

# Depopulation or population decline? Demographic nightmares and imaginaries

*Stuart Gietel-Basten*<sup>1,2,\*</sup> 

## Abstract

Scientists are well aware of the major social, economic and cultural challenges brought about by population decline. However, we can often underestimate the more extreme interpretations of both the causes and the consequences of population decline in the popular discourse. In this commentary, I explore some of these toxic narratives, and speculate about how they may be linked to what appears to be a prevailing populist/ethno-nationalist view of population grounded in political tropes, rather than in scientific reality. Using Armitage's (2021) concept of "demographic imaginaries", I argue that much of this public discourse serves several vital purposes: to try to simplify a complex issue; to try to "unify"; to try to blame and scapegoat; and, ultimately, to try to negate the obligation to make tough, complex political and policy decisions. I also argue that scientists working in the field of population decline need to be more aware of these tropes, and should make more active efforts to ground the discourse of population decline in science and reality. I conclude that a bottom-up approach to responding to population decline may be the most fruitful avenue for progress in the future.

**Keywords:** population decline; depopulation; conspiracy; fertility; migration; Twitter; social media

## 1 Depopulation as a conspiracy

Frenzied talk of depopulation and/or population decline in literature and in the popular press is nothing new. However, this issue appears to be very much top of the agenda at the current point in time. In the public discourse, much of this discussion

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<sup>1</sup>The Hong Kong University of Science and Technology, Kowloon, Hong Kong, China

<sup>2</sup>Khalifa University, Abu Dhabi, UAE

\*Correspondence to: Stuart Gietel-Basten. [stuart.gietelbasten@ku.ac.ae](mailto:stuart.gietelbasten@ku.ac.ae)

appears to be fuelled by one man. Prior to taking on a new HR role at a social media company, electrical engineer Elon Musk posted several tweets on the topic that garnered a tremendous amount of attention. On 8 May 2022, in response to an article on population decline in Japan, Mr Musk tweeted: “At risk of stating the obvious, unless something changes to cause the birth rate to exceed the death rate, Japan will eventually cease to exist. This would be a great loss for the world”. On 26 August 2022, for example, Mr Musk wrote: “Population collapse due to low birth rates is a much bigger risk to civilization than global warming” (followed up by a second tweet saying “Mark these words” to avoid any ambiguity). This fear of global civilisational collapse has been a theme for Mr Musk. For example, at the 2021 Wall Street CEO Summit, he proclaimed: “If people don’t have more children, civilization is going to crumble, mark my words” (Thomson, 2021).

The responses to these tweets were, if I may say so, rather predictable. In the popular discourse, population is always something that there is either too much of or too little – this is a common feature of how population issues are treated in literature (Shriver, 2003). The simple juxtaposition of the growth of human populations on the one hand and habitat degradation and declining animal numbers on the other makes for an appealing, simple narrative that ignores the complexities of sustainable development.

Similarly, it is often argued that if fewer babies result in fewer people, economic stagnation, geopolitical decline and, ultimately, civilisational collapse will follow. Without meaning to sound smart or condescending, most social scientists (and, indeed, most people who have, or are contemplating having, children or who have migrated) have a pretty clear understanding of the underlying reasons for population decline. As demographers, we know that population decline comes about through a combination of low fertility and out-migration. Low fertility – or, more precisely, very low fertility – tends to occur when institutional systems malfunction, making it difficult for people to achieve their reproductive aspirations. Meanwhile, if there are better opportunities elsewhere, and if people can and want to move, then they do.

However, according to many Twitter users, we have got this all wrong. As @SikhForTruth put it:

*“Everything going on today is meant to drive depopulation . . . From LGBTQ mania (they don’t reproduce), food shortages, genetically engineered viruses, abortion rights, and the introduction of deadly ‘vaccines’ - it all points toward one thing - more death. All in the name of health”.*

This tweet neatly encapsulates the views of many people on Twitter about some of the main modes through which depopulation is being foisted upon us, with some kind of vaccine conspiracy being a predominant trope. However, another explanation for why depopulation is occurring that was not mentioned by @SikhForTruth was brought up by @DaughtersOfEur, who stated: “It was never just going to be a few days . . . It’s been planned for years and years. Depopulation worldwide, with the White Race first to be Gen0cide” [*sic*].

