It is not a matter of being optimistic or pessimistic, knowing or not knowing elementary things, of being responsible or not for events. Those who would like to be thought of as politicians should be thrown onto the trash heap of history when, as the norm goes, they have no idea about everything or almost everything related to it in that activity.

Of course I am not speaking about those who throughout the various millennia turned public affairs into instruments of power and wealth for the privileged classes, an activity where the real records of cruelty have been imposed during the last eight or ten thousand years about those we have certain traces of the social behaviour of our species, whose existence as thinking beings, according to scientists, barely covers 180,000 years.

It is not my purpose to get involved in such topics that would surely bore almost one hundred percent of the people continuously being bombarded with news across the media, going from the written word to three-dimensional images that are starting to be shown in expensive cinemas. The day is not far away when they shall also predominate in the already fabulous television images per se. It is no accident that the so-called leisure industry has its headquarters in the heart of the empire that tyrannizes everybody.

What I would like to do is to rest on the current starting point of our species to speak of the march towards the abyss. I might even speak of an "inexorable" march and I would certainly be closer to reality. The idea of a Last Judgement is implicit in the most practiced religious doctrines among the inhabitants of this planet, without anyone classifying them for that as being pessimistic. On the contrary, I think it is a basic duty of all serious and sane persons, who number in the millions, to fight to postpone and perhaps to prevent that dramatic and imminent event in today's world.

Numerous dangers threaten us, but two of them, nuclear war and climate change, are decisive and both are ever farther away from coming close to a solution.

Verbose demagoguery, the statements and speeches of the tyranny imposed upon the world by the United States and its powerful and unconditional allies, on both topics, do not admit the slightest doubt in that respect.

January 1st of 2012, the western and Christian New Year, coincides with the anniversary of the triumph of the Revolution in Cuba and the year celebrating the 50th anniversary of the October Crisis of 1962 that put the world on the brink of a nuclear world war and this forces me to write these lines.

My words would be lacking in meaning if they had the objective of blaming on the American people, or on any other country which is an ally of the United States in the unusual adventure; they, like all the other peoples of the world, would be the inevitable victims of the tragedy. Recent events happening in Europe and elsewhere show massive indignation by those who are led to protest by the unemployment, shortages, reductions in their incomes, debts, discrimination, lies and politicking and lead to brutal repressions by the quardians of established law and order.

With growing frequency one speaks of military technologies that affect the entire planet, the only satellite known to be inhabitable hundreds of light years away from any other that may perhaps be suitable if we were to move at the speed of light, three hundred thousand kilometres per second.

We should not ignore that if our marvellous thinking species should disappear, many millions of years

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would go by before another one capable of thinking would arise, by virtue of the natural principles that rule as a consequence of the evolution of the species, discovered by Darwin in 1859 and which today is acknowledged by all serious scientists, whether they are religious or not.

No other era in the history of mankind has known the dangers that today humanity faces. Persons like me, at 85 years old, had reached our 18th birthdays with high school graduation degrees before the first atomic bomb had been put together.

Today artefacts of this type, ready to be used – incomparably more powerful than those that produced the heat of the sun over the cities of Hiroshima and Nagasaki– add up to thousands.

Weapons of this kind that are kept in storage, added to those already deployed by virtue of agreements, reach figures that surpass twenty thousand nuclear missiles.

The use of just one hundred or so of those weapons would be enough to create nuclear winter that would cause a horrible death in a short time for all the human beings living on the planet, as the American scientist and Rutgers University professor Alan Robock has brilliantly explained along with computerized data.

Those used to reading news and serious international analyses know how the risks of the outbreak of war with the use of nuclear weapons increase as the tension grows in the Middle East, where in the hands of the Israeli government hundreds of combat-ready nuclear weapons are accumulated, and whose nature as a strong nuclear power is neither admitted or denied. Likewise, tension grows around Russia, a country with unquestionable capacity for response, threatened by a presumed European nuclear shield.

The Yankee statement that the European nuclear shield is there to also protect Russia from Iran and North Korea is laughable. The Yankee position is so feeble in this delicate matter that its ally Israel does not even bother to guarantee prior consultations on measures that might unleash war.

Humanity, in contrast, does not enjoy any guarantee. Cosmic space, in the vicinity of our planet, is overcrowed by US satellites destined to spy on what is going on even on the roofs of houses in any nation of the world. The lives and customs of any person or family became objects of espionage; listenning to hundreds of millions of cell phones and subjects of conversations by any user anywhere in the world stops being a private matter and becomes information material for the US secret services.

That is the right that is being left to the citizens of our world by virtue of the acts of a government whose constitution, approved by the Philadelphia Congress in 1776, established that men were born free and equal and the Creator has given them all those rights, which they now no longer have, not the Americans themselves or any citizen of the world, not even to communicate by phone with relatives and friends about their most private feelings.

