

Climate and collapse: Only through the insurrection of civil societies will we avoid the worst

Translation of an [interview](#) of Christophe Bonneuil, French historian and research director at the CNRS, by Ivan Du Roy for BastaMag, published on October 16th, 2018.



Are we under the threat of an imminent "collapse" as a result of global warming and the over-exploitation of resources? For the historian Christophe Bonneuil, there is no question: major social, economic and geopolitical upheavals have already been triggered and will only accelerate. Instead, the issue needs to be repositioned, in turn inciting "political thinking" of the current situation: who will be the winners and the losers? How can we exert an influence on the nature of these changes? Mass migrations, risk of conflicts over resources: despite his brutal observation of this emerging world, the historian appeals to avoid the trap of a "romanticism" of collapse. "Another end of the world is possible," he says. It is up to civil societies to write the final scenario. Interview.

Basta Mag: How has the climate situation evolved since the signing of the Paris Agreement - in the context of the COP 21 -, at the end of 2015?

Christophe Bonneuil [1]: Greenhouse gas emissions continue to rise everywhere, France included. In view of the trajectory of global emissions, if we continue down that path, we take the direction of an overall increase in temperatures of at least +3°C well before the end of the century. We see here the limits of the non-compulsory nature of the agreement signed three years ago, at the Paris Climate Conference, the COP 21. The Paris Agreement is dangerously close to the 1938 Munich Agreement, which, believing it avoided a world war, actually precipitated it. This summer, the CO₂ concentration of the atmosphere exceeded 411 ppm (part per million), a level unmatched for 800,000 years to 4 million years. We must be even more gullible than a "*munichois*" to believe that it will not have consequences of geological magnitude, or cause human disasters and major geopolitical upheavals.

What are the indicators showing that a fateful threshold, which would pave the way to a "Hothouse Earth", may likely be crossed in the coming decades?

Since the Quaternary era, the Earth oscillates approximately every 100,000 years between a glacial state and an interglacial state, between two periods of glaciation. What threatens us is an exit from the limits of this oscillation. The probability of a scenario in which Earth would switch to a hothouse state was accredited by an article published in July in the journal of the American Academy of Sciences [2]. In India, projected temperatures in ten or fifteen years show that some regions will experience peaks above 50°C [3], which could also happen in France at the end of the century [4]. Bodies will not be able to bear it, regions will become unlivable, and the poorest will be most affected.

Part of our greenhouse gas emissions is absorbed by the oceans, which have themselves not been as acidic for 300 million years. This destroys coral reefs and threatens aquatic wildlife. On land, the speed of plant migration is also not fast enough to adapt to climate change [5]. Added to this is the extent of deforestation, habitat fragmentation and the impacts of chemicals used by intensive agriculture: in German nature reserves, scientists have observed a fall of more than 75% in insect populations in less than three decades [6].

Some talk of a coming "collapse". Is this an adequate way of presenting the risks?

It is no longer about positioning oneself as optimistic or pessimistic, as an informed catastrophist – by appealing to the possibility of a catastrophe in order to arouse the mobilisation that will prevent it - or, on the contrary, as someone who refuses to use fear because it would be politically problematic. Whether we like it or not, a report was presented at the last World Geological Congress in 2016, declaring that the Earth has left the Holocene to enter a new geological era, the Anthropocene. Whether we like it or not, hundreds of scientific works show that thresholds have been crossed or are being crossed for a range of parameters of the Earth system, beyond which the evolutions are brutal: runaway climate change as a source of extreme events, rising sea levels requiring to move hundreds of large

cities and billions of people across the century, biodiversity collapse, the cycle of nitrogen, phosphorus and water... multiple collapses are either already underway or coming.

What is looming over us is not a climate crisis to *manage* with "solutions" or economic globalisation to *regulate*, but the possibility of a collapse of the world we currently live in, a globalised industrial civilisation resulting from five centuries of capitalism. Some people prefer to define collapse as the extinction of the human species. Even with the worst climate and ecological scenario, this perspective remains less likely today than it was during the Cold War and the threat of nuclear winter.

Imagine the worst: climatic, ecological and geopolitical upheavals, devastating wars between powers for resources, civil wars fueled by xenophobic or religious fanaticism, clan wars in a devastated world... But why wouldn't the few humans surviving and resisting barbarism, find no resource and habitable place on Earth? To adopt the end of the human race as the framework of thought for collapse is to risk inhibiting all thought and politics. I think that this scenario should not monopolise our attention: it only distracts from any geopolitical, social or geographical analysis.

