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Chapter 1

Figure 1 Diagram of post-normal science (modified from Jerome R. Ravetz, 'The post-normal ...

ANOTHER END OF THE WORLD IS POSSIBLE

Living the collapse (and not merely surviving it)

Pablo Servigne, Raphaël Stevens and Gauthier Chapelle

Translated by Geoffrey Samuel

polity

Originally published in French as *Une autre fin du monde est possible: Vivre l'effondrement (et pas seulement y survivre*). Préface de Dominique Bourg. Postface de Cyril Dion.

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Polity Press 101 Station Landing Suite 300 Medford, MA 02155, USA

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ISBN-13: 978-1-5095-4467-7

A catalogue record for this book is available from the British Library.

Library of Congress Cataloging-in-Publication Data

Names: Servigne, Pablo, author. | Stevens, Raphaël, author. | Chapelle, Gauthier, author. | Samuel, Geoffrey, translator.

Title: Another end of the world is possible: living the collapse (and not merely surviving it) / Pablo Servigne, Raphaël Stevens, Gauthier Chapelle; translated by Geoffrey Samuel.

Other titles: Une autre fin du monde est possible. English

Description: Medford: Polity Press, 2020. | Includes bibliographical references. | Summary: "How to face the environmental crisis with open eyes and a deeper awareness of what we can do about it"-- Provided by publisher.

Identifiers: LCCN 2020023225 (print) | LCCN 2020023226 (ebook) | ISBN 9781509544653 (hardback) | ISBN 9781509544660 (paperback) | ISBN 9781509544677 (epub)

Subjects: LCSH: Social change--Philosophy. | Crises (Philosophy) | Global environmental change. | Catastrophical, The.

Classification: LCC HM831 .S4813 2020 (print) | LCC HM831 (ebook) | DDC

303.4--dc23

LC record available at https://lccn.loc.gov/2020023225 LC ebook record available at https://lccn.loc.gov/2020023226

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Dedication

To the survivalists, collapsonauts, and earth activists, to keep up courage To Joanna Macy, Ursula Le Guin and Constance de Polignac To Antoinette R., Laurie L.-M. and Géraldine R. To Hugo, Antoine and David S. Buckel To the growing mycelium ...

There are things that one can only see properly with eyes that have wept.

Henri Lacordaire

Humanity today is like a waking dreamer, caught between the fantasies of sleep and the chaos of the real world. The mind seeks but cannot find the precise place and hour. We have created a Star Wars civilization, with Stone Age emotions, medieval institutions, and godlike technology. We thrash about. We are terribly confused by the mere fact of our existence, and a danger to ourselves and to the rest of life.

Edward O. Wilson, *The Social Conquest of Earth* (New York: Liveright Publishing, 2012)

What was really needed was a fundamental change in our attitude toward life. We had to learn ourselves and, furthermore, we had to teach the despairing men, that it did not really matter what we expected from life, but rather what life expected from us. We needed to stop asking about the meaning of life, and instead to think of ourselves as those who were being questioned by life – daily and hourly.

Victor Frankl, Man's Search for Meaning (Boston, MA: Beacon Press, 1992)

I no longer believe that we can change anything in the world until we have first changed ourselves.

Etty Hillesum, An Interrupted Life: the Diaries and Letters of Etty

Hillesum 1941-1943 (London: Persephone Books, 1999)

This is not so much a return to the earth as a return to ourselves. A spiritual experience. It is to heal, rediscover and reaffirm ourselves.

Tee Corinne, quoted in Françoise Flamant, Women's Land. Construction d'une utopie: Oregon, États-Unis, 1970-2010 (Donnemarie-Dontilly: Éditions iXe, 2015)

You say that there are no words to describe these times, you say that they do not exist. But remember. Make an effort to remember. Or if necessary, invent.

Monique Wittig, *Les Guérillères* (Paris: Éditions de Minuit, 1969)

Acknowledgements

There are paradoxes we would like to do without: writing about the absolute need for nature, meaning and connection ... while spending long days immersed in books and in front of a screen, cutting off the presence of human and non-human beings who matter.

