

**Thème**

This time, I got them / I managed to get them! The Pyramids. I shot them with the 800 mm lens and you can clearly see their easily / distinctly / immediately recognisable shape, just on the edge of the sprawling city of Cairo // so their immediately recognisable shape can clearly be seen, just on the edge of.... It is 9pm; I'm going through the photos in my cabin, looking for the pictures that I'm going to post the following day when suddenly the alarm goes off / starts blaring. I rush out and bump into Peggy and Shane.

"Fire alarm!" the commander says. The flashing red lights leave no room for doubt / are unmistakable / unambiguous. My heart starts racing – honestly? The ISS has been running smoothly for twenty years and is catching fire during *my* mission? Is it really? Shane sets the pace / spurs us into action / takes the lead: the first thing to do / we have to do is go and check the Soyuz spacecraft, which serves as a life-raft / which is used as a life-raft. There is no smoke on the way. I am sent several months back, when we rehearsed, over and over again, the emergency procedures which we hoped we would never need. Where has my lucky star gone?

To conduct an emergency drill

[https://en.wikipedia.org/wiki/List\\_of\\_commanders\\_of\\_the\\_International\\_Space\\_Station](https://en.wikipedia.org/wiki/List_of_commanders_of_the_International_Space_Station)

**Synthèses - Quelques pistes et remarques**

- > S'il vous plait, reprenez les conseils donnés dans les corrigés précédents et lors des reprises en cours !
- > Il faut que vous ayez une idée claire de ce que le dossier, dans sa totalité, dit sur le sujet. Vous devez pouvoir résumer votre synthèse en une phrase qui répond à la question posée dans l'introduction
- > Vous négligez (complètement pour certains) le document iconographique. Entraînez-vous.

**Centrale / X/ENS/ESPCI** Voir le tableau synoptique

A few suggested headlines / Opening sentences / introductions

From Baby boom to birth rate crash

Have babies, for gov's sake!

To be free or to be three

- During his campaign, Donald Trump described himself as the next "fertilisation president". Still, in the USA and across the world, the fertility rate is decreasing drastically, and concerns are emerging about the possible consequences.

- The world population sharply increased after WWII which provoked a baby-boom worldwide. But the trend has now started to reverse leading governments to question their birth policies.

- People worry about the future of their country and more generally about what humanity and Earth will face because of a decreasing birth rate.

**I/ The birth rates are falling and population will age then shrink...**

**II/ ...which will cause significant shifts and raises concerns...**

**III/ Yet this requires calm collective planning and not short-term (populist) rushed solutions**

**CCINP:**

Space exploration or space (over) exploitation?

Can the new age of space exploration hold its promises?

- 1/ Space will offer tremendous new opportunities...
- 2/ ... if its exploration and exploitation is sustainable...
- 3/ ... and only if there is increased collaboration and cooperation

### **I. The future of space exploration has never seemed so bright**

>> More and more players (old ones and lots of new ones) in the space race: increased competition between countries and private companies

- >> The latter lowering the cost of space exploration > even more potential
- >> Resources are plentiful / abound in space (moon and asteroids)
- >> Even space tourism is now possible, making many people's dreams come true

### **II. Yet the current model of space exploration does not ensure sustainability**

>> The space industry needs to be sustainable: some private companies may not offer long-term guarantee of their profitability (rely too much on tourism), good working conditions etc. New players need to start on sound principles

>> There needs to be a sustainable use of space (or could end up with same critical problems as on earth): exploitation of resources, management of debris...

### **III. So there needs to be increased collaboration and cooperation**

- >> The private and public sectors need each other ( NASA and Space X are a case in point)
- >> Space cannot be left to turn into the new Wild West (Gold Rush). It cannot be the fight for the survival of the fittest
- >> Cooperation between countries towards a common goal, in spirit of the "golden age" of space exploration is necessary

## [The Underpopulation Bomb](#)

Underpopulation requires levelheaded thinking, just as overpopulation once did.

[The Progress Network](#) and [Emma Varvaloucas](#) Mar 26 2026

With the passing of academic Paul Ehrlich on March 13 has come what might be called obituaries of the "good riddance" genre, not in regards to the man himself but to his doomsaying.

Ehrlich, who wrote the 1968 bestseller *The Population Bomb*, is most famous for his prediction that the world would break under the weight of its growing number of inhabitants. Perhaps his most well-known prophecy of catastrophe was that hundreds of millions would starve to death in the '70s and '80s, but some of his others were no less extreme: He thought, for instance, that social and environmental turmoil would lead to the dissolution of England by 2000.

