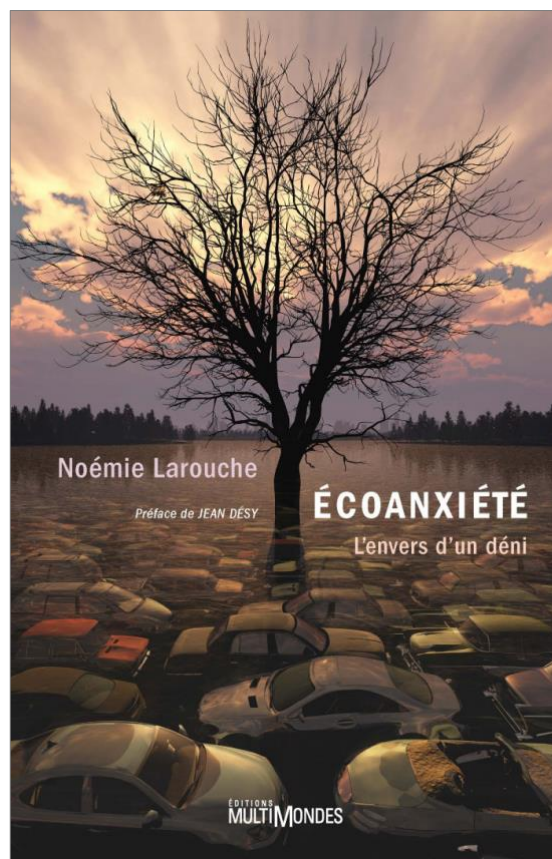


ÉDITIONS
MULTIMONDES

Écoanxiété par **Noémie Larouche**

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Foreword

As the crow flies, some 12,000 kilometres separate Montreal from Patuakhali, Bangladesh. Twelve thousand kilometres that 18-year-old Elsa Kazi will probably never travel, because she would have to do it in an airplane. Such a flight would add four tonnes of CO₂ to the earth's atmosphere, and the idea of being responsible for these emissions is unbearable to her.

So Elsa stays here in Montreal.

What she knows of Bangladeshi culture she learned from her grandfather, who was born in Patuakhali District and immigrated to Canada over 70 years ago. The news she gets from the country is about floods and cyclones, broadcast on television.

Is it this part of her heritage that upsets her—that takes her breath away—when she sees from her living room what is happening half a world away? Then Elsa has the sinister sensation of dying. A weight violently compresses her chest. Her breathing becomes shallow and laboured.

She has to wait for what feels like an interminable moment before air finally enters her lungs. Then, like a newborn baby taking its first breath of oxygen, Elsa starts to cry uncontrollably.

Her psychologist has told her she is suffering from eco-anxiety. She has learned that her physical symptoms (crying, choking, hyperventilating, etc.) are visible manifestations of the anxiety generated by her ecological concerns.

She is right to be concerned, because Bangladesh is one of the countries most affected by climate change. Two-thirds of the state is located in the Ganges-Brahmaputra-Meghna delta, and built on land that is flush with water. A delta is the result of the accumulation of deposits (alluvia) carried by rivers, so the geography of such a system is in constant transformation—even more so now that the glaciers are melting upstream and the sea is rising downstream. Yet between the mountains and the ocean live more than a hundred million people.

Elsa's heart is also like a delta, where all of the misfortunes of others pile up.

This young woman was my first contact with eco-anxiety. It was when she confided in me that I became aware of the psychological distress the climate crisis can cause. Of course, I was not unaware of the anxiety of young

people. As editor-in-chief of the teen science magazine *Curium*, published in Quebec since 2014, I'd many times encountered their ecological concerns and fears for the future, which I share. But never before had it occurred to me that these concerns could become so troublesome and so paralysing.

It was enough for me to start a conversation with some of Elsa's other classmates to see how many of them shared her fears.