We feel an immense gratitude to our companions, Elise, Stéphanie and Marine, and for our children, for having understood and accepted this for many weeks, and especially during this tough final marathon. All your love, and ours, is also found in this book! (We know that's not much comfort.)

At the end of this adventure, we would like to thank Sophie Lhuillier and Christophe Bonneuil, for your willingness to take risks and your kindness, as well as the entire Seuil team for your understanding and your patience. We are delighted to walk at your side!

A huge thank you to Dominique Bourg and Cyril Dion for the foreword and afterword, for your presence and your authenticity. Thanks also to both of you for proofreading, as well as to Nicolas Haeringer, Élise Monette, Typhaine Domercq and Denys Chalumeau, for critical and encouraging comments during the writing.

We send our warm thanks to the intrepid cowgirl Charlotte de Mévius, as well as to Hugues Dorzée from the magazine *Imagine demain le monde* and Alexandre Penasse from the journal *Kairos*, for your trust and support throughout these years.

Thanks to you, brothers and sisters who made the mycelium grow: Agnes, Aline, Claire, Clément, Corinne, Étienne, Helena, Josué, Laurent L., Laurent R., Lise,

Marine S., Michel-Maxime, Muriel, Nathéa, Raphaël, Sébastien, Tylie, Valérie-Azul, Vincent and many other filaments and spores. Also to you, our families and neighbours, Nelly and Michel, Chantal and Pierre, Nicole and Michel, Brigitte and Philippe, Typhaine and Sam, Yannick and Virginie, Monique, Benoît and Caroline, Anne and Jean-Martin, Luc, Marc Pier, Sébastien and Corentin, for help, in-flight refuelling and encouragement.

Maxi-admiration and ultra-gratitude for daring, sensitivity and inspiration: Zoé Alowan, Jean Claude Ameisen, Jean-Pierre Andrevon, Margaret Atwood, Carolyn Baker, Janine Benyus, Dominique Bourg, Paul Chefurka, Yves Cochet, François Couplan, Ashlee Cunsolo, Alain Damasio, Philippe Descola, Vinciane Despret, Cyril Dion, Michel-Maxime Egger, Arturo Escobar, Christophe Fauré, Monica Gagliano, Rachel and Antoine (Geb-nout), Brian Goodwin, John Michael Greer, Émilie Hache, Marc Halévy, Stephan Harding, Geneen Haugen, Jean Hegland, Emilie Hermant, Perrine and Charles Hervé-Gruyer, Xavier Hulhoven, Bill Kauth, Paul Kingsnorth, Maja Kooistra, Bruno Latour, Charles-Maxence Layet, Ursula Le Guin, Jacques Lucas, Joanna Macy, David Manise, Dennis and Donella Meadows, Edgar Morin, Baptiste Morizot, Marisa Ortolan, Kim Pasche, Bill Plotkin, André Ruwet, Suzanne Simard, Agnès Sinai, Rebecca Solnit, Starhawk, Isabelle Stengers, Valérie-Azul Thomé, Bruno Tracq, Patrick Van Eersel, Patrick Viveret, Francis Weller, Edward O. Wilson, not to mention the precious punk blue tits whose language has finally been deciphered by that fine diplomat and interpreter Alessandro Pignocchi (and one of which ended up perched on the cover of the original French edition).

Thanks to the pessimists-plus and optimists-plus of the social networks, as well as countless collapsonauts who have written touching and often overwhelming messages over the past three years; you have given us immense

courage! We haven't given up on answering you ... before the collapse.

Special mention to the modest genius of an *Earth-Dweller* who wrote on the walls the beautiful sentence (spotted in 2010 at the University of Nanterre) which served us as title: *Une autre fin du monde est possible....* We take this opportunity to make an appeal to the person who sent us the photo ... please get in touch, for the next version of these thanks.