So who exactly is behind this trend? Many people believe that it is part of the globalist conspiracy. According to @VerseCannon: “Depopulation is the true agenda of the global elites, the oligarchs and world leaders, #WEFpuppets”. Indeed, Klaus Schwab and Bill Gates frequently appear in this kind of narrative. At the same time, others allocate the blame to more ethereal actors. @Short\_88a reposted a video of a nun – a group not known for their contribution to the fertility rate – who “gives a grave warning regarding the depopulation agenda, and calls out the Pope as the spiritual leader of the evil globalists behind it all”. Meanwhile, in an unexpected twist, @AnandPanna1 posted a link to a Dr Lima Gaido and her exposition of “THE ELITE SATANIC DEPOPULATION AGENDA” [again, *sic*].

According to these narratives, the powers of these global elites to pursue their aims is almost limitless. In August 2022, a local news website in York announced the sad, sudden death of a man walking in a shopping street in the city. However, a tweet by “Vaccine Death Queen” of the screenshot of this headline was supplemented by two emojis: one of a vaccine, and the next of a face with a finger placed in front of the mouth whispering “sshh”. To ensure that the message of the tweet could not be misinterpreted, the words “Depopulation plan, going as planned” were added.

While some social media commenters have attributed depopulation to vaccine conspiracies, others have cited the so-called “Great Replacement” narrative: i.e., the racist notion that western elites are determined to replace whites by immigrants (Farivar, 2022). This “theory”, which links back to some of the tweets mentioned earlier, has “inspired” the perpetrators of white nationalist violence (for example, in the mass shootings in El Paso, Christchurch and Buffalo). However, it is not just in the white nationalist sphere that the issue of population decline has been raised. Concerns that differential fertility between and within countries will lead to the “depopulation” of one country or region and the growth of others are as old as the hills – and are, of course, fundamentally embedded in more universal notions of racism and eugenics. In India, for example, Hindu nationalists are currently weaponising a perception of “high Muslim fertility” (which is, in reality, not much higher than average fertility). In that country, radical priest Yati Narsinghanand urged Hindus to have more children, saying: “Otherwise they [Hindus] will be swamped by the Muslims by 2029” with a “real possibility that by 2029 India would have a Muslim prime minister and states would have Muslim chief ministers”. One of his fellow radical nationalist priests, Kalicharan Maharaj, took this view to an extreme, painting a picture of what could happen that is so stomach-churning that I simply cannot repeat it here (Scroll Staff, 2022).

No discussion of contemporary radical population policy is complete without reference to Hungary’s President Orbán, who likened the low fertility and population decline crisis to a war: “In all of Europe there are fewer and fewer children, and the answer of the west to this is migration . . . They want as many migrants to enter as there are missing kids, so that the numbers will add up. We Hungarians have a different way of thinking. Instead of just numbers, we want Hungarian children. Migration for us is surrender” (Walker, 2020).

These are, of course, rather extreme examples. However, they are joined by a “lite” version of demographic determinism, which paints a bleak view of the future as a consequence not only of population decline, but also of population ageing. According to this narrative, public welfare and health systems are going to collapse; GDP growth (that pinnacle of human achievement) is threatened; the global order will be destabilised; and so on. Population decline is presented as leading to civilisational collapse, in the same way that population ageing is presented as a “silver tsunami” (Calasanti, 2020). It is, for example, argued that because Japan has failed to respond adequately to depopulation, the country has “embarked on a road to ruin” (JT 2022). Even the *Shūkan Jitsuwa*, a tabloid aimed at Japanese men, found space between its pictures of nude women to proclaim that the nation’s future is *zetsuboteki* (hopeless) because of the low birth rate and rapid ageing. Indeed, in Japan, it is possible to log on to a “doomsday clock” that counts down until the very last child is alive in Japan. As the originator of this clock, Hiroshi Yoshida, an economics professor at Tohoku University, issued the following warning: “If the rate of decline continues, we will be able to celebrate the Children’s Day public holiday on May 5, 3011 as there will be one child . . . But 100 seconds later there will be no children left . . . The overall trend is towards extinction, which started in 1975 when Japan’s fertility rate fell below two” (Agence France-Presse, 2012). Unfortunately for Japan, since the above quote was published in 2012, the extinction day has been moved forward to 2966. Elsewhere, a 2014 study commissioned by the South Korean national legislature found that South Koreans could “face natural extinction by 2750 if the birthrate were maintained at 1.19 children per woman — assuming no reunification with North Korea or significant inflow of migrants” (Holodny, 2015). According to this study, Seoul will be fully depopulated by 2505, and Busan will have zero residents by 2413.

