagocytic individuals and one phagocytic deficient individual. In the three phenotypes of phagocytosis positive persons, only one individual has PP genotype and two others are of Pp genotype, which may actually

be considered as to have reduced ability in phagocytosis. We may speculate that when in a population of many PP, Pp and pp mixture, if PP can win resist plague infection and get survive, Pp can only partially survive after infected with plague, and pp will definitely die through plague infection. Actually, only phagocytosis can't fully kill bacteria. The lysosome shall be able to kill bacteria with cytotoxin. That involves another gene set, to which we may call it as KK (killing) dominant and kk (killing) recessive genes. That will cause two characters in combination with PP and pp genes (Table 1). There could produce a ratio of 9 out of 16 phenotypes showing the ability to kill bacteria, and one phenotype is totally immune dysfunctional and 6 phenotypes are incomplete in overall ability to kill bacteria. Please see the table 1 attached. From my hypothesis stated above, then, the ranges from 75 million to 200 million, or between 30~50% of European population were died in Black Death as literature mentioned shall be quite reasonable.

From humanitarian point of view, we need to save all the patients' life of those who had been infected with coronavirus. That is why we need to invent specific drugs or vaccines to cure and prevent coronavirus disease as soon as possible. But, taking ten thousand steps back, that kind of virus shall not be able to destroy all mankind. If the Table 1 is reasonable, the coronavirus could only kill 1/16 very weak immune system human population, and threaten 6/16 of relatively weak immunesystem human population. It will keep 9/16 of whole population, whose immune system is very strong or strong enough to be able to survive through that pandemic. And from the natural selection point of view, after coronavirus attack the future human being's population will have a revolutionary increase in health quality and longevity, and the life expectancy will be unexpected longer than it is now. According to the Gao's Equation $E = 7B2^{44}$, a deduction of human population shall increase the ultimate lifespan of mankind, or, it can postpone the doomsday to come early [2], although from philosophical point of view, having birth/creation must having death/extinction, human being as a biological species must be like dinosaur to be swept out from the earth. Coronavirus pandemic is a special Natural Selection method by sacrifice a small potion of weak immune population and preserve large population of perfect immunity individual, at the same time it will increase the human race ultimate lifespan. That might be the positive effect of Covid-19 pandemic unseen by majority of common people.

Another positive effect of Covid-19 could cause a revolutionary advancing in religion. Whether God created the man or man created God is an endless debating in the human history. It is difficult to verify the existence of the God; and it is also difficult to verify the non-existence of the God. The religious power is so strong until nowadays, especially America is a country that many people believe in God. People advice me never to discuss on that



topic. They asked: "Have you ever heard the story that the Giordano Bruno was burned to death in A. D. 1600 for being against Christ?" (Don't slap annoying flies over the tiger's face!) However, in order to rescue whole human beings and to postpone Doomsday, it is necessary to settle that historical problem. Covid-19 pandemic may cause a further debating on the above topic. A dull friend of mine asked me: "If God created everything is true, then, why God created the coronavirus and other toxic virus to punish his proudly created human being?" "Whether God is mad or human being is too bad and must be punished?" "Why the Pope don't pray to the God and ask God to kill all Covid-19, and after his pray the virus was disappeared overnight?" Now, it is a critical time to verify if human being needs only to pray to the God to save Homo sapiens and to avoid an early Doomsday to come. Or, we have to use human's wisdom and ability to defeat Covid-19 and save ourselves. The post coronavirus period might change forever, as Kissinger's saying with my understanding: A new epoch turning from God created human beings to human beings created God. That might be one of the unexpected positive effects of Covid-19 to the whole mankind. Personally, I can't answer my dull friend's question at all. I would like to refer an article by Henry Kissinger (2020) [1] and also those wise words: "God helps those who help themselves" attributed to Benjamin Franklin (January 17, 1706-April 17, 1790) [10]. If USA or any advanced country, which wants to become the real leader of the future world, its main stream of ideology armed with evolutionary could be more favorable as I could image. My song for the anti coronavirus contains that kind of ideology in both English and Chinese lyrics is attached.

Song of Anti-coronavirus.

People Must Win!

Johnson K. Gao

March 25, 2020

The coronavirus ravages the world.

People all over the world have been

Suffering unprecedented disasters.

Leaders of various nations and their people,

Are combating together and shown success.

Relying not on God or Buddha,

We have strong wills to defeat the Nature.

Firmly believe in self-motivation,

Hearts of people can build up the strongest castle.

Human being must win the battle against the Nature.