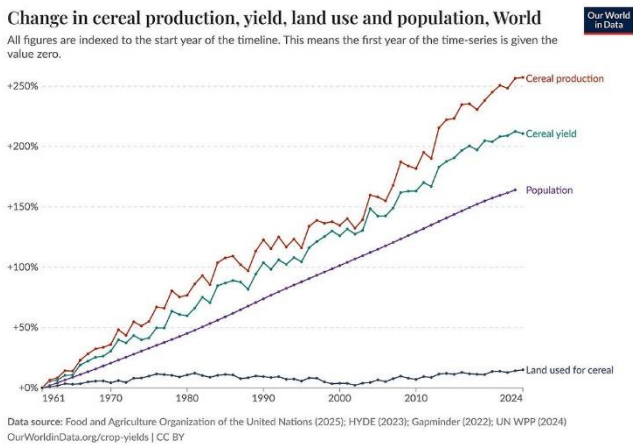
For many in the progress movement, his work is a kind of exemplum of what happens when you bet against humanity's capacity to solve problems. Rather than mass famine, agricultural advancements during the Green Revolution led to super-high-yield harvests. Today, famines are predominantly considered man-made, in that they have less

to do with food production and more to do with conditions created by war and conflict.

Ehrlich's work laid the foundation for the environmental movement, so it makes sense that, on the left, overpopulation fears have lived on to this day as climate change concerns, albeit tempered somewhat from 10 years ago, when warming figures seemed apocalyptic.

On the right, they've been, as Progress Network member Gregg Easterbrook wrote recently, "transmuted" into worries about *underpopulation*. Elon Musk, baby daddy of 14 children, speaks about population collapse resulting from declining fertility rates as a civilizational threat. Meanwhile, pronatalism is growing as a movement, including within progress circles, which are saturated by economists. (The central concern is that after the global population peaks sometime this century, fewer people will equal less economic growth, historically the key lever behind all sorts of global

quality-of-life upgrades, from literacy to sanitation.)



The Trump administration has taken up the pronatalism banner, soliciting a variety of ideas—from a “motherhood medal” awarded to moms with more than six children to a \$5,000 baby bonus—with the hopes of producing another boom. Making it easier to have a family also appeals to many on the left, who see space under the pronatalism umbrella for big-government ideas to thrive.

The Parable of Ehrlich is usually told as a cautionary tale against dire predictions driving policy, especially when governments enter the treacherous business of personal decision-making. *The Population Bomb* did contribute to a worldwide obsession with curbing population growth. Some of Ehrlich’s proposals were broadly fine, like increasing access to contraceptives. But others were inhumane. He infamously described sending emergency food aid to India during a famine in the late 1960s as “hopeless,” and many connect his work to mass forced sterilization campaigns instituted by governments from China to Mexico.

Now that underpopulation rules the day, we would do well not to mimic these mistakes and policies, which are at best wasteful—other countries’ experiences show that cash bonuses, for instance, do little in the long-term, as much as I’m sure parents would love one—and at worst evoke *The Handmaid’s Tale*. We should be particularly cautious when the project of having more babies is married to a 1950s-nostalgia of women barefoot and pregnant in the home.

There is a second layer to the Ehrlich story, however. As Stephen Heins writes, “The Green Revolution did not appear

out of nowhere. Its roots lay in decades of agricultural research, especially in the United States,” a hefty portion of it government-led and funded. Governments can do a lot of good when the right levers are pulled. So when it comes to pronatalism, what’s a well-meaning one to do? It’s not just the Americans asking.

For one, we should at least consider the possibility, as Easterbrook points out, that people simply don’t want a lot of kids anymore. Minds could change in the future, but we may need to start accepting that fewer kids will remain the norm, bonus checks be damned.

Such a future need not be catastrophic. There are upsides to a world that has arrived naturally at a smaller population—lower energy demand, for one, which will make climate change easier to handle. We’ll “age out” of crime, as I wrote about a few weeks ago. The portion of the world’s women who are formally employed, currently less than half, might rise substantially, cushioning families in the developing world against poverty. Who knows, in a few decades, journalists may be writing articles about how the “grandparent boom” is easing the childcare burden.<sup>1</sup>

Other concerns could be mitigated, too. A shrinking workforce in the developed world could be filled in the mid-term with immigration and the long-term with AI and robotics, something we’re scared of today that may turn out to be a lifeline later on. Medical advances will likely mean that our lifetimes, and the number of healthy years in them, will be extended; we’ll work longer, but with more flexibility. Scientific breakthroughs in the fertility field could be impactful as well.