To think that not so long ago, when I was a geography student myself at university, climate change was a controversial subject in the media. At times, the press gave the impression that the scientific debate was more balanced than it really was. Scientific findings and arguments were often treated indiscriminately. If news was an egg, with facts as the yolk and opinions as the white, we were served scrambled eggs.

At the time, I drew lines with an acetate pencil on aerial photographs to mark the territories that scientific forecasts indicated were threatened by rising sea levels. Fifteen years later, I can see that these predictions were correct.

Did I doubt the seriousness of climate change then? Not at all. Did I appreciate the scope and scale of the coming crisis? Once again: No. Could I have foreseen the psychological pain it would cause our children? Even less so.

What did science have to say about the anxieties and disorders the younger generation was experiencing? Could it help me to better understand their state of mind? I began to scour the literature, with particular attention to studies on the effects of climate change on mental health. What I found was so disturbing that I couldn't get it out of my head.

This is how this book was built: on myriad questions that I sought to answer by confronting the observations of science and the lived experiences of those suffering from eco-anxiety.

How does this new fear take root in our society? How is it different from other collective anxieties of the past? How did humans come to fear the ecological drama to the point of experiencing physical and psychological pain? And above all, what will happen next?

Chapter 2

The eco-anxious and the fools

[Excerpt chapter 2, pages 30 to 36]

Confessions, testimonies, and accounts of frightened young people: Since the beginning of 2019, eco-anxiety has been a topic widely discussed in the media. There has been a lot of talk about it, without our really knowing what we're talking about. Or that's been my impression.

Sara Montpetit was the first to point out to me the confusion around the word eco-anxiety. In January 2019, Sara was finishing her last year of high school when she created the collective For the Future Montreal¹ in the wake of the international movement Fridays for Future, which was founded by Swedish activist Greta Thunberg, and which inspired hundreds, then thousands of young teenagers to cut school on Fridays to demonstrate.

"I was angry. I was angry that my future was being decided by other people, when it's up to us to build it." Anger is also what Sara felt when she was first exposed to the term eco-anxiety. "It was after the first For the Future Montreal demonstration. The TV showed a report on eco-anxiety that included images of our demonstration. I thought it was so idiotic! To be afraid for our future is pathological? If there are people who aren't worried, I think they're the ones who should be seeking help."

Since then, there has been no shortage of opportunities to rant about the use, abusive or fair, of the term eco-anxiety. Over time, Sara has made a fragile peace with the word. Nevertheless, she remains ambivalent about the media's diagnostic criteria. "If being eco-anxious means worrying about your future and the possibility of falling into chaos, then fine, I'm eco-anxious. Now what are we doing to save our planet and ourselves?" she asked me in all seriousness, after I had told her I intended to write an essay on the subject. An honest question, which remained unanswered.

What would our *Homo sapiens* ancestor, who was afraid of cave lions, say? No doubt he would rejoice, not at what we have done with the Earth, which linked everything to him, but at the language, however imperfect, which is finally allowing us to name what was once unsayable.

¹ In 2020, "Pour le futur Montréal" became the "Coalition étudiante pour un virage environnemental et social (CEVES)". The organization now includes students from high school to university.

In fact, I must admit that my bit of background is anachronistic. It goes without saying that psychologists did not exist, and our forefathers were not so eloquent. Their discomfort was expressed in sound and onomatopoeia.

“Munummunum. Munummunum! Grrr!” (imitating the horrifying lion) “Aaaah!” (terrified expression) “Brrrr...” (We imagine our protagonist throwing himself to the ground, protecting his head with both hands.) “Sniff! Argh!” (He rolls into a ball, feigning agony, then gets up, bangs into the trunk of a tree, and looks with mixed hope and uncertainty at the speaker.) A prehistoric psychologist, assuming there is one, would watch the scene in confusion.

Is our friend angry at the tree he has stubbed his toe on? Is he angry because someone stole the remains of his reindeer carcass? Or has some beast devoured it?