Of course war is a tragedy that can happen and it is very probable that it will happen; however, if humanity were capable of delaying it for an indefinite length of time, another equally dramatic event is happening at an increasing pace: climate change. I shall restrict myself to point out what eminent scientists and world-class exhibiters have explained through documents and films that are questioned by nobody.

It is well-known that the US government was opposed to the Kyoto agreements on the environment, a line of conduct that didn't even agree with its closest allies whose territories would suffer tremendously and some of which, such as Holland, would practically disappear.

The planet goes on today without a policy to solve this serious problem, while the levels of oceans rise, the enormous ice caps covering Antarctica and Greenland, where more than 90% of the world's fresh water is accumulated, are melting at a growing pace, and now humanity, on November 30, 2011,

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officially reached the figure of 7 billion inhabitants which, in the poorest areas of the world grows in a sustained and inevitable manner. Could it be that those who have dedicated themselves to bombing countries and killing millions of persons in the last 50 years could be concerned about the fate of all the other peoples?

The United States today is not just the promoter of those wars, but it is also the greatest manufacturer and exporter of weapons in the world.

As it is well-known, that powerful country has signed a covenant to supply 60 billion dollars in the next few years to the Kingdom of Saudi Arabia where the transnationals of the US and its allies extract on a daily basis 10 million barrels of light oil, in other words, a billion dollars in fuel. What will happen to that country and the region when those energy reserves should run dry? It is not possible that our globalized world will accept without a murmur the colossal wasting of energy resources that nature took hundreds of millions of years to create, and whose dilapidation increases essential costs. It would in no way be worthy of the intelligent nature attributed to our species.

In the last 12 months, that situation has worsened considerably because of new technological advances which, far from alleviating the tragedy coming from the squandering of fossil fuels, considerably make things worse.

World class scientists and researchers have been pointing out the dramatic consequences of climate change.

In an excellent documentary film by French director Yann Arthus-Bertrand, entitled Home, and filmed in collaboration with prestigious and well-informed international celebrities, published in mid-2009, he warns the world with irrefutable data about what is happening. Using solid arguments, he shows the deadly consequences of consuming, in less than two centuries, the energy resources created by nature in hundreds of millions of years; but the worst of it is not the colossal squandering, but the suicidal consequences for the human species. Referring to the very existence of life, he admonishes the human species: "...You benefit from a fabulous legacy of 4,000 million years supplied by the Earth. You are only 200,000 years old but you have changed the face of the world."

He didn't blame nor could he blame anyone up to that time, he was simply pointing out an objective reality. However, today we have to blame ourselves for what we know and we are doing nothing to try to fix it.

In their images and concepts, the authors of that work include memories, data and ideas that we have the duty to know and take into account.

In recent months, another fabulous film was Oceans, made by two French film-makers, considered to be the best film of the year in Cuba; perhaps, in my opinion, the best film of this era.

This is amazing material because of the precision and beauty of the images never before filmed by any camera: 8 years and 50 million Euros were invested in the making of it. Humanity must thank that proof for the way in which the principles of nature adulterated by man express themselves. The actors are not human beings: they are the inhabitants of the world's oceans. An Oscar for them!

What inspired me with the duty to write these lines did not arise from the events referred to up till now, which in one way or another I have commented on previously, but others that, managed by the interests of the transnationals, have been coming to light sparingly in the last few months and in my opinion serve as definitive proof of the confusion and political chaos rife in the world.

Just a few months ago I read for the first time some news about the existence of shale gas. It was stated that the US had reserves to supply their needs for this fuel for 100 years. Since I now have time to do research on political, economic and scientific topics that could be really useful for our peoples, I

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discretely got in touch with several people living in Cuba or abroad. Oddly, none of them had heard a word about the matter. Of course, this wasn't the first time that happened. One is amazed about important facts that are hidden in a veritable sea of information, mixed in with hundreds or thousands of news items that circulate the planet.

Nevertheless, I persisted in my interest on the subject. Only a few months have gone by and shale gas is no longer news. Just before the new year enough information was known to clearly see the world's inexorable march towards the abyss, threatened by risks of such great seriousness as nuclear war and climate change. I have already spoken of the first of these; about the second one, in the interest of brevity, I shall restrict myself to reveal known data and some to be known, that no political cadre or sensible person should ignore.

I don't hesitate saying that I am observing both facts with the serenity imparted by the years I have lived, in this spectacular phase of human history, that have contributed to the education of our brave and heroic people.