Finally, thank you to the sacred feminine, to magic, to the witches, to the Shambhala warriors, the New Warriors, to the spirits of the places that have given us hospitality while we were writing, and to all the other-than-humans who amaze us, who give us life and who are relying on us.

Foreword

I remember something I once read, though I cannot recall where. We are in Gallo-Roman Provence, towards the end of the fourth century. A patrician, at the head of a vast estate, boasts of the power of Rome. The same archaeological excavations reveal that shortly after its owner wrote about his pride in belonging to the Empire, the villa and its inhabitants were victims of a barbaric incursion. It seems that the assailants feasted on the spot and celebrated their crime by drinking out of the skull of the former master of the estate. Perhaps it is this sinister side of this story that prevents me from remembering where I read it.

Whether that is the case or not, the elites of that time, like those of today, displayed a mixture of arrogance, naivety and crude cynicism. Like today, the end of the Empire saw a dramatic rise in inequality. We can imagine that after centuries of the Pax Romana, it must have been difficult to imagine anything like the end of the Empire. It's equally difficult for us to admit that after centuries of 'progress', thermo-industrial civilization and its high growth rates could fall apart.

If you have opened this book, you have probably had some intuition of such a collapse. So have I, and I am convinced, too, that the moral and political manifestations of our movement towards collapse can already be seen and felt around us. For several years, we have seen the rise of political leaders with much the same psychological profile, who gain power by skilfully stirring up and playing on fear and hatred. Repellent and pretentious, dishonest and depraved, destroying one after the other the barriers, physical as well as moral, that protect his compatriots from

global violence, Trump is the epitome of these new ruling elites. Many of these politicians have been elected and have won the admiration of vast numbers of people. As this shows, the catastrophe, and the movement that carries it forward, has a moral nature before it takes physical form. As in Serge Reggiani's song, the wolves, all too human, were able to enter Paris because they were already there. Human fellow-feeling had already deserted the city. Moral violence precedes and feeds physical violence, but above all it blinds us and disarms us in the face of the physical threats which signal our entry into the Anthropocene.

This is precisely why this book by Pablo Servigne, Raphaël Stevens and Gauthier Chapelle is so important. The industrial 'party' will soon be over. A number of vital issues, under whatever names, will again take centre stage. How this present world ends, and even more what new worlds it will give birth to, will depend very much on the connections which we are able to weave and on how we succeed in imagining our immediate future. In this respect, this book is very valuable. It is not a treatise of 'collapsology', like Pablo and Raphaël's first book, but a book of 'collapsosophy'. It does not aim to convince us of a probable collapse - an exercise which has already been accomplished - but to prepare us internally to face it, and in a way to go beyond it, by preparing from now on for the world that is to come, the world that we would choose to rebuild, on new principles, among the other worlds that might take shape.

Our approach to reality has driven its extreme love of the one-dimensional, its obstinate simple-mindedness, to the point of destruction. Our Paradise here on earth was to be built purely through progress (but what kind of progress?), science (that of Bayer-Monsanto and its 'science-based' approaches?), the quantitative, GDP, growth, competitiveness, efficiency, mastery of the material world

(on what scale and for how long?), capitalism, freedom (what kind of freedom? for whom? for what end?), humanity (alone in a lifeless world?). The modern world was to be a world of easilyunderstood slogans, everything simple and straightforward. All we had to do was to keep on growing, without considering the consequences, to tear ourselves away from nature, to focus more and more on the individual, to automate everything, to go always faster and further ... towards a world where finally we dread the coming of summer for fear of suffocating, or of being the victim of some extreme event, where seeing a ladybird fly has become a rare occurrence, where cities have become refuges of biodiversity because the countryside has been devastated, where the sciences, those of climate or biodiversity, that still seek to understand the world rather than to oversimplify it even more, describe nightmare futures. And so on.