The expression of suffering is not something to be mocked. And emotion, however deeply felt, can only be echoed if there are words to describe it.

But words don’t solve everything. You have to know how to use the right words; you have to agree on their meaning. In the vast and complex world of mental health, this is not easy.

In a game of charades, everyone uses up their vocabulary trying to decide if the dimwitted look on your face is that of a *moron*, an *imbecile*, or an *idiot*. If there is a linguist among you, however, he or she might want to use this forum to point out the clear historical distinctions among these three terms. Indeed, what is a slur today was a medical term one hundred years ago for people with below-average IQs.

At the beginning of the 20th century, the Association of Medical Officers of American Institutions for Idiotic and Feeble-Minded Persons² sought a way to categorise people with below-average IQs, which was itself a recent concept.

Morons were the brightest, with an IQ between 50 and 70, followed by *imbeciles*, with an IQ between 25 and 50, and then *idiots*, with a score below 25³. All three terms later acquired the meanings we know today.

Following progressive objectives, the organisation became the American Association on Mental Retardation in 1987. Another setback: The term “mentally retarded” almost immediately entered common parlance, with

² This professional organization became the American Association on Intellectual and Developmental Disabilities (AAIDD) in 2007.

³ DOLL, E. A., “Idiot, Imbecile, and Moron”, *Journal of Applied Psychology*, vol. 20, no 4, 1936, p. 432.

a pejorative connotation. Once again, scientific jargon was diverted from its original meaning and turned into a schoolyard slur.

Eco-anxiety has suffered a similar fate. In everyday conversation, “eco-anxious” is an adjective used to describe anyone who insistently raises concerns about the environment. A little, a lot, immensely, insanely, not at all: How concerned are you about the fate of the planet? Eco-anxiety has become an arbitrary barometer of ecological awareness. But by definition, the eco-anxious person is worried... to the point of madness. According to the American Psychological Association (APA), he or she has “a chronic fear of environmental disaster⁴.”

This was the conclusion reached by a March 2017 APA report highlighting the urgent need to recognise the effects of climate change on psychological health. American psychologists argue that the uncertain and changing environment in which we live is a legitimate cause of distress, and that increasing numbers of people are likely to suffer as we progress through the Anthropocene⁵. In its original definition, then, eco-anxiety is a disorder the APA has recognised as valid. “Qualitative research shows that some people are profoundly affected by feelings of loss, helplessness, and frustration due to their inability to feel that they are part of stopping climate change,” the report states.

Some call it “eco-anxiety”; others, like the American psychiatrist Lise Van Susteren, call it “pre-traumatic stress,” as opposed to post-traumatic stress disorder (PTSD). People with PTSD are constantly reminded of the past. They are pursued by images, impressions, memories, and recurring dreams that force them to relive a traumatic event. Pre-traumatic stress occurs before the trauma. People have images in their minds corresponding to the scientists’ warnings. Anxiety arises when someone envisions the inevitably catastrophic trajectory of the future. This state is accompanied by a sense of often unmanageable urgency. Worries and anxieties can become debilitating, and in some cases, even paralyzing. It is difficult to be proactive when you are panicking, when you’ve stopped eating, when you’ve stopped sleeping. Yet more and more people are being diagnosed with disabling environmental anxiety.

⁴ CLAYTON, S., MANNING, C. M., KRYGSMAN, K., SPEISER, M., “Mental Health and Our Changing Climate: Impacts, Implications, and Guidance”, Washington D.C., American Psychological Association, and ecoAmerica, 2017.

⁵ "Anthropocene" is the term proposed in 2002 by the chemist and meteorologist Paul J. Crutzen to designate a new geological period characterized by the consequences of human activity on the planet's ecosystems. The Anthropocene coincides with the beginning of the industrial revolution. The term entered the *Larousse* in 2016.