## 2 Debunking these claims

I don’t believe I am part of the globalist elite. I have never been invited to Davos. In fact, the closest I have probably gotten to this super-elite who are supposedly running the world was staying at the Bilderberg Hotel in Scheveningen (no relation). But in my own experience, I have not heard any convincing evidence that the processes of population decline are, indeed, part of a Catholic/Satanic/big pharma/WEF conspiracy to rid the world of hard-done-by white people. Vaccines have been scientifically shown to save lives, not destroy them. The man who tragically died in the street in York may have just had a heart attack. On the other hand, population decline is real; it is happening now; and it brings with it a wide array of challenges. Recently, however, the public discourse on this topic has become so tightly packed together with so many other concepts that it has become almost impenetrable.

Without wishing to sound pedantic, we may want to start unpacking this issue by drawing a distinction between population decline and depopulation. The former is a simple change in numbers; just like population growth. Thus, the definition of population decline is scientific, neutral and clear. By contrast, *Thesaurus.com* returns

the following synonyms for the term “depopulate”: desecrate, devour, ruin, depredate, spoliage, despoil, pillage, sack, lay low, devastate, plunder, waste, lay waste. Clearly, depopulation is very different from the scientific, neutral concept of population decline, as the term evokes the language of war, devastation and destruction. Thus, in a sense, depopulation seems much more closely linked than population decline to the conspiracy theories and fears presented in much of the popular discourse.<sup>1</sup>

In her recent work, Armitage (2021) introduced the concept of “demographic imaginaries”, which she defined as “dominant political tropes suggesting that imagination and ideology, rather than purely technical considerations around demographic data” have been “central to the creation and construction of the ‘population crisis’ [in Eastern Europe]”. She further observed that these “imaginaries” shape the “kinds of solutions and interventions that are being implemented in response” to the perceived crisis. This concept is, in turn, built upon the idea of “social imaginaries” as developed by Anderson, and, more recently, by Taylor (2002). For Taylor, these “imaginaries” are neither ideology nor theory, but are rather “background understandings” of how people “fit together, how things go on between us, the expectations we have of each other, and the deeper normative notions and images that underlie those expectations” (Steger, 2012).

This concept allows us to look at all of these claims through a different lens. First, we have a tendency to seek simplistic answers to complex issues. As the other papers in this special issue have pointed out, population decline (and population ageing) brings with it a large and complex set of challenges, including those associated with raising productivity to ensure that macro-economic growth continues (Lee et al., 2014); maintaining the sustainability of health and welfare systems (Lee and Mason, 2012); providing public services in sparsely populated areas (OECD, 2022) even as tax receipts dwindle; maintaining cultural heritage (Signes-Pont et al., 2022); changing zoning (Yu et al., 2022), urban planning (Hollander, 2011) and land use practices (Rodríguez-Rodríguez and Larrubia Vargas, 2022); and managing the impact on ecosystem services (Bruno et al., 2021) and infrastructure services (Franklin et al., 2018), such as water (Hummel and Lux, 2007) and transport (Canzler, 2008). Tackling these challenges will require holistic, joined up responses and integrated planning – which are not, it has to be said, the strong suits of most governments. Moreover, addressing these challenges will not only be technically difficult, it will also raise thorny ethical questions (such as about whether to provide school places for a tiny number of children in rural areas) and present practical and political difficulties. Lest we forget, one of the only times when the Russian population has come out to protest the policies of Mr Putin was in response to his

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<sup>1</sup> To return to Twitter, if you search “population decline” rather than “depopulation”, the messages returned are very different in character. There are no references to the vaccine/globalist/Satanic conspiracy, but rather tweets like: “Kosovo is the only Western Balkans country that will not have population decline by 2050” (@admirim) and “#China is set to register an absolute population decline. Its crisis from a dwindling and ageing workforce can be an opportunity for India to reap the next ‘demographic dividend’. But rapid job creation will be key: Harish Damodaran writes” (@CPRIndia).

proposal to raise the retirement age to 63 from 55 for women and to 65 from 60 for men (BBC News, 2018).

Facing these consequences head on would also force stakeholders and policy-makers to look at the underlying dynamics of population decline in a much more systematic way. Why are fertility rates so low? Or, more precisely, why is the gap between fertility aspirations and reality so large? Answering these questions will require us to look at some of the root causes: i.e., at the deeply entrenched, seemingly intransigent challenges relating to work, gender roles, culture, family, care, the economy, state support and so on. At the same time, we must also consider the other key driver of population decline: namely, out-migration. Why do people leave? Or, to put it another way, why would people not want to stay, preferring instead to leave behind their family, their friends and their way of life? Clearly, people choose to migrate in response to the lack of opportunities in their home region, which may be due to the effects of economic shocks and transformations, or to low levels of growth in rural areas (exacerbated by poor infrastructure). Thus, people operate in systems of extreme spatial inequality in which there is (relative) freedom of movement that allows them to travel to places that appear to offer them more chances for success in life.