It's time to stop. We have spent too long sliding down the slope of this destructive modernity. It's time to oppose to it our inner world, our emotions and passions, our children, our friends, our networks, our intelligence and our creativity. We can learn again to accept the complexities of reality (or rather of realities). We can learn again that our world is more than just what we can dominate, directly or indirectly, and more even than we can understand. We can restore ourselves with the wisdoms that the world has accumulated through centuries past, without sneering at them, but also without being afraid to create something new. We can bring into being the spirituality, and the spiritualities, that will allow us to remain upright in the coming storm and to rebuild a shared, open house in which we can all live.

Dominique Bourg Philosopher, University of Lausanne

Notes

- 1. The reference is to Serge Reggiani's 1967 song, 'Les loups sont entrés dans Paris' ('The wolves have entered Paris') Tr.
- 2. Pablo Servigne and Raphaël Stevens, *How Everything Can Collapse: A Manual for Our Times* (Cambridge: Polity Press, 2020).

Preface Facing the collapse of our world

Don't you think our epoch has a scent of collapse? Something has toppled over, something is dying on a grand scale. There are signs of the end of this world appearing in the speeches of Extinction Rebellion, Greta Thunberg and Antonio Gutierrez, the Secretary General of the United Nations, in conversations at Davos and in commentaries on the fires in Australia and Brazil and now on the Covid-19 pandemic.

This is no longer surprising: the idea that our world can collapse in the coming years is widespread. In February 2020, an opinion poll on 'collapsology' conducted by the Institut français d'opinion publique (IFOP) in five countries (France, United States, United Kingdom, Italy and Germany) found that 56 per cent of British people and 65 per cent of French think that Western civilization as we know it will soon collapse (23 per cent of British people expect it within twenty years, and 9 per cent before 2030).²

We are now beyond discussing whether the threat is real or not. Dozens, even hundreds of 'top scientists' agree that global catastrophic risks (GCRs 3) need to be taken seriously. For the most sceptical readers (and it is normal to be sceptical), we have summarized the scientific works dealing with these risks in *How Everything Can Collapse* published by Polity in April 2020 (in French in 2015 4).

As we expected, everything is speeding up. Not so long ago, some scientists claimed that a global systemic collapse of our society and of the biosphere was possible in the near future, though without being able to specify a date. Today, we have gone a step further: some top scientists say this is

the most likely scenario. The Doomsday Clock, which symbolizes the imminence of a planetary cataclysm, was brought forward in January 2020 to midnight minus 100 seconds. This cold and relentless statement is in line with that of wellknown authors from the English-speaking world who have inspired us, such as Donella and Dennis Meadows, Joanna Macy, Jared Diamond, John M. Greer, Richard Heinberg and Naomi Oreskes, to name a few.

In 2015, the rational and scientific approach of collapsology was considered 'pessimistic' by the political establishment and most of the mainstream media. However, the general public was already open to discuss the matter. We have seen a growing number of readers coming to our lectures who had reached similar conclusions: neither 'sustainable development', nor 'green growth', nor promises of wealth redistribution will be able stop the disasters from happening, should business-as-usual prevail. There is no doubt that humanity and the planet are heading down a catastrophic path.

Once people realize the situation, bewilderment strikes to the very roots of the soul. Then, two questions arise over and over again: How do we live through our lives with this constant flow of bad news and disasters? How can we rethink politics in the aftermath of catastrophes? In other words, which 'inner' and 'outer' paths must we explore?

The book you are holding in your hands tries to answer the first question. This is the psychological, metaphysical and spiritual question of our relationship to the world, of interdependencies between humans as well as between humans and non-humans, of meaning, of narratives, of the sacred, and so on. We wrote it during the summer of 2018, when a conjunction of events caused the theme of collapse to go viral in France: the first articles in the mass media, a particularly hot summer, the publication of a study dubbed

'Hothouse Earth' in the *Proceedings of the National Academy of Sciences* (PNAS), the spectacular resignation of the charismatic French Minister of the Environment, Nicolas Hulot, and fifteen days later, the publication of the IPCC's special report on the impact of global warming of 1.5°C. The following autumn saw the almost simultaneous emergence of the powerful movements of the Gilets jaunes ('Yellow Vests') in France, of Extinction Rebellion and Deep Adaptation in the UK, and of course of the Fridays for Future initiated by Greta Thunberg.