For example, a fascinating story of a 17-year-old boy was documented by a doctor in Melbourne, Australia, some years ago⁶. The young man, who became delusional and depressed, refused to drink water because he believed he was hastening the deaths of millions of people by depriving them of this resource due to climate change. This case, considered the first of what researchers have termed “climate change delusion⁷,” was obviously unusual. But the Australian doctor noted nonetheless that his clinic was overflowing with children suffering from some form of climate-related anxiety and a generally gloomy perception of the future.

To be sure, Australia has not been spared its share of natural disasters—forest fires, floods, and droughts. The American scientist and best-selling author Jared Diamond sees all the signs of a society in collapse⁸. Is it the repeated spectacle of such devastation that generates so much bitterness in the younger generation? In any case, a quarter of Australian children, aged 10 to 14, believe that they are going to witness the end of the world⁹. One in four children is preparing for the apocalypse. Is it not absurd to begin one’s life with a sense of imminent doom?

Children and adolescents grow up with a vision of an uncertain future over which they have no control. At a sensitive time in their development, as they seek to make sense of the world they live in, they are told that they will have to deal with the climate-change crisis, undoubtedly the greatest challenge humanity has ever faced.

Is this normal?

Eco-anxiety is not listed in the fifth edition of the APA’s *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5), the bible of mental health—nor is it listed in any other condition related to environmental destruction. But if it were to be added to the list of disorders, syndromes, and other illnesses, would we still consider those who suffer from it to be sick people in need of treatment? Would we see them as people we can bring back

⁶ SALO, R., WOLF, J., “Water, Water, Everywhere, Nor any Drop to Drink: Climate Change Delusion”, *Australian & New Zealand Journal of Psychiatry*, 2008.

⁷ In psychology, a patient is said to be suffering from “delusion”, or “psychic delirium”, when he or she persists in believing an idea without foundation, even in the face of proof of its irrationality. These “false beliefs” can be constructed in the realm of the possible (the impression of being followed, the fear of adultery by a spouse, etc.) as well as in the realm of the impossible (for example, the conviction of having been cloned).

⁸ DIAMOND, J., *Effondrement, Comment les sociétés décident de leur disparition ou de leur survie*, Paris, Éditions Gallimard, 2006.

⁹ According to a survey by the Australian Childhood Foundation: GODDARD, C., MITCHELL, J., TOCCI, J., “Children’s Fears, Hopes and Heroes: Modern Childhood in Australia”, 2007, p. 7.

to their senses with a little therapy and a few anti-anxiety drugs, without worrying that more and more people are suffering from the fact that the world is withering away before their eyes? Without even worrying that their fear, even if it is experienced as unhealthy, is nevertheless well-founded?

It would be an easy solution. And humans like easy solutions.

And ideally, disposable ones.

Chapter 5
Anxious times: From the nuclear bomb
to the climate-change bomb

[Excerpt chapter 5, pages 59 to 62]

Sapiens has grown up. He has become modern.

His fear of the cave lion? Ancient history!

It must be said that this species of voracious feline disappeared with the last ice age. To protect itself from its modern cousin, *sapiens* developed formidable weapons and ultra-secure shelters.

But fear did not die with the cave lion. It has changed. It has shed its snakelike skin and put on the clothes of humans, and even of technology. After all, what is a lion compared to the atomic threat? What use are our primitive reflexes in the face of absolute and ubiquitous fear? How can we flee or fight an ever-present threat that thwarts the primitive survival-instinct mechanisms of the human brain?

Our power to destroy ourselves has become our greatest fear. In the aftermath of the nuclear attack on Hiroshima, the editorialist and author Albert Camus did not hesitate to publicly condemn what, for his colleagues, still appeared to be a victory of science. “Mechanical civilisation has just reached its last degree of savagery,” he wrote in his editorial in the newspaper *Combat* on 8 August 1945. This was an idea he continued to nourish, and which led him to publish a brilliant article in 1946 entitled “The Century of Fear¹⁰.”