Therefore, we can see that both low fertility and migration are perfectly rational human responses to malfunctioning upstream institutions. Having fewer children is a mode of risk avoidance, while out-migration is a mode of maximising opportunities. Policies aimed at increasing fertility and limiting out-migration need to be holistic, comprehensive and grounded in meeting the needs, desires and aspirations of individuals with regard to reproduction and migration (or return migration) to improve their chances of success. The nation of Japan will not face extinction in 2986, and Busan will not, as “projected”, become a total ghost town in 2413 (Holodny, 2015). Yet in the world of the demographic imaginary, this technical correction simply does not matter. Such projections are tools to demonstrate the consequences of the social recession of low fertility: namely, civilisational collapse. What is the purpose of such tools? To frighten people into having (more) children – without doing anything to address the legitimate concerns that lead to lower fertility.

Thus, rather than looking at all of these tough issues in turn, we can instead use “demographic imaginaries” to package these problems together as in a gift box, while saying: “This is depopulation, and it is bad”. For good measure, the populist-nationalists can also add a nice ribbon of racism around the box and tie it with a bow of scapegoating and blame.

Since time immemorial, we have been led to believe not only that our tribe, our race, our country is better than that of everyone else, but also that we are under a constant threat from the “other”. In this simplistic worldview, population decline is linked to civilisational collapse. According to this narrative, low fertility is the fault of young people – especially women – who are selfish, individualist and feckless; renege on their obligation to reproduce for the benefit of the civilisation, rather to spend time and money on holidays, smashed avo and Taylor Swift tickets. In this worldview, young, single women are neglecting their obligations to the country (and

the race) and are therefore presented as a “national security threat” from Taiwan (Deutsche Welle, 2015) to Egypt (Galal, 2016). Older people are blamed too – or are at least stigmatised (Gietel-Basten, 2019). Ageism is legitimised (Ylänne, 2022) and mainstreamed.<sup>2</sup> *In extremis*, a professor of economics at Yale University proposed mass suicide or ritual self-disembowelment as a solution to the perceived grip of older persons on Japanese industry (Zitser, 2023). As Bourdieu might say, this “social imaginary” can be used to set up a “pre-reflexive framework . . . for our common-sense social repertoire” (Steger, 2012).

### 3 So what do we do?

The first thing I think we need to do as population scientists is awaken to the reality of how some people are talking about population decline. Yes, we can be very smart and explore it in a very calm, cool and rational way. We can be pleased with ourselves and proudly declare that it is all about rural development and infrastructure and youth employment and gender roles. We can also declare that low fertility and managed population decline may not be a bad thing (Lee et al., 2014; Marois et al., 2021; Striessnig and Lutz, 2013). However, there is a whole world of people out there who perceive these issues very differently. These people do not read *Rural Sociology*, *Land Use Policy* and *Ecosystem Services*. They may not even read *The Vienna Yearbook of Population Research*. In a dangerous echo chamber of increasingly extreme ideas, commentators, politicians (of more or less radical hues), the general public and megalomaniacs are able to propagate false ideas (and seek equally egregious responses) in a scientific vacuum. If these “demographic imaginaries” are left to prevail, they become gospel.

Of course, we cannot spend all of our time on Twitter pointing out the flaws in the arguments made by writers such as those mentioned in this article. As G. K. Chesterton once said: “If you argue with a madman, it is extremely probable that you will get the worst of it; for in many ways his mind moves all the quicker for not being delayed by the things that go with good judgement”.

Nonetheless, we can be vocal, record our dissent and point out scientific flaws when politicians and key stakeholders are discussing these issues. As Datta (2020) observed: “institutional vacuum and the absence of scientific and intellectual expertise have given way to false experts and other charlatans to advance alternative conspiratorial explanations and propose populist solutions” (translated in Armitage, 2021). We can – and we must – play a role in bringing the “demographic imaginaries”

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<sup>2</sup> This is especially apparent when looking at the manner in which older people were treated during the COVID-19 pandemic. For example, there was evidence of age discrimination in triage decisions (Barnes, 2020; Kuylen et al., 2021); grotesque statements about deaths among the elderly were made on social media (such as referring to the virus as #BoomerRemover (Meisner, 2020; Skipper and Rose, 2021)); and older people were denied agency through “compassionate ageism” or “caremongering” (Vervaecke and Meisner, 2021).

back down to earth by trying to ground narratives of population decline and population ageing in science and evidence, rather than in political tropes. Even though Twitter seems to be on the verge of collapse, we need to redouble our efforts to make the science of demographic change as publicly accessible as possible through whatever means are available, including through social media.