Another End of the World is Possible was published the same autumn and added a missing piece to deepen the conversation. Since then, the word 'collapsology' has become an uncontrollable media monster that has slipped away us, feeding on catastrophic news but also on criticism and praise, superficial mumbo-jumbo and scholarly analysis. It has even entered the famous French dictionary Le Petit Robert. \(^{\frac{7}{2}}\)

The unravelling of the biosphere is bad news. So, do we need to wish for a breakdown of the current social order in order to avoid an even greater collapse of earth systems? This question becomes more relevant than ever with each passing year. The latest news on climate change and mass extinction of species is breath-taking. The European Environment Agency does not disagree with that statement. In a collection of maps published on 10 February 2020, this public body tries to figure out our children's and grandchildren's future in Europe at the end of the century: rising sea levels, torrential rain, droughts, mega-fires. A Hollywood movie featuring all these disasters would hardly be credible.

Since 2018, protests and rebellions have erupted across the globe. And, in the midst of the heated political debates on collapses (biodiversity, climate, geopolitics, finance, etc.), a

microscopic coronavirus has unleashed a series of cascading effects: fear and entrenchment, a voluntary slowdown of economic activity, domestic political upheavals, diplomatic and geopolitical crises, shortages of medicines, masks and food, the injection of massive amounts of liquidity into the markets by central banks around the world to stabilize the financial system and avoid a major crash, and so on. Covid-19 has proved to be a huge stress-test for the globalized economy. It is also a stark reminder of what matters deeply in our daily lives, as well as a real-time dress rehearsal for future disasters and psychological mayhem, which will be much more intense. And more unexpectedly, the lockdown of half of the world's population has demonstrated the extraordinary capacity of wildlife to adapt and self-regenerate!

The Covid-19 pandemic also showed that while we have the political power to shut down non-essential businesses, it is not enough to moderate the extent of future global warming. The efforts we must make to avoid a dramatic loss of the vital earth systems that sustain life are immense and we are not yet up to the task. Nonetheless, the real-life experiment of quarantine has at least made it possible to distinguish the essential (e.g., health, food, the local economy, love, mutual aid, the living world) from the trivial (e.g., holidays on the other side of the world, extravagant gadgets, stock market speculation, trendy clothes, advertising, Formula One Grands Prix). In Western countries, it is totally feasible to considerably reduce industrial activities and stop overconsumption while meeting people's basic needs.

Unfortunately, the post-Covid era is demonstrating the inability of political and economic elites to see this health emergency as a historic opportunity to phase out fossil fuels, drastically reduce inequalities and address poverty. Instead, we have witnessed the development and

implementation of non-eco-friendly recovery plans as illustrated by the billions of dollars made available to the aeronautics and automotive industries. Moreover, we must bear in mind that whatever the outcome of this crisis, extreme weather events are locked in for the next twenty to thirty years due to climate system inertia. There is a whole process of acceptance and mourning before us.

This book is dedicated to people who find themselves running on a perpetual treadmill of emotions (anger, fear, rage, sadness, grief, guilt, etc.). It may help you to keep up with the times and to transform your relationship to the world. It may provide some 'useful' tools for people who want to contribute to the emergence of new livelihoods built on the ruins of capitalism. It is not a call for an individual journey; the need is to bring people together and reclaim the commons, to imagine collective stories, so as to ride the wave of the next centuries without capsizing. In this sense, the task ahead is fundamentally political. More precisely, the political task is a precondition for devising policies of resilience that can cope with the unpredictable roller-coasters of the Anthropocene, that can manage great 'collapses' and imagine what may come 'after'.