The seventeenth century was the century of mathematics, the eighteenth the century of physical science, and the nineteenth the century of biology. Our 20th century is the century of fear. Some will say that this is not a science. But first of all, science has something to do with it, since its latest theoretical progress has led it to deny itself, and since its practical improvements threaten the entire Earth with destruction. [...] What is most striking about the world in which we live is first of all, and in general, that most men (except believers of all kinds) are deprived of a future.

The world, it is true, was already badly wounded.

¹⁰ CAMUS, A., *À Combat. Éditoriaux et articles 1944-1947*, Paris, Éditions Gallimard, 2002.

Has the century of anxiety supplanted the century of fear? Anxiety, the new “disease of the century,” is the subject of documentaries, books, special programmes, conferences, etc. One concern is that anxiety is rising among young people. In Quebec, in six years, the proportion of high school teenagers who say they have been diagnosed with an anxiety disorder has increased from 9% to 17%¹¹.

Ask a specialist—a psychologist, a psychiatrist, a sociologist—if anxiety (in all its forms) is on the rise today; they will all tell you the same thing.

Yes, but no, but yes. In that exact order!

Yes: There are more cases reported.

But no: This does not necessarily mean that anxiety is on the rise. In fact, perhaps we are diagnosing what was not diagnosed in the past?

But... considering the contemporary era, the overabundance of choice and information, the lack of a structuring framework, the disappearance of role models, the redefinition of gender and gender roles, the expectations of performance, the overprotection of children, and the unpredictable nature of risks, it is quite likely that anxiety is on the rise.

Yes. But no. But yes.

What if the eco-anxious were in fact just anxious people looking for a prefix to better define themselves? So there would be the “nuclear-anxious” of the 1960s and the “terrorist-anxious” of the early 2000s?

Is the climate crisis and the fear it arouses merely a contemporary version of the tragedies of the past? Is that all there is to it? Do great panics hook themselves onto different historical periods, following after one another like clothes on a clothesline? Do they become parched over time? Are they then unhooked and put away, so new ones can be constructed?

After all, where did the nuclear anxiety of the Cold War go? Baby boomers and their elders still have vivid memories of it. But what about contemporary generations? For most, it’s a danger of the past, one that’s mentioned only in history books. Yet the nuclear bomb has not ceased to exist. According to the Arms Control Association, about 13,500 nuclear weapons remain in the world¹². The threat is still there, but it has diminished—in the

¹¹ According to a survey by the Institut de la statistique du Québec of 62,000 youth : Quebec Survey on the Health of Secondary School Youth 2016-2017, Results of the Second Edition, Volume 2, Social Adjustment and Mental Health of Youth, Quebec City, Government of Quebec, 2018.

¹² According to the report "Nuclear Weapons: Who Has What at a Glance", published in August 2020 by the Arms Control Association, Russia and the United States have 90% of these weapons.

early 1980s, the number of nuclear weapons was estimated at 70,000—and it's theoretically under control. It's a risk we have learned to live with. Can we assume that this is also what will happen with the climate crisis and the fears it raises? Both threats are unprecedented.

[Excerpt chapter 5, pages 65 to 67]

As it was during the Cold War of the 1950s and 1970s, “the notion of risk is at the heart of eco-anxiety,” says Valérie de Courville Nicol, a professor of sociology at Concordia University in Montreal. She has been studying fear for years through a sociological lens. At the time of our meeting, she was completing her third book on the subject, this one on the sociological and contemporary dimensions of anxiety and the American culture of self-help¹³. “Anxiety is not just an individual psychological phenomenon. It is shaped and nurtured by a sociological context.” These times are anxiety provoking for those who are seeking their bearings.

Nicol identifies six types of anxiety in three areas of action. For an understanding of eco-anxiety, the most relevant are in the cognitive field, which includes generalised anxiety and existential anxiety.