What would be the most likely collapse scenario?

A more interesting definition, otherwise more probable in the 21st century than human extinction, is one given by Yves Cochet and the Momentum Institute: the collapse as a "process through which the basic needs (water, food, housing, clothing, energy...) are no longer provided - at a reasonable cost - to a majority of the population by services regulated by law". Just as the violence of the Greek crisis has shown us, this type of collapse can affect entire countries, even in Europe. Given the interconnected nature of the world economy, we can extend the hypothesis to that of the collapse of a system: the civilisation of industrial capitalism and its consumerist culture, nowadays a globalised civilisation, regardless of the vast disparities in social and territorial domains.

Following the erasure of so many political systems across the last 50 centuries, and while reports from all over describe the coming upheavals, isn't it reckless to regard industrial and consumerist capitalism as immortal? Given it is the cause of global disarray ^[7], it seems rather interesting to think about its collapse, or even to prepare it!

How?

By multiplying, for example, the acts of non-cooperation with the consumerist model, by resisting the fascist drifts or oppressions enabled by the ecological crisis, by opposing useless projects and the pursuit of fossil fuel extraction and ore processing, by reinforcing emerging alternatives. With the image of the post-apocalyptic and Hollywood's individualistic "last man" in mind, I rather prefer the image of the collectives participating in the collapse of an old productivist world: those blocking the mines and bringing down the share price of multinationals, those reinventing the commons - from the transition movement of the *Zone to Defend*. Another end of the world is possible! ^[8]

Have such upheavals ever occurred in the past? What were the social, economic and geopolitical

consequences?

It is interesting to look at the past, or else we will remain very politically naive, especially in the face of this fear of a future collapse. This kind of sublime of a collapse that will happen later is a representation of rich Western, white people. Populations and societies are either seeing their lives turned upside down, or have already seen it in the past. With the arrival of Europeans in America, Amerindian populations literally collapsed from 55 million people to 5 million between 1492 and 1650. Is that not a collapse? This genocide has left traces in the ice cores of climatologists. There is a drop of more than 5 ppm in the carbon concentration in the atmosphere between 1492 and 1610 ^[9]. This decline is due to the fact that, with 50 million Indians disappearing, more than 50 million cultivated hectares have returned to the fallow land and forest, capturing carbon in turn.

This European expansion was also a consequence of another upheaval, the Black Death of the 14th century. Nearly half of the European population was decimated. There was less manpower in the countryside, which in turn weakened the seigniorial power. Less numerous, the peasants then obtained certain rights. The aristocracy then went in search of new spaces to dominate and expand within, financing oceanic expeditions to Africa and the Americas. The establishment of the first sugar company in Madeira, off the coast of Morocco, served as a base for departure to the Americas. From the 16th to the 18th century, an important supply of European money came from mines exploited in the New World.

So there are winners and losers to the collapse?

After the Black Death, European peasantry was able to establish for itself a better position in society, ultimately recovering. The aristocracy and the nascent financial bourgeoisie continued to contribute to the emergence of capitalism and European expansion. The vanquished were Amerindians and Africans, captured as slaves until the 19th century. For this reason, we cannot say that everyone is in the same boat in the event of collapse.

Another example: in the years 1870-1900, El Niño events - the large-scale warming of ocean surface waters - caused droughts and famines in the Amazon, Asia and sub-Saharan Africa, killing nearly 40 million people ^[10]. The consequences of these natural climatic phenomena were then aggravated by European expansion, in turn bringing with them geopolitical implications. In China, the Qing dynasty was weakened by European Imperialism following the Opium War. The imperial dynasty no longer had the means to meet the needs of its population in the event of a natural disaster, and lost its legitimacy. Hence the Boxer war in 1899-1901, which led to the fall of the dynasty in 1912. The disrupted monsoons also caused millions of deaths to famine in India because the British colonial power, far from supporting the rural population, continued to puncture their commodities, which at the time were exported to Britain. Colonial empires also benefited from the climate disruptions that profoundly destabilised Africa. The droughts and famines of the 1890s in East Africa facilitated colonial penetration, which in turn aided rinderpest and sleeping sickness that decimated livestock, wildlife and African societies in the early 20th century.

These examples illustrate how the impacts of ecological and climatic disasters, both their causes and their consequences, are never separated from forms of domination and exploitation. As a result, we cannot think of the collapse purely politically by simply comparing a graphed curve of the world's population against a curve of resource availability or planetary limits. These curves say nothing about what is happening geopolitically, how social and political relations evolve, lest of all who the winners and losers are in these upheavals. The poorest can lose even more than what they have already, while the richest 1% emerge unscathed.