For now, we can at least focus on the practical over the hyperbolic. An interesting new paper out of Arizona State University suggests that one thing the Trump administration could do to encourage young people to have kids is dial down the volatility.<sup>2</sup> Its authors find that across 140+ countries, those confident about their nation’s future are more likely to procreate, regardless of whether or not on-the-ground economic conditions have actually improved.<sup>3</sup> In other words, if families feel that they can bet on the future, they will. To boost this sense of security, the authors suggest governments go back to basics: job security programs, social insurance, and affordable housing.

### Astronaut Thomas Pesquet: ‘Earth is just a big spaceship with a crew. It needs looking after’

A stint in space showed the ESA astronaut Earth’s fragility – and convinced him international cooperation is urgently needed

**Jon Henley**, *The Guardian*, Fri 2 Feb 2018

**With photos and videos** <https://www.theguardian.com/science/2018/feb/02/astronaut-thomas-pesquet-earth-is-just-a-big-spaceship-with-a-very-big-crew->

As divisions between them widen on Earth, space must be where countries show they can work together for a common good, France’s best-known astronaut has said in a powerful plea for international cooperation beyond the final frontier.

“From up there, the Earth seems so small, so tiny, so ... the same,” said Thomas Pesquet, who spent 196 days, 17 hours and 49 minutes in space on the 50th and 51st expeditions to the International Space Station (ISS), returning in June last year.

“There are no borders. Even your own country – it’s impossible to make out where France ends, and Germany begins. You just realise, very strongly, how much we all share the same problems, how much we are, all of us, almost identical.”

Pesquet, who arrived on the ISS six months after his friend, Britain’s Tim Peake, left it, said the joint project between the US, Russian, Japanese, Canadian and European space agencies was a potent symbol of how countries can cooperate

above the Earth even as below, interests diverge and tensions mount.

“Today no single country can go into space on its own,” he said. “The days when even the US could do that are long gone. And of course, up there, it’s very clear: you can only work together. You may have different views, but you have to get along. You have to make it work, every day, because you’re on the same spaceship.”

Pesquet, 39, said his spell in space – which made him so famous in France that a semi-serious campaign was launched for him to enter the presidential race – had brought home to him the urgent need for more, not less, international cooperation in the face of the planet’s “extraordinary fragility”.

Known as the overview effect, the experience of observing from 250 miles up the reality of Earth in the vastness of space has long been known to produce a cognitive shift in some astronauts. It transformed Pesquet into a militant environmentalist.

“I was already concerned about climate change and global warming,” he said, “but in a general way, like everyone else. But it’s happening on such a vast scale that from close up, it’s hard for us to grasp. In space, you take this huge step back. You experience it, fully. That really changes something.”

Throughout his entire half-year stay, Pesquet said, he had been unable to take a clear picture of Beijing. “You see the air pollution: it’s right there,” he said. “You see the river and sea pollution. You see the clear-cutting in the Amazon. You see how much smaller South America’s glaciers are than they were a few years ago.”

Viewed from orbit, what Pesquet called our “tiny, fragile planet, this delicate band of atmosphere that holds all of life, with nothing else all around it for billions of light years” prompted an obvious if startling comparison.

Satellite image of the eastern part of the Amazon Basin showing the contrast between the rainforest (dark green) and land cultivation (fishbone patterns). Agricultural areas once covered by rainforest are light green. Photograph: ESA

“The Earth is actually just a big spaceship, with a very, very big crew,” he said. “It really has to travel sensibly, be maintained and looked after properly, or its voyage is going to come to an end. That’s how it felt to me. That was my experience.”

The obvious need for international cooperation – despite “frictions” created, for example, by Britain’s vote to leave the

EU, Russia’s annexation of Crimea and Donald Trump’s decision to pull the US out of the Paris accords, which Pesquet has publicly dubbed irresponsible – has made high-profile projects in which countries “work visibly together” all the more important, Pesquet said.

While he regrets the Brexit vote, Pesquet, who was in London to take part in an embassy event marking France’s Night of Ideas, said he did not necessarily expect it to have a major impact on the Britain’s space programme beyond UK involvement in EU-run projects such as the Galileo GPS programme (whose back-up security monitoring centre, it was announced this month, is to be relocated to Spain).

The European Space Agency is not an EU body and Britain, Pesquet said, should continue to play its part. “I certainly hope so,” he said. “As things stand, Europe has always been a relatively small player in space – Japan has a bigger stake in the ISS on its own than all of Europe.”

International space strategy over the coming years, he said, would aim to “open the door” for commercial operators, such as SpaceX’s Elon Musk and Virgin’s Richard Branson, to start operating in “near space”, while the professional agency astronauts push further into “deep space”.