Generalised anxiety has to do with our perception of reality. It expresses the difficulty of distinguishing between truth and falsehood, danger and safety. To deal with it, we must “learn to become aware of our cognitive patterns and transform them so that they are more helpful.” We distance ourselves from our thoughts in order to better deconstruct them... and reconstruct them.

Existential anxiety interrogates the very nature of existence. It reflects the difficulty of giving meaning to one's life and accepting one's mortality amid the quest for selfhood.

“In a context of the loss of traditional values, individuals are under a lot of pressure to build a life path that reflects who they are,” notes the sociologist. “We know we have only one life. If we don't make the right decisions, we feel responsible for having missed our only chance.”

The current ecological crisis is also unique in that we all have the capacity to act. To varying degrees, we are all responsible for the danger we face. This makes the situation not only frightening, but also guilt inducing.

¹³ To be published by Routledge in 2021. Working title: *Anxiety in middle-class America: self-help for emotional turmoil in late modernity*.

And “the more we feel responsible for an anticipated effect, the more anxiety we experience,” says Valérie de Courville Nicol.

In addition to fear, there is the ability—or lack thereof—to do something. Because eco-anxiety involves a paradoxical feeling of control and loss of control. The difficulty, again, is that the climate threat is larger than nature—or rather, as large as nature. We can take action against this type of danger, but the effects of such action are difficult to measure. This creates even more anxiety among people who are already trying to get a grip on reality.

This is also what Ulrich Beck suggested more than three decades ago, the researcher notes. If he were still alive, this German sociologist would no doubt be bitterly ambivalent about the continued relevance of his ideas. In 1986, under the cloud of Chernobyl, he published an essay entitled *Risk Society*. In it, he distinguished between industrial modernisation and a new modernisation, which he describes as “reflexive,” into which humanity is tilting.

If industrialisation has produced a lot of wealth, and if that was its objective, the present era is scarred by this so-called progress, whose unforeseen and catastrophic effects are beginning to be recognised. In this new era, Beck argues, the threat is no longer external to society, but self-constructed. It is impossible to measure the extent of the damage or to predict its long-term effects. Systemic forces beyond our control are at work, but there is no longer any way to decipher and make sense of them.

“An ever-greater destructive force is being unleashed, to a degree that exceeds the human capacity for representation,” writes Ulrich Beck. We have allowed its progress to advance unchecked, and created a monster far more terrifying than Frankenstein’s. And now we are afraid. The sociologist continues: “The risk society is characteristic of a social epoch in which solidarity from anxiety arises and becomes a political force.”

Chapter 11

For our children

[Excerpt chapter 11, pages 138 to 144]

Dysfunctional families are the bread-and-butter of the mental-health field. An alcoholic, drug-addicted, violent, or incestuous parent sabotages your life from the start. Every specialist knows this. Unlike eco-anxiety or environment-related psychological suffering, this is something they are used to working with. According to Lise Van Susteren, however, eco-anxiety is comparable to those disorders in some ways.

The psychiatrist cites the children of alcoholics as an example. Children who, because they can only rely on themselves, become adults before their time.

Their “courage” is praised, because from the outside they appear to function well. But on the inside, it is often a different story. They feel abandoned, angry, misunderstood, overwhelmed, and alienated from the culture of other children. Overburdened with worries, they find it hard to relax and feel happy. Having been deprived of a “normal” childhood, they may have difficulty establishing meaningful relationships and dealing with authority as adults, and they harbour a cynicism that inhibits commitment. I don’t see how... young people who are desperate to awaken the world to the peril of climate change we face can escape similar difficulties in the face of adult inaction and irresponsibility¹⁴.

The image is strong. Too strong?

Yes, if you equate these two completely different situations.

But no, if we remember their basic elements. The feeling of being “abandoned, angry, misunderstood, overwhelmed,” the struggle to “relax and feel happy,” the cynicism in adulthood: All of a sudden, the comparison seems very fitting.