What could be the consequences of the current climate and environmental upheavals?

A disastrous scenario could be that of an unrecognisable Earth, less habitable overall, with hundreds of millions of refugees ruined and forced to leave their homes, whole sub-continent left to the chaos of civil wars and the extraction of resources, and ultra-militarised world powers. These authoritarian regimes would fight each other for the control of Earth's resources, and would internally reign a dictatorship in the name of the ecological emergency and the exclusion of destitute foreigners hurrying to their doors.

In the name of climate emergency and in the face of a rapid degradation of Earth's habitability, these regimes will abolish the moral and social boundaries: we will be offered servitude and submission in exchange for survival. The control of our personal data will guide our behaviours. This totalitarian order will present itself as an ecologist and will ration the use of resources, but will maintain enormous inequalities between a general population with diminished life and an elite that will continue to over-consume.

This is the scenario of a capitalism partially de-globalised, and re-structured in dictatorial blocks, in which the militarised state and the economic power would become one. Fully privatised ecological service markets, climate geoengineering, military and extractivist space conquest or trans-humanism would be the "solutions" proposed by these regimes to the problems of the planet. This scenario sends chills up the spine. Yet we are already experiencing these premises, in China, the United States, Russia, Europe or Brazil.

Only a massive mobilisation of civil societies and victims of climate change already facing the damage of existing "globalisation", only an ethical and political insurrection against all attacks against the living and human dignity itself, only an archipelago of revolutionary changes towards well-being and self-reliant societies can thwart this scenario of ecofascist capitalism.

Yet many are those saying to themselves "So far, so good, so far, so good"...

If we look in the short term at how global imbalance changes the game, it seems that for a number of years to come, the top 5% to 10% of the world, living mainly in OECD countries [which includes the 36 most developed countries in the world, ed] as well as China and Russia, do not yet fully realize the seriousness of the situation: they are less fragile, live in relatively stable states erecting barriers against migrants, have access to a standard of living that requires an unequal ecological exchange with the rest

of the planet, where most of the production workshops and sites of extraction are located. For them, "everything is fine" as long as they continue to benefit from a political and economic system externalising violence towards other territories, populations and species of the world.

On the other hand, the most underprivileged half of humanity, could be in vital danger. This half has received nothing from the wealth generated in 2017 worldwide while 82% of it benefited the richest 1% of the world ^[11]. While some buy lifeboats, others toil in the workshops of the world under conditions of extreme pollution, or on land becoming less and less fertile. Between 200 million and one billion people could become refugees by 2050. We must realise the violence of climate change that is adding to, and combining with, the social violence suffered by these "Wretched of the Earth".

We must therefore expect considerable political and geopolitical upheavals...

Europe is in the grip of a xenophobic push. On our doorstep, the drowning rate of migrants trying to cross the Mediterranean has increased from one in 42 in 2017 to one in 18 in 2018, according to the United Nations High Commissioner for Refugees. It's appalling! India erected a 4000 km long separation wall with Bangladesh. With the melting ice in the Himalayas and the disruption of monsoons, water regimes are changing, with effects on dams and irrigation systems. This is already creating tensions between China, India and Pakistan. The Himalayas become a kind of geopolitical bedlam, subject to a "hyper-siege" as Jean-Michel Valantin has shown ^[12]. Their populations are stuck between rising water on one side, and the relative drying of the Himalayan water tower on the other. This conjunction of climatic phenomena and geopolitical tensions is worrying in an area with nuclearised countries.

The disturbances of the planet also redistribute the power relations between nation-states as we have known them since the end of the Cold War. Among the potential winners, there is Russia, which has room - Siberia - which will be able to accommodate populations in the future. North America and China also have clear lands, which Europe doesn't have. These lands will allow the cultivation of millions of hectares of wheat.

Paradoxically, global warming also opens up new potential for fossil energy exploitation, doesn't it?

The thaw of the Arctic sea ice is accelerating Russian fossil fuel extraction projects with massive Chinese funding, which, incidentally, may further worsen global warming. A new maritime route is opening, the passage of the North-East [which connects the Pacific to the Atlantic through northern Russia and Scandinavia, note]. The first big methane tanker - Christophe de Margerie [named after the former CEO of Total who died in 2014, ed] - sailed for the first time in the summer of 2017 without the necessity of an ice-breaking ship. The Northeast Passage is the equivalent of the Suez Canal or Panama in the 19th century: it brings China closer to Europe by three weeks. Floating nuclear power plants will likely be established by Russia in the Arctic, to provide power to the first cities that are set up in this 'frozen far-west', as well as the exploitation of gas and oil fields.