The primary objective would be to send a smaller ISS into an elliptical orbit round the moon. “The moon is the focus for now, not Mars,” Pesquet said. “It’s a sensible, immediate step. We can explore and research. Test the technology three days from Earth, rather than 300.”

But whatever happens, the voices of the astronauts will be important, he said. Like Peake, who gained a big UK Twitter following during his ISS mission, Pesquet was huge on social media in France (“Much bigger than Tim,” he grinned. “You should write that. At one point I had five million followers on Facebook.”)

He lists the benefits of space exploration: modern navigation, communications, satellite and weather forecasting technologies are all by-products of man’s journeys into space. Of the 50 variables scientists use to monitor the Earth’s atmosphere and climate, more than half can only be measured from space; there is vital scientific research, notably in medicine, that can only be done in space.

In the past, the job of astronaut was largely scientific. “It’s about a lot more than that now,” said Pesquet. “It’s about teaching, demonstrating what people, and countries, can achieve when they really work together.

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### « Space is always fascinating »

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Blind Magazine, December 19, 2022

*Earth’s vulnerability, climate change, and the scarcity of resources are among Thomas Pesquet’s pet peeves. For the French astronaut, Space can help meet these challenges. His stunning photo book, La Terre entre nos mains, is a result of his experience aboard the ISS and a true act of love and resistance.*

<https://www.blind-magazine.com/en/stories/thomas-pesquet-i-wanted-to-show-the-beauty-of-our-planet-as-well-as-its-fragility/>

Europe is panicking over its shrinking population -The Full Article - <https://wapo.st/4bJRHn1>

## Proposition de corrigé pour le texte d'opinion du format X

(Co-écrit avec Mme Marquardt, professeure en PC\* au lycée Janson de Sailly)

Behind the dry statistics about the falling birth rates, there are difficult life-changing and sometimes harrowing decisions taken by couples. One cannot help but empathise with Ms Lee's deeply personal and melancholy piece published on the CNN website in 2023. As she highlights, nearly every other Gen Zer says climate change may weigh as a factor in their decision to have children. So she is certainly not alone in pondering this heartbreaking choice. I don't really see eye to eye with her though.

I would respectfully point out to Ms Lee that not having children may not be the solution to the climate crisis which she seems to imagine. In fact, demography would not decline fast enough to limit global warming. Imagining the end – or even decline – of humanity as the solution to a planetary problem smacks of post-apocalyptic fantasy. This point takes me to the "climate anxiety" which she feels as she cannot sleep, watching videos of environmental disasters. This obsession with catastrophe is dark to say the least. Although it is shared by many in her generation, perhaps this morbid fascination reveals a general malaise which may best be addressed with a therapist, rather than by making radical decisions about the future. Thus, it seems to me that the mental health crisis among Gen Zers ought to be taken very seriously, but that it should be dealt with differently.

Perhaps the real problem lies elsewhere.

Ms Lee glosses over socioeconomic issues (and the inequality they engender) as well as "practical questions of financial security" very quickly. But these factors influence people's decision to have children much more heavily than climate change, especially later in life (Ms Lee says she is 21). The burden of student loans means that many adults have to delay milestones such as moving out of their parents' home, at least in the US. This in turn is emblematic of a housing crisis in many Western democracies. Housing is increasingly treated as an object of speculation rather than a human right, leading to shortages which politicians of many stripes keep mentioning, but fail to address. In 2025, 34-year-old Zohran Mamdani was elected mayor of New York with just such a pledge: increasing the number of rent-controlled apartments in his city. Whether he can deliver on this promise remains to be seen.

As a result, there must be other ways to address people's concerns when the time comes to make this life-altering decision. Ms Lee says she hopes for "drastic change, and soon", but fails to mention how this should be achieved. Gen Zers are often portrayed as politically apathetic because they tend to vote less than their elders. So the first action any Gen Zer can take is to show up on polling day.

Yet this cliché is unfair: the young are politically engaged, just in different ways. Protests against ICE in Minnesota in 2026 have shown that, when citizens organise and stand united, they can resist effectively. (As long-term mass protests such as the 1960s civil rights movement have shown), change may come frustratingly slow, but it is achievable. The prospect of disaster should never be an excuse for inaction – quite the opposite. It is also up to the young to invent new ways of becoming the change they want to see in the world.

One final point: Ms Lee seems to take one thing for granted: that having children is her choice at all. One year after the 2022 *Dobbs* decision removed federal protection for abortion, this seems a surprising oversight. Whenever birthrates decline, the threat of backsliding, especially on women's rights, is never far away.

So let us celebrate one thing: the fact that Ms Lee, and so many young women like her, have the freedom to choose – whatever choice they make. [595-625 words]