“I have seen children suffer psychologically and emotionally at the hands of adults,” writes Lise Van Susteren in her report to the court. “I know abuse when I see it. And I see it. The climate crisis perpetuated and

¹⁴ VAN SUSTEREN, L., *Expert Report*, (Case 6 :15-cv-01517-TC Document 271-1), United States District Court, District of Oregon, June 2018, p.21.

supported by the federal government is an intolerable assault on our children that amounts to child abuse¹⁵.”

By passing on the burden of the climate crisis to future generations, governments (notably the U.S.) are asking young people not only to mature more quickly, but also to become heroes. Because this is about saving a planet.

A great many young people are anxious and seeking solutions, even as that little inner voice keeps reminding them that they shouldn't have to play the superhero. Because everyone knew. For decades, adults have been consciously putting their children's future at risk. If only they could silence that little voice, that grating, annoying voice...

That young people's mental health is particularly vulnerable to the effects of climate change is one of the most powerful arguments in Lise Van Susteren's testimony. It's the one, I have to say, that resonates most strongly with me. Out of consideration for my own children, of course, but also for the thousands of others I encounter on a daily basis. For six years I have been running a science magazine for teenagers. For six years I have been sharing, discussing, and reflecting on the concerns, aspirations, fears, and hopes of this somewhat unloved and certainly misunderstood generation. I have seen this fear and these feelings of abandonment and powerlessness that the psychiatrist describes grow, year after year, among the young readers of our magazine *Curium*. We receive so many questions at our editorial offices about the issue of climate change. Confessions, too. Like those of Elsa, the young girl at the beginning of this book.

My idea of youth is very different from the usual one. Adolescence, it should be remembered, is a recent invention. This elastic concept was born of schooling in the mid-19th century, which allowed students, grouped for the first time with others of the same age, to forge a "youth" culture and an identity at the margins of the dominant culture.

This break was immediately viewed with suspicion. With the increasingly rapid evolution of our awareness, these educated minds in their prime became viewed as indispensable for the future. But they remained a group apart, who thought and acted differently, and who proved to be less conformist than previous generations. Thus, explains the psychiatrist Patrice Huerre, author of the book *L'Adolescence n'existe pas: histoire des tribulations d'un artifice*, "In the 19th century, with the triumph of reason, the idea of an irresponsible youth developed."

¹⁵ *Expert Report*, p.24.

The adolescent became an object of study for psychologists in the following century. Youth: a disease to be cured? Although completely disproved by recent advances in neurobiology, the label “troublemaker” nevertheless continues to be attached to the youth of the present generation. The landscape remains hostile for the unruly age.

The latest research on the subject tells us, however, that far from being defective, as was previously thought, the adolescent brain is endowed with exceptional plasticity, which gives humans dazzling learning capacities into their mid-twenties. In order to develop to its full potential, this young brain must be nourished. It is up to us, as a society—institutions, parents, teachers, and others—to provide the raw material that’s necessary for it to flourish.

This raw material certainly encompasses knowledge and social achievements, but it’s also shaped by the context in which learning occurs.

“The preoccupations circulating in society are at the heart of the anxieties of young people who are in the process of constructing an identity,” the sociologist Valérie de Courville Nicol pointed out to me.

This is where the problem lies. Although crucial in the formation of identity, the development of the brain, a fascinating mechanism, can easily be disrupted. Sometimes it only takes minor disturbances, such as anxiety-provoking situations, to disrupt its functioning.

If a mechanic were to approach a brain “damaged” by stress in the same way he would a car, he would quickly conclude that certain parts need replacing. Without much hesitation, he would locate the problem in the prefrontal cortex. That’s where it all happens.

Reasoning, decision-making, problem-solving, coordination of executive functions, strategising: This is the prefrontal cortex.