Our generation must therefore work on three fronts simultaneously, as Rob Hopkins says, with our heads, hearts and hands: understanding what is happening (collapso-*logy*), imagining and believing in other worlds (collapso-*sophy*) and gathering the forces of life to lead the fight against destructive powers and to build alternatives (collapso-*praxis*).

After *How Everything Can Collapse*, this book lays the foundations of collapsosophy. It is a step. Everything remains to be written, to be felt, to be shared, and above all, to be done. With wisdom and compassion. With love and rage.

Notes

- 1. A neologism we proposed to refer to the emerging field of research in the scientific community that studies global catastrophic risks (GCRs), the category of risks that could cause mass deaths and disasters on a global scale. See Gorm E. Shackelford et al., 'Accumulating evidence using crowdsourcing and machine learning: a living bibliography about existential risk and global catastrophic risk', *Futures* 116, 2020: 102508.
- 2. Jean-Laurent Cassely and Jérôme Fourquet, La France: Patrie de la collapsologie? (Paris: Fondation Jean Jaures and IFOP, 2020). https://bit.ly/37jzvOv. For a press dispatch in English, see https://bit.ly/2XKNWaU
- 3. M. Ivanova, 'Global risks: a survey of scientists' perceptions', in *Our Future on Earth* (Future Earth, 2020), pp. 14–17.
- 4. Pablo Servigne and Raphaël Stevens, *Comment tout peut s'effondrer* (Paris: Seuil, 2015).
- <u>5</u>. Asher Moses, "Collapse of civilisation is the most likely outcome": top climate scientists', *Voice of Action* (5 June 2020). https://bit.ly/2MI2H8j
- 6. The Doomsday Clock was created during the Cold War, and is maintained by the editors of the Bulletin of the Atomic Scientists at the University of Chicago. Since 23 January 2020, the clock has been displaying midnight minus 100 seconds (23:58:20), for the first time since 1953, due to the inability of world leaders to deal with the imminent threats of nuclear war and climate change,

- and the proliferation of 'fake news' as a weapon to destabilize democracies.
- 7. Le Petit Robert, Les mots nouveaux du Petit Robert (15 May 2020). https://bit.ly/3dS3Zt4
- 8. European Environment Agency, 'Climate change and its impact in Europe' (EEA, 2020). https://bit.ly/3f7xuHJ

Introduction Learning to live with it

The idea of a possible collapse no longer seems to worry us much. These days, the realization that global disasters are already happening is more and more widely accepted, as is the understanding that along with them comes the possibility of a global systemic collapse.

The monumental shocks caused by Fukushima, by the successive waves of refugees in Europe, by the terrorist attacks in Paris and Brussels, the large-scale disappearance of birds and insects, the Brexit vote and the election of Trump have seriously ruptured the sense of peaceful continuity that had been reassuring so many of us.

One of the barriers that stops us from accepting this idea of collapse is the caricature that has been made out of it. When we think of collapse, scenes from Hollywood disaster films rush up in front of us, feeding the vision of a single, unavoidable event that will suddenly annihilate everything with which we are familiar. We fear such a moment much as we fear the moment of transition from life to death in our own dying.

This is to forget that there are other, worse things about death. There is its anticipation, having to see others die, or seeing oneself suffer in the eyes of others. The collapse of our civilization will not be a single event or catastrophe, but a series of disastrous events (cyclones, industrial accidents, attacks, pandemics, droughts, etc.), taking place against a backdrop of equally destabilizing gradual changes (desertification, the disruption of the seasons, persistent pollution, the extinctions of species and of animal populations, and so on).

We envisage the collapse of what we call 'thermo-industrial civilization' as a process taking place in many different locations. It has already begun, but it has not yet reached its most critical phase, and we cannot say how long it will continue. It is both distant and close, slow-moving and fast, gradual and sudden. It will involve not only natural events, but also (and especially) political, economic and social disturbances, as well as events at a psychological level (such as shifts in collective consciousness).