The gas is measured in TCF, which can be referred to in cubic feet or cubic metres – it is not always explained whether they are dealing with one or the other – it depends on the system of measurement that is used in certain countries. On the other hand, when they speak of billions they tend to refer to the Spanish billion that means a million millions; that figure in English is called a trillion, and we must keep that in mind when analyzing the references to the gas which tend to be copious. I shall try to point that out when necessary.

The American analyst Daniel Yergin, author of a voluminous classic on the history of oil stated, according to the IPS news agency, that now a third of all the gas produced in the US is shale gas.

"...exploitation of a platform with six wells can consume 170,000 cubic metres of water and even create harmful effects such as influencing seismic movements, polluting surface and groundwaters and affecting the landscape."

The British BP group informs us that "proven reserves of conventional or traditional gas on the planet add up to 6,608 billion —million millions— of cubic feet, some 187 billion cubic metres, [...] and the largest deposits are in Russia (1,580 TCF), Iran (1,045), Qatar (894), and Saudi Arabia and Turkmenistan with 283 TCF each". We are dealing with gas that is being produced and marketed.

"An EIA study —a US government energy agency — published in April of 2011 found practically the same volume (6,620 TCF or 187.4 billion cubic metres) of recoverable shale gas in just 32 countries, and the giants are: China (1,275 TCF), United States (862), Argentina (774), Mexico (681), South Africa (485) and Australia (396 TCF)". Shale gas is gas de esquisto. Take note that according to what is known, Argentina and Mexico have almost as much as the United States. China, with larger deposits, has reserves that equal almost the double of those and 40% more than the United States.

"...countries secularly dependent on foreign suppliers shall count on an enormous base of resources in relation to their consumption, such as France and Poland which import 98 and 64 percent respectively of the gas they consume, and in shale or lutite rocks they would have reserves greater than 180 TCF each".

"To extract it from the lutite — IPS points out— they resort to a method called 'fracking' (hydraulic fracturing), with the injection of great amounts of water plus sand and chemical additives. Carbon traces (proportion of carbon dioxide that is released into the atmosphere) are much greater than those generated in the production of conventional gas.

"Since we are dealing with bombarding layers of earth crust with water and other substances, the risk of damaging the subsoil, soil, surface and groundwater tables, the landscape and communication channels is greater if the facilities for extracting and transporting the new wealth presents handling

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defects or errors."

Suffice it to point out that among the numerous chemical substances that are injected with the water to extract this gas we have benzene and toluene, substances that are terribly carcinogenic.

Lourdes Melgar, expert from the Instituto Tecnológico y de Estudios Superiores of Monterrey, has the opinion that:

"It is a technology generating much debate and they are resources located in zones where there is no water...".

"Gas-bearing lutites — IPS states— are unconventional hydrocarbon quarries, encrusted in rock that protects them, therefore fracking is used to release them on a grand scale."

"Generation of shale gas involves high volumes of water and the excavation and fracking generates great amounts of liquid waste that may contain dissolved chemicals and other pollutants that require treatment before they are disposed."

"Production of shale leaped from 11,037 million cubic metres in 2000 to 135,840 million in 2010. In the event of expansion following this pace, in 2035 it will cover 45 percent of the demand of general gas, according to EIA.

"Recent scientific research has warned on the negative environmental profile of lutite gas.

"Professors Robert Howarth, Renee Santoro and Anthony Ingraffea from Cornell University in the US have concluded that this hydrocarbon is a greater pollutant than oil and gas, according to the study 'Methane and the traces of greenhouse effect gases from natural gas coming from shale formations' published in April last year in the Climatic Change review.

"'Carbon trace is greater than that from conventional gas or oil, seen on any time horizon, but particularly within the lapse of 20 years. Compared to carbon, it is at least 20 percent greater and perhaps more than double in 20 years', the report underlined."

"Methane is one of the most polluting greenhouse effect gases, responsible for the rise in the planet's temperature."

"'In active extraction areas (one or more Wells in one kilometre) average and maximum concentrations of methane in wells of drinking water increased with proximity to the closest gas well and were a danger for potential explosion', states the text written by Stephen Osborn, Avner Vengosh, Nathaniel Warner and Robert Jackson, from Duke State University.

"These indicators put into question the industry argument that shale could replace carbon in generating electricity and, therefore be a resource for mitigating climate change.

"'It is an adventure that is far too premature and risky'."

"In April of 2010, the US State Department started up the Shale Gas Global Initiative to help countries seeking to use that resource in order to identify and develop it, with the eventual economic benefit for US transnationals."

I have been inevitably extensive, I had no other option. I write these lines for the Cubadebate website and for Telesur, one of the most serious and honest channels in our long-suffering world.

In order to deal with the subject, I let the holidays of the old and the New Year slip by.

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