Indeed, we should acknowledge that this problem is at least partially attributable to how we ourselves discuss the issue. It seems that the very language we use is laden with doom and fear. Consider, for example, the use of the term “demographic winter” in various European discourses, including by the European Conservative and Reformist Group of the European Parliament (cf. Trimble, 2013). Even though the use of terms such as “demographic time bomb” appear to be on the decline (and there is a wide recognition that other expressions such as “silver tsunami” and “silver economy” are ageist (Calasanti, 2020; Lipp and Peine, 2022)), many scientists are not immune to making grand statements concerning the contribution of their own research to sensitive demographic issues, with the recent trailing of the IHME projections being an obvious case in point (Gietel-Basten and Sobotka, 2020). Moreover, we often automatically refer to “problems” of population decline and/or ageing. This is already a value judgement, and is different from referring to “challenges”. We regularly use “dependency” ratios, which, apart from being misleading in terms of what is being measured and presented, imply decrepitude and a lack of agency among older people (Basten, 2013; Sanderson and Scherbov, 2015). Finally, of course, we tend to use the terms “population decline” and “depopulation” interchangeably. Perhaps we should try to use the former as a matter of course?

Finally, we also need to stop talking about a call-and-response, closed-loop way of dealing with population decline and ageing. Rather than being supported through reproductive empowerment, women (and men) are simultaneously being harangued through pronatalist propaganda, having their reproductive choices narrowed through restrictions on access to family planning services and being bribed through cash handouts to reproduce for the nation. In Belarus, President Lukashenko declared: “This is a disaster when one child grows in a family! Two are necessary. But three of them must be stimulated. Four! . . . Well, maybe someone will strike at five – we have such people, thanks to them. . . . But three of them are necessary! . . . This sphere will never – at least as long as I’m the president – be deprived of attention” (Sobotka et al., 2019). In Turkey, meanwhile, President Erdogan declared: “Rejecting motherhood means giving up on humanity . . . I would recommend having at least three children” (Sobotka et al., 2019). This is because, according to Mr Erdogan, having just one child doesn’t do anything “for the vitality of the country” (Idil, 2020): “One or two (children) is not enough . . . To make our nation stronger, we need a more dynamic and younger population . . . We need this to take Turkey above the level of modern civilizations” (AlArabiya, 2014). Mr Erdogan added that those opposed to this view “have been engaged in the treason of birth control for years and sought to dry up our generation” (AlArabiya, 2014).

Higher birth rates will not solve the social, political, economic and institutional challenges associated with population decline. Rather, we need to strive to change



the narrative. Population decline is happening here and now. Every country on earth will experience it at some point or another in the future. We need to change our mindset and think in different ways; to think about how we are going to respond to this “grand challenge”. In this vein, I want to close with three quotes:

*“Ever since the Meiji Restoration 150 years ago, the Japanese have been harbouring the illusion that happiness can only be attained through growth . . . But that’s no longer sustainable. We need to figure out ways to achieve happiness while scaling down, and Tokigawa can become an example.” (1)*


*“Depopulation is an unstoppable phenomenon happening all across the nation. It’s neither good nor bad, but something we must accept.” (2)*

*“Simply increasing the population won’t solve the many issues these shrinking communities face. It’s more about how we can turn these issues into advantages.” (3)*

These quotes, for me, encapsulate the need to adapt our mindset, and to just get on with dealing with the causes and the consequences of population decline in a clear-headed, realistic way. However, these quotes do not come from some famous demographers, rural sociologists or urban planners. They are from residents of Tokigawa, a small municipality in Japan’s Saitama Prefecture, which, like so many others, is undergoing rapid population decline. Quote (1) reflects the thoughts of Norio Koyama, a nonfiction writer who founded an event space in the town in late 2020. Quote (2) is the opinion of a local realtor, while quote (3) comes from a local artist. These residents are contributing to efforts to offset some of the challenges of population decline in this rural area through various economic, cultural and social activities.

What these quotes tell us is that we, as scientists working on population decline, need to get out of our offices and away from our computers, and to stop modelling and theorising these demographic changes long enough to find out how communities are responding to them on the ground. It is only by doing so that we will be able to truly see “what works” at the grassroots level, and, in turn, be able to craft sustainable policies to address the very real challenges of population decline from the ground up.

## ORCID iDs

Stuart Gietel-Basten  <https://orcid.org/0000-0002-5818-8283>

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