When we see the gap between the richest and the billions of people most affected by climate damage, or the differences in the costs and benefits of the warming depending on regions or states, it is clear that the rhetoric of "We are all concerned, we must act together", doesn't hold water. There will be winners and losers to global warming. Some countries - like Russia and the oil monarchies of the Gulf - and some social groups have no interest in this changing. No, we are not all in the same boat, or not in the same class or with the same access to the restaurant and canoes [reference to Titanic]. A "positive ecology" made of concrete alternatives is useful, but it will not be enough without a fight. This is also the lesson to be learned from Nicolas Hulot's failure in the government [Nicolas Hulot was the French Minister of the Environment under Macron, resigning in August 2018].

Won't the extraction of fossil fuels stop by itself, because of the limits of these resources, for example oil?

Since the 1970s, the environmental movement has highlighted these limits. But in terms of fossil resource reserves, we have, according to a study published in 2015, largely enough to increase the global temperature of the planet by more than 8°C, and the level of the oceans by 30 meters during the 3rd millennium [13]. We can no longer count on these limits and on a shortage of resources - the famous oil "spike" - to stop us on time. Only political voluntarism, spurred by an insurrection of civil societies, can help avoid the worst.

We know the existence of fossil reserves under our feet, which we must absolutely learn not to extract. We must leave a model of development dating back 500 years, when the conquistadores killed Amerindians for mere kilos of gold or silver. This model that must be overcome is capitalism: it is not only a question of returning to a Keynesian capitalism with a little more ecology in it. Our conception of the individual, "who is by himself a perfect and solitary whole" according to Rousseau, our conception of beings other than human beings, of the good life and of property, must be rethought.

We must work on the issue of the commons. And, beyond a collapsing industrial modernity, we must invent *terrestrial futures* [14]. In politics, it's time for the focus to shift. Political leaders, institutions or companies can no longer be taken seriously if they don't have clear proposals to drastically reduce greenhouse gas emissions and the ecological footprint within the next five years. While they currently place competitiveness, growth and business above all, they will have to give way to policies more adequate to preserve our lives, our values of solidarity, and a habitable world.

Translated by Crystelle Vu - Edited by Julian Oliver - 2018 / Written with VIM / Last edit 30.10.2018

Notes

[1] Historian, research director at the CNRS, co-author of "L'événement Anthropocène. La Terre, l'histoire et nous" (Seuil, « Points Histoire », 2016) and director of the « Anthropocene » collection at Ed. du Seuil.

[2] Trajectories of the Earth System in the Anthropocene.

[3] Deadly heat waves could hit South Asia this century.

[4] France could experience heat peaks of 50°C at the end of the century, 'Le Monde' article in French

- [5] Richard T. Corlett & David A. Westcott. « Will plant movements keep up with climate change ? ».
- [6] More than 75 percent decline over 27 years in total flying insect biomass in protected areas
- [7] Christophe Bonneuil & Jean-Baptiste Fressoz, *L'événement Anthropocène. La Terre, l'histoire et nous* (Seuil, « Points Histoire », 2016).
- [8] It is the slogan of a graffiti illustrating the political radicalisations of recent years, and the title of the latest book by Pablo Servigne, Raphaël Stevens and Gauthier Chapelle, *Une autre fin du monde est possible (Another end of the world is possible)* (Seuil, 2018)
- [9] Simon L. Lewis et Mark A. Maslin, « Defining the Anthropocene », *Nature*, 519, 2015, p. 171-180.
- [10] Read the book by Mike Davis, *Late Victorian Holocausts: El Niño Famines and the Making of the Third World.*
- [11] Report by Oxfam NGO, January 2018.
- [12] Jean-Michel Valantin, *Géopolitique d'une planète dérégulée* (Seuil, 2017).
- [13] R. Winkelmann, A. Levermann, A. Ridgwell, K. Caldeira, « Combustion of available fossil-fuel resources sufficient to eliminate the Antarctic Ice Sheet », *Science Advances*, 1 (2015).
- [14] « *Devenirs terrestres* » (fr) : <http://www.terrestres.org/2018/05/10/devenirs-terrestres/>