This is no longer a Nostradamus-like prediction, nor is it yet another reason for a passive or nihilistic attitude. 'Collapse' is not a fashion, or a new label. However, this is likely to be a period that historians or archaeologists of future centuries will comes to label and to look upon as a coherent whole, or which future intelligent species will regard as a quite specific historical event.

If you think that we are exaggerating to get your attention, just remember what two climate scientists were saying in 2011 at a conference in Oxford about climate goals for the twenty-first century (and keep in mind that greenhouse gas emissions are directly proportional to economic activity). They recommended the following: The emerging countries had to start reducing their greenhouse gas emissions by 2030, then maintain this decline at 3 per cent annually. The developed countries had to reach their peak emissions in 2015 and then decline by 3 per cent annually. If these very ambitious goals were reached (and we already know that they are not being reached), then the world will have one *chance in two* to stay below an average temperature rise of 4°C by 2100 ... which would already be monstrously catastrophic on a global scale. In 2017, BP and Shell were planning (internally, without informing their shareholders, let alone the public) for changes of the order of +5°C average by 2050.2

In recent history, there is no example of a society which has been able to reduce its emissions by more than 3 per cent over a short period. Such a reduction would cause an immediate economic recession, unless it had itself resulted from a collapse like that of the Soviet Union in the early 1990s or that of Venezuela after 2016.

For the Earth's non-human population (fauna, flora, fungi and micro-organisms), the rise in temperature will mean mass slaughter. Some populations will just keep shrinking. Whole species will disappear forever. Populations of amphibians, of insects and birds in the countryside, of coral reefs, mammals, big fishes, whales and dolphins ... The last male northern white rhinoceros of the North died in 2018, joining the list of imaginary animals which illustrate the stories we read at night to our children.

The change in attitude over the last few years

All these numbers about catastrophes are easily accessible, and the aim of this book is not to add to them. What interests us here is the change of attitude and of conscious awareness within society in recent years.

One landmark was in 1992, at the Rio Summit, when more than 1,700 scientists signed a common text warning humanity about the state of the planet. At the time, this was a new and even embarrassing development. Some 2,500 other scientists responded by warning society against the 'emergence of an irrational ideology that opposes scientific and industrial progress'. Twenty-five years later, 15,364 scientists from 184 countries coauthored a letter explaining that without swift and radical action, humanity would be threatened with extinction. There was no response to this letter. There is no longer any

debate. But what is the nature of the silence that followed? Paralysis, exhaustion, lack of interest?

Among the ruling elites, tongues speak more freely, if discreetly. When any of the three of us speak these days in political and economic circles, we are struck by how people no longer question the facts. In public, though, scepticism has given way to feelings of powerlessness, and often to a desire to find ways of escape.

Many of the richest people in the world are barricading themselves inside 'gated communities', luxurious and highly secure residential enclaves. ⁶ They are also leaving the big cities: in 2015, 3,000 millionaires left Chicago, 7,000 left Paris and 5,000 left Rome. Not all of them are just seeking to evade taxes. Many are genuinely anxious about social tensions, terrorist attacks or the anger of a population increasingly aware of injustices and inequalities. As Robert Johnson, the former director of the Soros Fund, told the Davos Economic Forum, many hedgefund managers are buying farms in remote countries like New Zealand in search of a 'plan B', and have private jets at hand, ready to take off and fly them there. Others have built, away from prying eyes and on every continent, gigantic and luxurious high-tech underground bunkers to protect their family from whatever disaster might happen. 9

All this illustrates what the philosopher and sociologist Bruno Latour has described as an act of secession by a very well-off category of the population. Aware of the risks and of what is at stake, they are seeking to save their skins without worrying about the fate of the rest of the world. To take up his metaphor of a plane and the difficulty of coming to land back on earth, we have entered an area of heavy turbulence. The lights have come on, the glasses of champagne are falling over, existential anguish is returning. Some people open the portholes, see lightning