The problem, says the psychiatrist’s report, is that “adverse conditions, brought on by external emotional, sensory, or social stressors, can permanently affect the prefrontal cortex. Exposure to ‘climatic trauma’ during this period of cognitive development has the potential to cause irreversible damage¹⁶.”

The American Academy of Pediatrics reports that children and adolescents are severely affected for long periods of time by extreme weather events. Nearly two years after Hurricane Charley hit Florida in 2004, American researchers were still observing high rates of post-traumatic stress in young victims¹⁷. A child who loses his or her home, school, or

¹⁶ *Expert Report*, p. 21-22.

¹⁷ LA GRECA, A. M., SILVERMAN, W. K., LAI, B., JACCARD, J., “Hurricane-related exposure experiences and stressors, other life events, and social support: Concurrent and prospective impact on children’s persistent posttraumatic stress symptoms”, *Journal of Consulting and Clinical Psychology*, 2010.

neighbourhood is also deprived of the reference points that have served as a foundation for cognitive development. And if this child is forced to relocate, the healing process will take still longer... sometimes an extremely long time.

In some cases, the trauma is so great that it shakes the genome with a bang, awakening otherwise dormant genes. Epigenetic research has in fact shown that intense stress experienced at an early age (such as war, forced migration, aggression, or sexual abuse) can alter the expression of our genes. Worse, these “stress genes” can be passed on to future generations. Even to offspring who haven’t themselves experienced any form of trauma.

A grandfather of the future might tell his grandchildren how, when he was eight years old, Cyclone Sidr forced his family to leave Bangladesh in 2007 to settle, by a combination of circumstances, in Montreal. But he will probably avoid revealing that he subsequently developed post-traumatic stress disorder. Instead, he will dwell on the story of meeting his sweetheart, an event this disaster paradoxically brought about. He won’t mention his recurring nightmares, nor the stormy days when he won’t leave the house. And his granddaughter, who is listening to him, is unaware that Grandpa’s story, which she is hearing for the first time, has left its mark on her own genome.

Unless this granddaughter is not born. Because Grandpa and Grandma, in light of what they have seen or experienced, and of the future predicted for them, have thought it wiser not to have a child. This is another singularity of our time: the hesitation of young people to bring new life into the world, not knowing what kind of existence they will be able to offer. How can I ensure the safety of this unborn child, considering the nightmarish scenarios of the future that are presented to us? How can I justify this choice, knowing that putting another human on the Earth means adding a “CO2 producer?”

Lise Van Susteren calls these young people “climate Cassandras.” In Greek mythology, Cassandra is a character who is given the gift of seeing the future by Apollo. But when she is unmoved by Apollo’s divine beauty and refuses to offer herself to him, he is angered and makes sure that no one will ever believe her predictions. Young people who worry about their future, the psychiatrist argues, are climate Cassandras because they envision a doom that everyone else refuses to see. Does this mean that for the psychiatrist, people who suffer from eco-anxiety are clairvoyant?

“If you don’t have eco-anxiety, you’re not listening. Is it a mental disorder to worry about a threat? Or to be concerned that we are not doing enough to prevent the worst from happening?” she asks me.

No, certainly not. For Lise Van Susteren, the real trouble is on the other side of the spectrum: denial. People tend to suppress their fears about the climate crisis because “it’s too big.”

“People are very stressed. When my patients first come to me, they don’t always tell me the real nature of their concern. Often, in fact, the deeper the concern, the more they avoid revealing it. They prefer to talk about superficial matters: a roommate’s remark, a boss’s reprimand, their insomnia. It’s when you start to peel back the layers covering those first confidences that you discover the deeper concerns. One day, in consultation, they’ll tell me that it’s very hot, that the temperature is weird. So I’ll take advantage of this open door to ask them if they are concerned about the temperature, or even the climate in general. Then they’ll let out an ‘Oh, my God!’, slumping in their chairs and rolling their eyes. ‘It’s too big. It’s just too much.’ It eats them up inside.”