Looking to the future,

A bright,

Prosperous and flourishing scenery

Have been appearing on the view.

I had stated in my previous work that the Doomsday is inevitable. Here I would like to quote few paragraphs below. According to

the reliable philosophy that everything shall have its beginning, creation or birth and its ending, extinction or death. From the evolutionary point of view, the human being, Homo sapiens, was originated about 300,000 years ago [11]. No matter how you realize it or not, the current historic era of human being has entered a very peculiar stage, which is characterized by high technology development, entertainment luxuriously, information exposure, industry waists changing the environment toward the un-livable condition, the threatening of a worldwide nuclear war has not yet been subsided and human population increasing in an exponential speed. All of those factors accelerate the doomsday to come. Don't be too happy and incredible cheerful. Doomsday is inevitable.

Gao's, Equation $E = 7B^{244}$, could be used to calculate the Doomsday [2].

According to the Johnson K. Gao's Equation: $E = 7B^{244}$, the weight of human being's population could be heavier than the weight of the Earth in A. D. 3552 and the body of whole human being could cover the total land of the Earth in about 500~700 years, calculated starting from A. D. 2012. So, if we consider the hazardous chemical pollution of the air, the radio waves generated by web sites, the sea level rising caused by global warming and radioactive nuclear wastes accumulated in environment, etc. the next few hundreds of years will bring the human being to the critical point of existence. While the presidents, kings and queens currently lead their nations are not qualified to lead the future world, because of a simple reason that they are patriotism, and the patriotism only considers the national benefit higher than the whole mankind's benefit. Thus, we must educate future world leaders based on the Homo sapiensism, in order to prolong the human being's strategic longevity. The establishment of the World Leaders Education Institute is for that purpose.

Now, the world population had reached 7 billion in March 2012. I heard that the rate of doubling of human population is about 35 years. Shall we curiously ask a question: How many years later the weight of total mankind will equal to the weight of the whole Earth? The Earth has a weight of about 6×10^{24} kg. The world population is about 7×10^9 . If the averaging weight per man is 50 kg, the total weight of human being is approximately about 3.5×10^{11} kg. The result of the double increment of 244 obtained is 17.59×10^{12} . Now, let us use 3.5×10^{11} kg multiply by 17.59×10^{12} . It produces 6.15×10^{24} kg, which is a little heavier than the weight of the Earth. For easy to remember, here is a short equation of mine: $E = 7B^{244}$

Where E denotes the equivalent weight to the Earth. B denotes the total weight of one billion of human population, suppose that the average body weight is 50 kg/man. I hope that the equation might become a sister equation to the famous Albert Einstein's equation, because of their rather similar appearances, although where E has different meaning...



If the calculation is based on the entire Earth-land surface and the average area required by a man: Because $E_S = m7B_S 2^X$, so that $148.3 \times 10^{12} \text{ M}^2 = 982.28 \text{ M}^2 \times 7 \times 10^9 \times 2^X$ or, 2^X equals to $148.3 \times 10^{12} \text{ M}^2$ to be divided by $982.28 \text{ M}^2 \times 7 \times 10^9$. Or, $2^X = 21.568$. When $X = 4$, $2^4 = 16$, which is less than 21.568. When $X = 5$, $2^5 = 32$, which is greater than 21.568. When $X = 4.44$ when, $2^{4.44} = 21.706$, the value has more than 21.568. If the world population doubling time is 35 years, then 35 years \times 4.44 = 155.4 years. If the world population doubling time is 50 years, then 50 years \times 4.44 = 222 years. Since in the year A. D. 2012, the entire world's population had reached seven billion. We used the year A. D. 2012 + 155.4 = A. D. 2167.4; we use the year A. D. 2012+222 = A.D. 2234. So, the continuation from A. D. 2107 ~ 2147 extending to A. D. 2167.4 ~ 2234 and between that duration, the more people give birth, the less life land could be shared with. People's lives will change from a wellbeing status to a global poverty. It will appear the world's second immigration climax. The characteristic of that second climax of immigration is its direction towards barren mountains and vast deserts. More detailed information on three inevitable worldwide immigration climaxes, please see my article that I published three years ago [2].

Don't forget that the year of population doubling time needed is adjustable. The longer the doubling time of whole human beings' population required, the longer of the ultimate longevity of human beings could reach. Let us go back to the beginning, if the brutality of coronavirus and the way of sacrifice of a portion of week immune population are the natural way to extend the lifespan of whole human beings? Is that will raise the overall quality of mankind as a biological species? Maybe my mind is totally wrong. Criticism is welcome.

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